
Older People

An Expert Report on the Situation of People
Between 65 and 80 Years of Age

BZgA

Bundeszentrale
für
gesundheitliche
Aufklärung



The Federal Centre for Health Education (BZgA) is a specialist authority within the portfolio of the German Federal Ministry of Health. Based in Cologne, it carries out information and communication activities (in an educational capacity) and quality assurance activities (in a clearing and coordination capacity) in the area of health promotion.

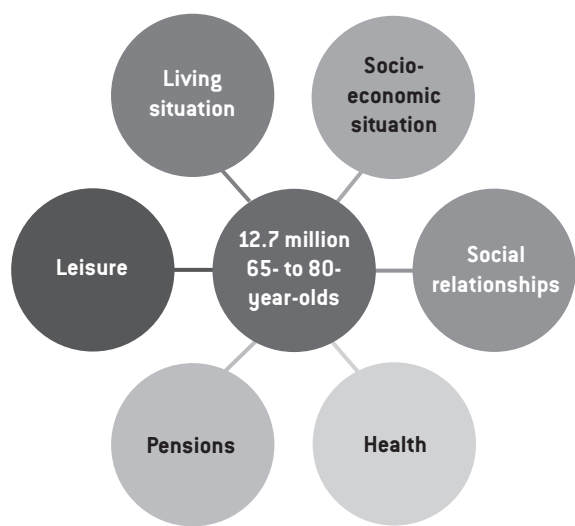
Its information and communication activities include education on topics of particular priority with respect to health. It works together with its partners to run campaigns on issues such as AIDS prevention, preventing addiction, sex education and family planning. The BZgA's current focus is on promoting the health of children and young people as a specific target group. The BZgA's main activities in the quality assurance field include formulating research principles, developing guidelines and conducting market surveys on media and initiatives in selected areas.

As part of its quality assurance activities, the BZgA carries out research projects and studies, develops expert reports and runs conferences on current topics within health education and health promotion. Many of the results and reports are included in the BZgA's series of research publications, in order to make them available to interested parties from a very wide range of health promotion fields. The series of specialist booklets entitled *Forschung und Praxis der Gesundheitsförderung* (Research and Practice of Health Promotion) and the topic-specific series *Forschung und Praxis der Sexualaufklärung und Familienplanung* (Research and Practice of Sex Education and Family Planning) aim to provide a forum for academic discussion. The principal aim of this series of specialist booklets, which is published in German and English, is to promote dialogue between those working in the fields of research and practice and to create the basis for successful health promotion.

Older People

An Expert Report on the Situation of People
Between 65 and 80 Years of Age

Josefine Heusinger, Kerstin Kammerer and Birgit Wolter,
with the collaboration of Kathrin Ottovay



Bibliographical information from the German National Library:

The German National Library lists this publication in the German National Bibliography; detailed bibliographical data is available online at http://www.dnb.de/EN/Home/home_node.html.

The articles in this series reflect the opinions of the authors, which are not necessarily shared by the editor in all cases. The series of specialist booklets is designed to provide a forum for discussion.

Research and Practice of Health Promotion, Volume 17

Older People – An Expert Report on the Situation of People Between 65 and 80 Years of Age

Cologne: Federal Centre for Health Education, 2013

Publisher

Federal Centre for Health Education (BZgA)

Ostmerheimer Str. 220, 51109 Cologne, Germany

Phone: +49 (0)221/8992-0

Fax: +49 (0)221/8992-300

Project manager

Dr Monika Köster

The Federal Centre for Health Education is a specialist authority within the portfolio of the German Federal Ministry of Health.

All rights reserved.

Translation: Jayne Fox

Editing: René Zey, Frechen

Type-setting: Mediengruppe Essen GmbH & Co. KG

Printing: Welpdruck, Wiehl

Print run: 1.0,5.11.14

ISBN 978-3-942816-58-8

Volume 17 of the series of specialist booklets can be ordered from the following address: BZgA, 51101 Cologne, Germany, and online at <http://www.bzga.de>.

This booklet is distributed free of charge by the Federal Centre for Health Education. It is not for resale by the recipient or third parties.

Order number: 60817070

Foreword

In light of the current demographic developments in Germany, in which we are seeing a considerable increase in the number of older people in the general population, health promotion and preventive health care for older people are becoming increasingly important. Health in old age is a high priority both for individuals and for society as a whole.

Life expectancy at birth is now 82.7 years for girls and 77.7 years for boys. A look at the life expectancy of older people shows that men who have reached the age of 60 have a life expectancy of a further 21.3 years, while 60-year-old women have almost 25 more years to live. By mid-2030 around 28 million people aged over 65 will be living in Germany. The aim is to enable these people to experience the highest possible quality of life in their remaining years. To this end, it is important that older people can actively shape their lives for as long as possible and enjoy a high degree of self-determination. Only then will they be able to make full use of the options and resources available to them.

It should be noted that this group of older people is extremely heterogeneous: their individual circumstances and biographies differ greatly, as do their associated health risks and opportunities. To develop effective health promotion strategies, it is therefore important that we take into consideration this diversity in life circumstances and in the individual process of growing older. An early and lifelong approach to health promotion is important in order to maintain and improve health, independence and participation into old age. Strategies to achieve this should take into account the different lifestyles, life stages and vulnerabilities of the individuals in question, as well as their resources, strengths and opportunities.

Building on the report entitled "The Young Old", which focused on the target group of men and women aged 55 to 65 (BZgA 2011), the Federal Centre for Health Education commissioned the Institut für Gerontologische Forschung e.V. (Institute for Gerontological Research) to prepare a targeted analysis of national, publicly available data and current information on a variety of topics, in order to obtain an overview of the various life situations of people aged between 65 and 80.

This expert report provides an overview of the socio-economic situation, social relationships, health situation and health behaviour of 65- to 80-year-olds in Germany. It also explores the areas of leisure, civic engagement and volunteering, the living situations of older people and the topic of long-term care. The following study enables readers to gain an overall picture of the life situations of the large target group of 65- to 80-year-olds in Germany.

With this specialist publication, the Federal Centre for Health Education has made available a detailed report which can be used by local stakeholders as a basis for planning preventive health care and health-promotion activities for older people.

Cologne, April 2013

Prof Dr Elisabeth Pott
Director of the Federal Centre for
Health Education

Contents

01	» Introduction	7
02	» Overview of the socio-economic situation	10
02.1	Age and gender	10
02.2	Migrant background	11
02.3	Education	13
02.4	Work and retirement	14
02.5	Pensions and pension levels	22
02.6	Assets, income and poverty	25
02.7	Subjective perception of material life situation	31
02.8	Conclusion	31
03	» Social relationships	34
03.1	Lifestyles and households	34
03.2	Family and inter-generational relationships	37
03.3	Extrafamilial networks	40
03.4	Conclusion	42

04	» Health	44
04.1	Health status	44
04.2	Morbidity	46
04.3	Accidents	56
04.4	Mental illness	56
04.5	Life expectancy and mortality	60
04.6	Health behaviours and risks	62
04.7	Addiction in old age	65
04.8	Pharmacotherapy (prescription medications)	67
04.9	Health promotion	68
04.10	Rehabilitation	72
04.11	Healthcare costs	73
04.12	Place of death	74
04.13	Conclusion	75
05	» Giving and receiving care	76
05.1	People in need of care in the age group from 65 to 80	76
05.2	Provision of care	78
05.3	Carers	80
05.4	The burden of providing care	80
05.5	Conclusion	83
06	» Leisure	84
06.1	Quality of life, values and religion	84
06.2	Leisure time: culture, travel and clubs	87
06.3	Civic engagement, volunteering and further education	88
06.4	Media usage	92
06.5	Mobility	96
06.6	Conclusion	102
07	» Living situation	104
07.1	Regional distribution of the age group: where do older people live?	104
07.2	Ownership, living costs and availability of living space	107
07.3	Forms of housing in old age and age-appropriate housing	109
07.4	Living environment	111
07.5	Migration and willingness to move house	113
07.6	Conclusion	115

08	» Conclusion	117
----	--------------	-----

09	» Appendix	120
----	------------	-----

09.1	Tables	120
09.2	Figures	138
09.3	Abbreviations	160
09.4	References	162
09.5	List of tables	174
09.6	List of figures	179

01

» Introduction

For most people, turning 65 marks the beginning of a new stage of life. The end of a long working career represents a decisive point and is accompanied by tangible changes in everyday life, with new freedoms and challenges. In contrast, by around 80 years of age, individuals are on the threshold of very old age. More time is required to maintain health and physical well-being, and many people have had to go through the experience of losing their life partner. The phase of life examined in this report lies between these two poles – the start of a new life stage, and the beginning of the time of farewells. At the end of 2009, there were almost 13 million women and men in Germany aged between 65 and

80. This age group was predominantly female, and the proportion of women continued to rise with increasing age. Despite many commonalities, the group was highly heterogeneous, with individual members experiencing different life circumstances. While many materially well-off older people who were in good health enjoyed an active life that was largely free of responsibilities, at the same time, many older individuals were managing their everyday lives with limited economic resources, health problems and worries about their future.

The age group of 65- to 80-year-olds included – depending on the basis for the data¹ – the birth cohorts from 1930 to 1944 (based on the reporting

¹ The available data makes it necessary to use sources from various birth cohorts. Data sources from the years 2005 to 2011 were evaluated in order to obtain a comprehensive picture of 65- to 80-year-olds. Inspection of the main sources shows that the selection of the age groups varies among the individual sources, as well as within the sources themselves in some cases. Many of the analyses represent over-65s as one age group, however, some studies consider 55- to 69-year-olds and 70- to 85-year-olds. Even if the data does not relate to our exact age group, it is presented in this report where there is no other data available. The age group studied is noted in the text in each case. The aim is to provide as comprehensive a picture as possible.

year of 2009). As of 31 December 2009, the largest cohort constituted the years from 1938 to 1941, i.e. individuals born around the beginning of the Second World War. People in this age group lived through their childhood and youth under National Socialism, during the war and in the post-war period. They grew up in families with predominantly traditional gender relationships, were taught by teachers trained in National Socialist education, had their first life experiences in a society in which oppression and persecution prevailed, and witnessed – some in early childhood, some as teenagers – the violence and brutality of the war, bringing a rapid end to their childhood.

The post-war period was a time of upheaval and new beginnings. On the one hand, there was hunger, poverty, displacement and families who had been torn apart – and on the other, a fresh start, independence and newfound freedoms. Members of our cohort were beginning their lives or setting out on their own at this time of rapid economic recovery. Faith in progress prevailed, but there was also far-reaching silence about the immediate past as the events that had been experienced became taboo. Family was very important, people sought security in clear gender roles, and individualism was gaining ground (“everyone for himself”).

The division of Germany into East and West Germany occurred during this time, and living conditions for the populations in the two parts of the country differed considerably. People on both sides lived in relative economic and social security. In the 1960s, however, while a time of social confrontation and debate began with the student movement in West Germany, East Germany was entering a period of restriction and oppression, which found its brutal expression in the building of the Berlin Wall. Those who are now aged 65 to 80 were seeking their place in society at this time, or were already establishing

themselves: in 1960, members of our cohort ranged from 16 to 30 years old.

For most, the period from 1960 to 1989 brought with it professional development and safeguarding of their material existence. However, the economic crisis meant that unemployment was a growing threat to many, especially in West Germany. The traditional family model with a wife at home was widespread here, while in East Germany, married women were increasingly in paid employment from the 1970s. In both parts of Germany, young “guest” workers were recruited and went on to settle in the country, forming part of the age group under consideration.

In 1989, individuals who are now aged 65 to 80 ranged from 45 to 59 years old. While some were already on the verge of retirement, others were in the middle of their careers. In the West, little was felt of the turmoil of reunification. In East Germany, however, this was quite different. Older members of this age group found themselves beginning a new phase of life (i.e. retirement) under a different political system. Many were able to make active use of their life experience in the construction of new civil society structures. On the other hand, younger cohort members were often confronted with the threat of unemployment and needed all of their energy to secure their economic existence.

Now, members of the age group being considered have retired and are able to benefit from the resources and life experiences that they have collected throughout their lives. They are being confronted with an image of active ageing and are expected to fill this life stage with individual meaning. In comparison with former times, they are experiencing a relatively long, healthy phase of life. Some make use of the care services covered by nursing care insurance, as well as individual health services (known as “IGeL”) that are not covered by health insurance and are paid for by the individual. Many

enjoy being able to structure their daily lives in a self-determined way. However, women in particular are often confronted with social responsibilities in terms of caring for family members or looking after their grandchildren.

The key dimensions of everyday life for 65- to 80-year-olds are considered in the following report. In the next chapter, different aspects of the age group composition are described and an overview of the socio-economic situation is provided. The social relationships within and outside of the family are then examined in Chapter three. The fourth chapter deals with the health situation of the elderly. The topic of care takes on increasing importance in the age group being considered, whether as a carer or as an individual being cared for, so a separate chapter has been dedicated to this issue. In Chapter six (“Leisure”), the free-time activities of older people are presented: their civic engagement, their media habits and – as an important basis for active ageing – their mobility. Finally, the seventh chapter describes the housing situations of members of this age group and their regional distribution in Germany.

Using the data available at the time of writing, the report aims to represent the diversity of the phase of life between 65 and 80 in Germany, as well as highlighting the personal and societal resources available to support the health and self-determination of older people in daily life. At the same time, special attention is given to vulnerable and risky life situations that are associated with a particular need for support. These “fringe groups” are often more interesting than the statistical average for the identification of future prevention strategies.

02

» Overview of the socio-economic situation

This chapter shines a spotlight on the living situations of older people aged 65 to 80. It starts with an initial outline, which provides information on the differentiation within the age group by age, gender, migrant background and education. This is followed by an overview of income and assets and the distribution of poverty risks.

Age	Total	Men	Women
65–69	4,880,500	2,345,400	2,535,100
70–74	4,739,900	2,187,200	2,552,700
75–79	3,100,600	1,327,500	1,773,100
<i>Total</i>	12,721,000	5,860,100	6,860,900

» Table 1: Distribution of the age group of 65- to 79-year-olds in absolute figures as of 31 December 2009, in thousands (Statistisches Bundesamt 2011c, p. 44)

» 02.1 Age and gender

As of 31 December 2009, people aged 65 to 80² represented 15.5% of the total population (the total population on 31 December 2009 was 81,802,300, of which there were 40,103,600 men and 41,698,700 women; Statistisches Bundesamt 2011c, p. 44).

In absolute figures, there were 12,721,000 people aged between 65 and under 80. Of these, 5,860,000 were men and 6,860,900 were women – so there were around a million more women than men in this age group. Due to the higher life expectancy of women, the difference between the number of men and women was greatest in the older age groups (Statistisches Bundesamt 2011c, p. 44; own calculation).

Table 2 in the Appendix shows the age distribution broken down by birth cohort and gender (as of 2009). It shows that 69-year-olds (born in 1940) formed the largest group, followed by 70-year-olds (born in 1939) and 68-year-olds (born in 1941).

In many studies, data is collected and presented for the 65+ age group as a whole, without being broken down further. Since the total group of individuals aged 65+ comprised 17,145,000 people, and the group of over-80-year-olds (defined as the very old) amounted to 4,424,000 people, the group of 65- to 80-year-olds considered in this report represented 74% of the total group of individuals aged 65+ (ibid.).

The largest overall number of over-65-year-olds lived in North Rhine-Westphalia, being 3,637,400 people (almost two-thirds of these, namely 2,092,200 people, were female). They represented 20.3% of the total population in this federal state. 2,450,900 older people lived in Bavaria, corresponding to just under 20% of the population (Statistisches Bundesamt 2011c, p. 43).

In percentage terms, however, the eastern German states with a lower overall population had the highest proportion of older people. Saxony had the highest percentage of people of retirement age; just under a quarter of residents here were over 65. There was a large proportion of older people in Saxony-Anhalt, Thuringia, Brandenburg and the Saarland, but just 19% of the population in the “young” city states of Hamburg and Berlin were over 65 (Statistisches Bundesamt 2011b, p. 8; see Chapter 07 for more detail on regional differences).

» 02.2 Migrant background

How many older people have a migrant background? According to the well-established definition by the German Statistisches Bundesamt, individuals are defined as having a migrant background if they “immigrated to the present territory of the Federal Republic of Germany after 1949, as well as all foreigners born in Germany and German individuals born in Germany with at least one parent being an immigrant or a foreigner born in Germany” (Statistisches Bundesamt 2011c, p.31).³ A review of the 2010 micro-census on migration shows that the approximately 1.4 million older people with a migrant background represented 9% of 65- to 85-year-olds (Statistisches Bundesamt 2011a, pp. 64 f.; own calculation).

In 2010, 948,000 people in the age group of 65- to under-75-year-olds had a migrant background.

Of these, 482,000 were men (ibid., p. 73) and 467,000 were women (ibid., p. 81). Fewer had a migrant background in the age group of 75- to under-85-year-olds, namely 431,000 people. Of these, 203,000 were men (ibid., p. 73) and 229,000 were women (ibid., p. 81). The vast majority of these people experienced the migration themselves and had been living in Germany for 20 years or more. Only 67,000 of the 65- to 85-year-olds with a migrant

2 When this report refers to 65- to 80-year-olds based on the micro-census data (Mikrozensus, Statistisches Bundesamt), this includes individuals who were aged from 65 to under 80 at the time of the micro-census. In the Deutsche Alterssurvey (German Ageing Survey [DEAS]), the age of a respondent refers to the year of age completed in the survey year (the survey year minus the year of birth).

3 Unless otherwise indicated, the details in this report on the situation of people with a migrant background – also referred to as migrants – are based on this definition. Where the data cannot be interpreted in this way, we have sometimes had to use the categories of non-Germans or foreign nationals. This includes people who live in Germany but do not have German citizenship.

background moved to Germany in the previous ten years.⁴

Where did these older people (or their parents) migrate from, what is their citizenship, or what was it before their naturalisation in Germany? (Late) repatriates⁵ represented the largest group overall among older people with a migrant background – however, in many cases, information on country of origin and year of arrival was missing from the surveys by the Statistisches Bundesamt. (Late) repatriates are considered German under Article 116 of the Basic Law (“Grundgesetz” – the constitution), regardless of whether they have German citizenship. This means that they can move to Germany with family members who are not ethnic Germans, who may also apply for German citizenship.

While Poland was the main country of origin for repatriates in the 1980s (peaking at the end of the Cold War with a total of half a million arrivals in the years 1988, 1989 and 1990), the influx from the USSR dominated in the 1990s, with around 1.5 million people (Forschungsverbund 2009, p. 19). The influx of a total of 22,000 people aged 65–85 in the ten years prior to the micro-census was thus relatively low (Statistisches Bundesamt 2011a, p. 68).

A specific feature of the migration experience of (late) repatriates was that they mainly migrated to Germany in multi-generational family groups. In this respect, the proportion of older people in this group was relatively high – a significant proportion was already of retirement age at the time of the migration, i.e. 55 years or older; and very old people also migrated with them (Mika 2007). There was a marked predominance of women in this group. According to Mika (Forschungsverbund 2009, p. 72)

this can be explained by the lower age at death of men compared to women, which was even more pronounced than in Germany. Consequently, some of the older women who migrated were already widowed. The older people who migrated from Turkey had another migratory history. Known as “guest workers”, they were among the migrants who came to Germany primarily in the 1960s and 1970s as part of the bilateral agreements on labour recruitment (and the subsequent immigration of family members known as family reunification), and remained in the country (Özcan and Seifert 2004). 24,000 people in the cohort of 75- to 85-year-olds (15,000 of them male, 9,000 female) and 145,000 in the cohort of 65- to 75-year-olds (85,000 male, 61,000 female) came to Germany from Turkey (Statistisches Bundesamt 2011a, pp. 64–65, 72–73, 80–81). The predominance of men was a result of male-dominated labour migration under the bilateral agreements on labour recruitment, and possibly also due to the data in the Central Registers of Foreign Nationals and Residents’ Registration Offices not being updated when residents moved house, remigrated or were naturalised (Menning and Hoffmann 2009, p. 7; Bundesamt für Migration und Flüchtlinge 2008, p. 17).

Italy and Greece were also important countries of origin for migrants of the “guest worker” generation, as summarised in Table 3. However, with regards to the figures on countries of origin or former citizenship, it should be noted that for 127,000 65- to 74-year-olds and 78,000 75- to under-85-year-olds, the details of previous citizenship were missing or were considered to be inaccurate (also see Table 4 in the Appendix).

4 Differences due to rounding.

5 Reported under the term late repatriates since 1993.

Countries of origin	65–74 years		75–84 years	
Turkey (total)	145,000		24,000	
Turkey (men/women)	85,000	61,000	15,000	9,000
Russian Federation (total)	63,000		43,000	
Russian Federation (men/women)	27,000	36,000	18,000	26,000
Poland	75,000		44,000	
Italy	52,000		21,000	
Greece	31,000		11,000	

Table 3: Older people with a migrant background, for selected major countries of origin (in absolute figures) (Statistisches Bundesamt 2011a, pp. 64–65, 72–73, 80–81, own compilation, differences due to rounding)

In metropolitan areas, migrants aged over 65 represented almost 10% of the 65+ age group in 2007, which cannot be regarded as negligible. However, this proportion was halved in rural areas (Menning and Hoffmann 2009, pp. 11 f. based on the data from the Mikrozensus 2007). In 2005, older migrants represented the greatest proportion of the overall 65+ age group in Frankfurt at 13%, Stuttgart at 11.3%, Munich at 10.3% and Berlin West at 9.3% (ibid., based on the data from the Mikrozensus 2005). As these figures date back to 2005, it is also worth looking at the group of 50- to 64-year-olds (at the time of the survey), who were aged 57 to 71 in 2012. In proportion to the total age group, the percentage of 50- to 64-year-olds with a migrant background was 31.6% in the city of Frankfurt, 29.6% in Stuttgart and 26.6% in Munich in 2005.

Older (late) repatriates are expected to play a minor role here compared to older people from Turkey in particular, as not many repatriates settled in big cities (with the exception of Berlin) – people in this group lived primarily in medium-sized cities and rural areas (Mika 2007).

02.3 Education

What kind of educational and professional qualifications do older people hold? The micro-census provides detailed insight into educational and professional qualifications (Statistisches Bundesamt 2011c, pp. 132–133). It is clear from this data that, on average, older women tended to have a lower educational level than men.

Table 6 shows that almost half of women without a migrant background and well over half of migrants and (late) repatriates had no professional qualifications. On the other hand, women with a migrant background and (late) repatriates were more likely to have a university degree than women without a migrant background. While a good 14% of men without a migrant background had no professional qualifications, among those with a migrant background this increased to around 40%.

Age: 65+ Total*		Number of people					Without general school-leaving certificate
		With general school-leaving certificate					
		Secondary school certificate	Polytechnic secondary school certificate	Secondary school or equivalent certificate	Higher education entrance qualification	No details of type of certificate	
Total	17,145	11,361	421	2,126	2,242	76	741
Men	7,385	4,585	190	795	1,443	28	294
Women	9,760	6,776	231	1,331	799	48	447

* Including 178,000 people who did not provide information on their school education.

Table 5: Population in 2009 by age, gender and school qualifications, in thousands (Statistisches Bundesamt, 2011c, p.132, own representation)

	University degree		No professional qualifications	
	Men	Women	Men	Women
Without migrant background	8.2	2.7	14.2	45.9
With migrant background	9.0	5.6	40.1	63.8
[Late] repatriates	4.8	3.3	32.6	64.3

Table 6: Men and women over 65 with/without a migrant background, with a university degree/without professional qualifications (as a percentage) (Menning and Hoffmann 2009, p. 26, based on data from the Statistisches Bundesamt 2007)

02.4 Work and retirement

The end of paid employment becomes a significant topic for most people in the years between 55 and 65. The groundwork for the transition to retirement is laid during this time (BZgA 2011). For some of the younger people in our age group – i.e. some of the 65- to approximately 70-year-olds – and for a small proportion of older individuals, active employment remained a source of income and part of everyday life.

However, for most people, the days start to be filled in different ways. People in this age group supported themselves from a variety of different sources – depending on their former careers – such as pension plans, state pensions, private or company pensions, assets, or from the basic state social security provisions. Sometimes this also included support from their male partner – or, less commonly, from their female partner. It can be seen that “within the population of older people there is also strong socio-economic inequality, which is both a reflection of the differentiated opportunities and successes in working life, as well as being a result of historic, politically intended differentiation within the pension system” (Noll and Weick 2012, p. 3).

Age	Income through							
	Employ- ment	Assets	Public funding	Of which		Non-public funding	Of which	
				Pension plan	State pension		Company pension	Private insurance
Western								
65–69	10	8	75	51	11	7	4	1
70+	4	6	83	56	11	7	4	1
Eastern								
65–69	8	2	88	81	0	2	0	0
70+	2	3	93	84	1	2	0	0

Table 7: Proportion of different types of income in gross household income (as a percentage) (Noll and Weick 2012, p. 3; data based on: Einkommens- und Verbraucherstichprobe 2008)

Table 7 provides an overview of the composition of the average gross household income of 65- to 69-year-olds and those 70 or over in western and eastern Germany.

According to this data, 10% of the gross household income of 65- to 69-year-olds was generated by paid employment. This leads us to ask, who in this age group is still working? And what do we know about the conditions and circumstances of this employment?

It is striking that the data that is available on economic activity and employment of over-65-year-olds is unsatisfactory and at times contradictory. In the following, we will see that the information on the economic activity status of older people that was collected in the micro-census surveys differs considerably from the figures held by the Bundesagentur für Arbeit (Federal Employment Agency). Over-65-year-olds in employment subject to social security deductions or in low-paid/marginal employment – for example, pensioners with what is known as a “mini job” (a low-paid or short-term job) – are registered

with the latter agency. For more details on the problem of the results of the micro-census diverging from other statistics relating to employment, and a discussion of the possible causes, see Körner and Puch 2009 and Köhne-Finster and Lingnau 2008.

The generally accepted International Labour Organisation (ILO) definition of the economically active population is used in the micro-census. The category of “economically active persons” includes both the employed and the unemployed who are actively available to the labour market.

By this definition, unemployed persons do not have to be actually registered as unemployed. People are categorised as employed if they self-report that in a one-week reporting period they “pursue any professional activity for at least one hour for wages or other remuneration, or are in an employment relationship (employees including soldiers and family workers), operate a self-employed business or a farm, or practice a profession”⁶ (Statistisches Bundesamt 2010a, p. 381).

6 Individuals are also considered to be employed if they are in permanent employment but did not work during the reporting week due to reasons such as illness, parental leave or phased retirement arrangements.

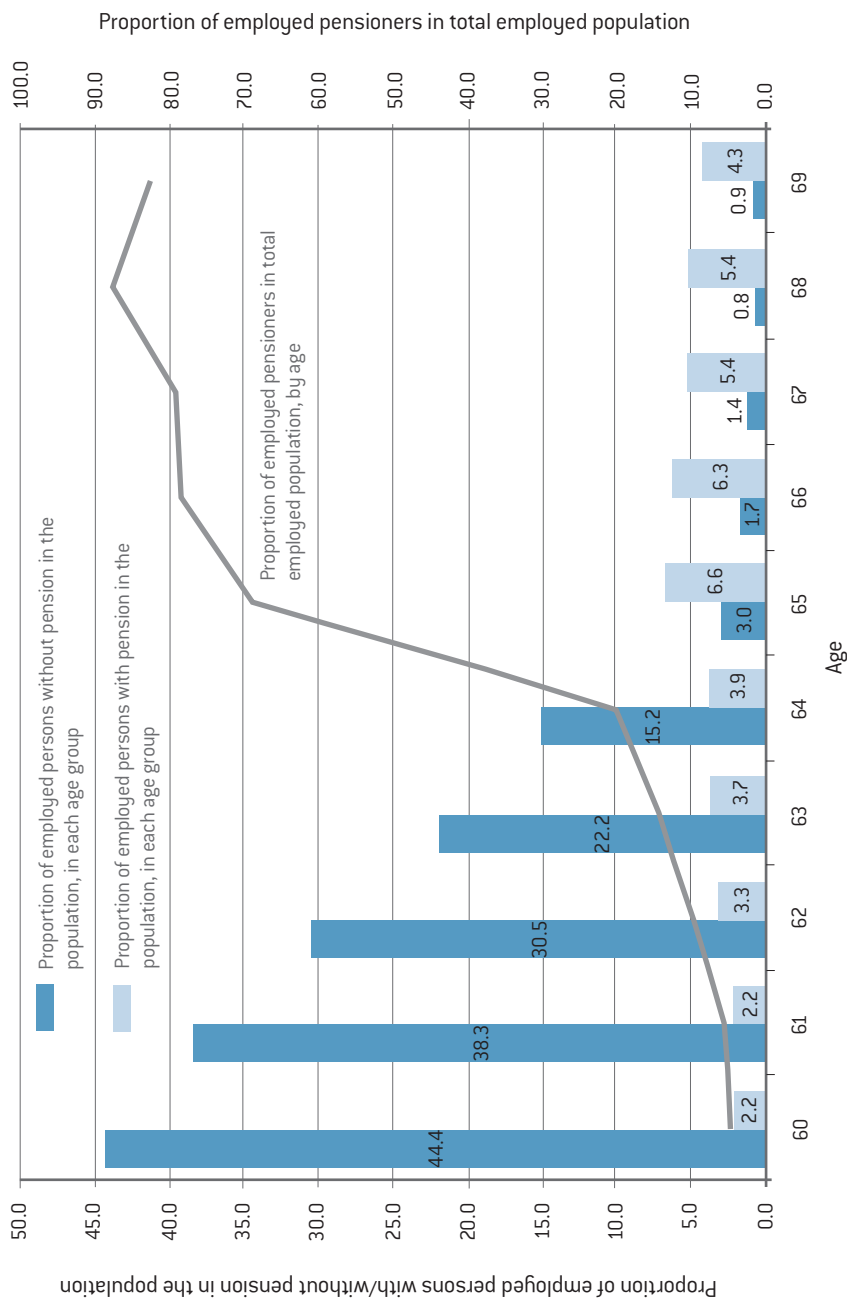


Figure 1: Employment rate by age of persons who are/are not drawing a pension, 2007 [Brussig 2010a, p. 8, based on the Mikrozensus 2007]

With this definition, 666,000 over-65-year-olds (6% of 65- to 74-year-olds and 1% of people aged 75 or older) were counted as employed in 2009 (Statistisches Bundesamt 2011b, p. 47). For approximately 40% of these employed persons aged 65 years or older, employment was their primary source of funding. This equates to around 277,000 people of retirement age whose income was predominantly generated by employment. For other employed persons aged over 65, income from employment was an extra source of funds in addition to their pension plan or state pension. Almost every female employee aged 65 or over and every second male employee aged 65 or over was classed as self-employed or a family worker; this proportion was more than three times as high as in the age group of 55- to 64-year-olds.

It should be noted, however, that differentiation in the employment situation of older people began long before the 65th birthday. In the 55–65 age group, only about 60% of individuals were registered as economically active persons in line with the ILO definition (i.e. they undertook paid work for at least one hour per week or were looking for a job), while 40% had already withdrawn from working life, whether as a response to pressures in the labour market for older people, particularly in eastern Germany, or for health reasons (especially among skilled manual workers). Other members of this age group had not been economically active for some time, for example, housewives or house husbands.


Using figures based on the 2007 micro-census (i.e. in line with ILO definitions), Martin Brüssig presented the trends for employed persons in the 60–69 age range who did and did not draw a pension (Brüssig 2010a, p. 8).

Table 8 shows the proportions of economically active persons, employed persons and non-economically active persons (including pensioners) that made up the population of the 65–70, 70–75 and 75–80 age groups, based on the 2009 micro-census and in line with ILO definitions. Around twice as many men as women were reported as employed. The employment quotient that we calculated considers the employed persons in each age group in relation to the corresponding age group as a whole. According to the 2009 micro-census, among 65- to 70-year olds, every tenth man was in employment, compared to 6% of women. Among 70- to 75-year-olds, more than 5% of men and 2% of women were in employment.

Looking at the number of people registered with the Bundesagentur für Arbeit as being in employment subject to social security deductions (including part-time work), this figure turns out to be much smaller. Beyond the age of 60, the number of people in employment subject to social security deductions decreased to about a million – which was equivalent to just under a quarter of the 60-65-year age group (Bäcker et al. 2010, p. 14).

The proportion of employees subject to social security deductions in the 63- and 64-year-old cohorts was particularly low: there were only about 100,000 employees in each of these age groups, of which over a quarter were part-time workers (Bäcker et al. 2010, p. 15). The rate of full-time employment dropped to 9.2% at 63 years and 6.3% at 64 years. For those aged over 65, the number of people in employment subject to social security deductions was low, as can be seen from the table (Bundesregierung 2010, p. 44, see also Figure 2 in the Appendix).

Gender	Age	Economic activity status of the population					
		Total	Economically active persons	Employed	Employed quotient	Non-economically active persons	Pensioners
Male	65 – < 70	2,446	263	259	10.6 %	2,184	2,148
Male	70 – < 75	2,189	106	106	4.8 %	2,083	2,049
Male	75 – < 80	1,310	34	34	2.6 %	1,277	1,259
Female	65 – < 70	2,681	163	161	6 %	2,518	2,053
Female	70 – < 75	2,525	60	60	2.3 %	2,465	2,027
Female	75 – < 80	1,713	19	19	1.1 %	1,694	1,455

 Table 8: Economic activity status by gender and age group, 2009, in thousands or as a percentage (Mikrozensus 2009: Erwerbsstatus der Bevölkerung, own calculation of employed quotient)

The Bundesagentur für Arbeit also provides reliable figures on low-paid/marginal employment (“mini jobs”) held by older people. This data suggests far more robust employment activity among older people than that described in the self-reported micro-census data presented above. In June 2011, the Bundesagentur für Arbeit registered a total of 764,016 low-paid/marginal employees aged 65 and older [Bundesagentur für Arbeit 2012].

Schröder compared the 2010 figures for each age group to the totals, differentiated by gender, with the following results [Schröder 2011]: at the end of 2010, in the age group of 65- to under-70-year-olds, 9.1% in total were low-paid employees, being 9.9% of men in this age group and 8.3% of women. At the same time, in the age group of 70- to under-75-year-olds, 5.3% in total were low-paid employees, being 6.2% of men in this age group and 4.6% of women. Among those aged 75 and older, 1.4% were still in low-paid employment at the end of 2010: 2.1% of men and 1.1% of women. When compared to the data from 2003, a significant increase in marginal employment is apparent (see Table 73 in the Appendix).

In contrast to these figures provided by the Statistisches Bundesamt and the Bundesagentur für

Arbeit on marginal employment, the details listed in Table 9 are based on the 2009 micro-census. According to this information, 36% of employed persons aged over 65 (but half of the women in employment) were in marginal employment as their primary or secondary source of income; which means that more than 60% of those employed were in employment not classed as marginal or low paid. But the figure of 241,900 people aged 65+ in marginal employment, determined in the micro-census sampling in 2009, is far below the figure of 776,577 supplied by the Bundesagentur für Arbeit for December 2009 [Bundesagentur für Arbeit 2012].

This brings into question the reliability of the self-reported data on employment. (For a discussion of the data quality, see Körner and Puch 2009 and Köhne-Finster and Lingnau 2008).

According to the Deutsche Alterssurvey [German Ageing Survey [DEAS]], around one in ten pensioners aged between 60 and 69 was in employment in addition to drawing a pension in 2008. This number was halved in the 70–85 age group. These figures approximately coincide with the data on marginal employment from the Bundesagentur für Arbeit (cf. Table 10 in the Appendix).

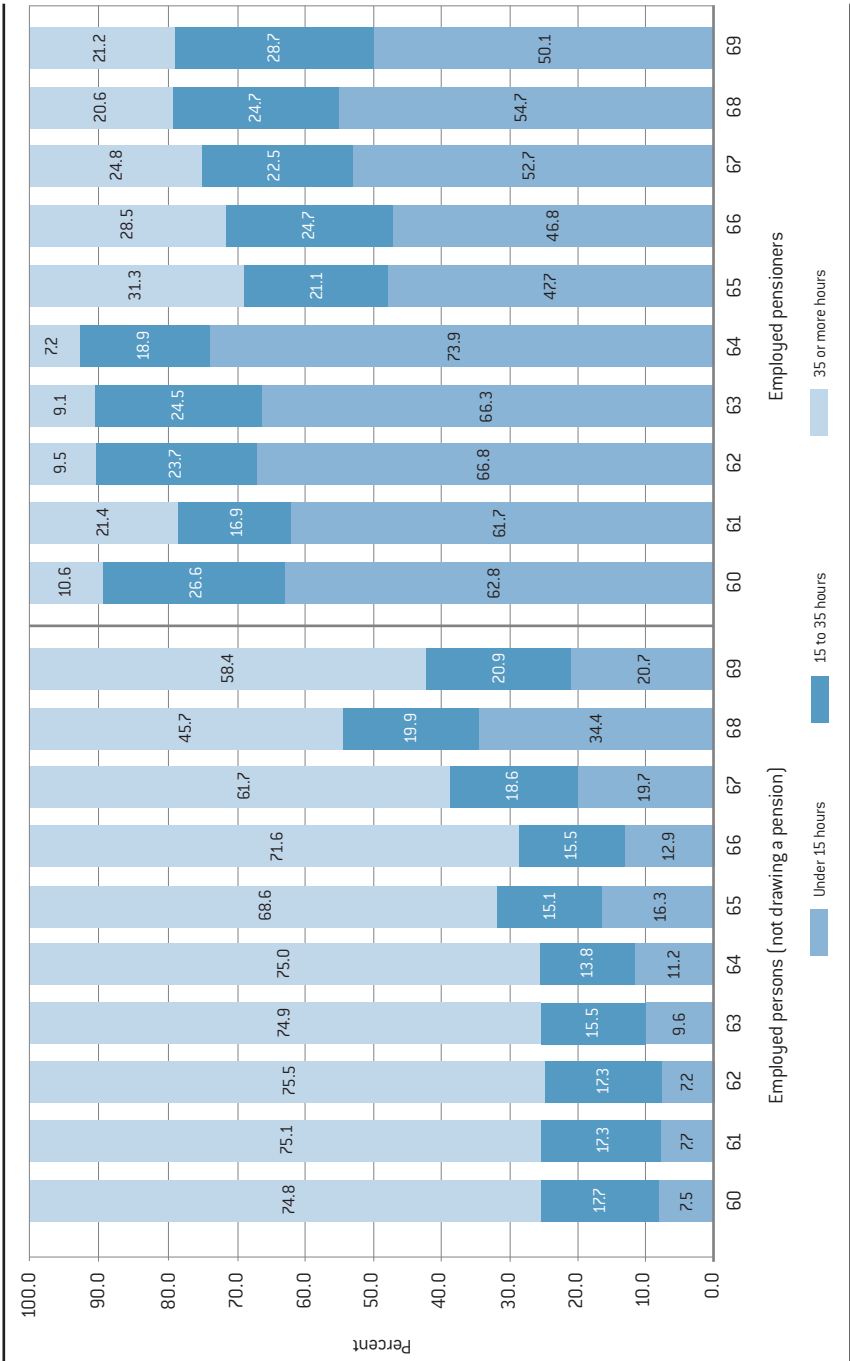


Figure 3: Number of hours worked regularly per week for employed persons of retirement age (60–69 years) (Brussig 2010a, p. 12, based on the Mikrozensus 2007)

Gender	Employed persons by type of employment			
	Total no. of employed persons	Not in marginal employment	In marginal employment as their principal employment	In marginal employment as supplementary employment
Total	669	428	203	38
Male	416	294	101	22
Female	253	135	103	16

Table 9: Employed persons aged 65 and over – marginal employment and supplementary employment, 2009, in thousands (Mikrozensus 2009: Erwerbstätige nach geringfügiger Beschäftigung und Nebenerwerbstätigkeiten)

Figure 3 on page 19 shows how many hours per week were worked by those who were still employed (or employed once again) despite reaching the retirement age, broken down by year of age, up to 69 years. The employed persons who participated in the German Ageing Survey perceived the quality of their working conditions in very diverse ways. While most of those who still pursued paid employment did not feel that it was an undue burden, a quarter described being “physically fairly or very burdened” and well over a third described being “fairly or very burdened by stress”. A quarter found “new requirements” to be “very” or “quite stressful” (multiple answers possible, see Table 11 in the Appendix).

The motives for paid employment in old age are particularly interesting, and there is room for more research in this area. In the German Ageing Survey, about two-thirds gave enjoyment of work as a reason for working. However, a third reported their own cur-

rent financial situation as a reason (multiple answers were possible).

The pensionable age and age of retiring from one’s career are rarely identical (for a detailed discussion of this, see BZgA 2011, pp. 90 f.). Martin Brüssig (Brüssig 2010b, p. 1) placed the age of retiring from one’s career at 61.7 years in 2008, based on calculations from Eurostat (men: 62.1; women: 61.4 years). According to the Deutsche Rentenversicherung (German statutory pension insurance scheme), the average age at which individuals first drew an old-age pension was 63.2 years in 2008: 63.4 for men and 63.0 for women (Deutsche Rentenversicherung Bund 2010, pp. 117 f.). In the former West German federal states, this was one year higher than in the former East German federal states. In regions with an unemployment rate of under 5%, people first drew the old-age pension at 63.1 years, while this decreased to 62.8 years in regions with an unem-

Age	Reasons for employment following retirement			
	Current financial situation	Enjoy working	Contact with other people is important	I want to continue to have a job to do
60–69	38.3	71.4	50.6	46.1
70–85	30.1	72.8	43.9	47.8

Table 12: Reasons for employment following retirement, 2008 (as a percentage) (DEAS 2008: Gründe für Erwerbstätigkeit im Ruhestand)

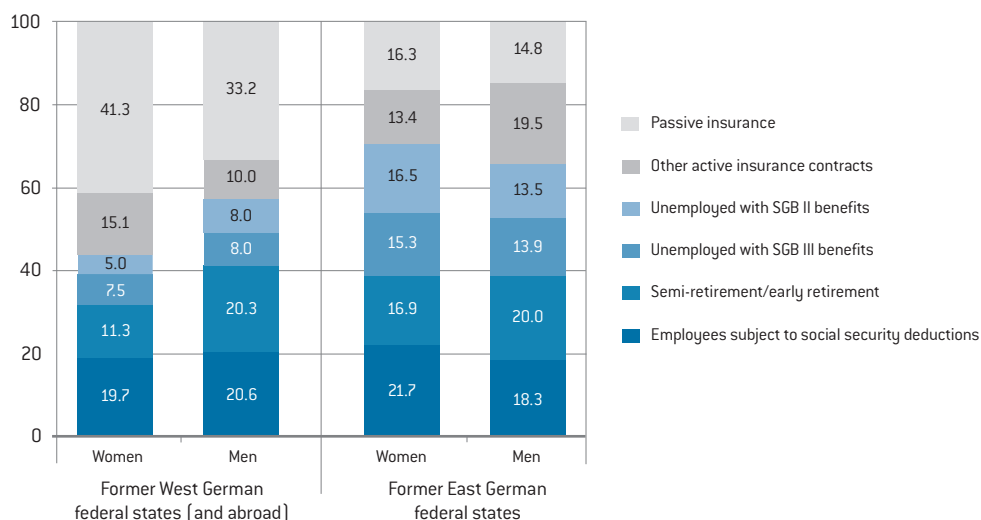


Figure 6: Status before drawing a pension, individuals first drawing an old-age pension in 2009 (as a percentage) (Bäcker et al. 2010, p. 33)

ployment rate of over 10% (Bundesregierung 2010, p. 34).


Figures 4 and 5 in the Appendix provide information on the development of the pensionable age for the old-age pension and the reduced earnings capacity pension (“Erwerbsminderungsrente”). Figure 6 shows the types of insurance that men and women had in eastern and western Germany in 2009 before drawing a pension. The proportion in active employment subject to social security deductions was comparatively small, while semi-retirement and early retirement were common. In eastern Germany in particular, high levels of unemployment were recorded prior to the pensionable age. The large number of “passively insured” individuals was made up of the self-employed, civil servants and non-economically active persons (including many housewives in western Germany).

In the German Ageing Survey, the economic activity status before drawing the old-age pension was

determined cohort-specifically. Here, too, the figures show a noticeably high number of individuals in eastern Germany who were unemployed and/or in early retirement prior to drawing the old-age pension. In eastern Germany, the status of “housewife” was only marginally represented prior to drawing a pension, while among 70- to 85-year-old women in western Germany, almost a third were housewives prior to drawing a pension (cf. Table 13).

Region	Age	Gender	Economic activity status before drawing old-age pension or state pension			
			In employment, incl. semi-retirement	Unemployed/ early retirement	Housewife/ house husband	Unable to work/ incapacitated, other
Germany	60–69	Men	65.4	21.6	0.0	13.1
Germany	60–69	Women	56.6	18.0	17.0	8.5
Germany	60–69	Total	61.2	19.9	8.1	10.9
Germany	70–85	Men	72.5	17.6	0.1	9.8
Germany	70–85	Women	57.6	11.8	22.3	8.3
Germany	70–85	Total	64.4	14.5	12.2	8.9
Western*	60–69	Men	69.5	18.0	0.0	12.5
Western	60–69	Women	59.0	11.4	22.1	7.4
Western	60–69	Total	64.7	15.0	10.1	10.2
Western	70–85	Men	77.1	13.0	0.1	9.7
Western	70–85	Women	57.2	6.9	28.1	7.8
Western	70–85	Total	66.5	9.8	15.1	8.7
Eastern	60–69	Men	48.0	36.6	0.0	15.4
Eastern	60–69	Women	48.9	38.2	1.1	11.8
Eastern	60–69	Total	48.5	37.4	0.6	13.5
Eastern	70–85	Men	52.8	37.4	0.0	9.9
Eastern	70–85	Women	59.0	28.6	2.4	10.0
Eastern	70–85	Total	56.4	32.2	1.4	9.9

* In the German Ageing Survey and GeroStat, “western Germany” includes the former West Berlin, while “eastern Germany” includes the former territory of East Berlin. Berlin is thus divided at district level in accordance with the East-West relations that existed before the district reform of 2001.

 Table 13: Economic activity status before drawing old-age pension (as a percentage)
(DEAS 2008: Erwerbsstatus vor Bezug der Altersrente)



02.5

Pensions and pension levels

In the 65–80 age group, around 1.1 million men and 1.4 million women in eastern Germany were drawing pensions on the survey date of 1 July 2009. In western Germany, this was around 4.7 million men and 5.3 million women – giving a total of approximately 12.5 million pensioners, i.e. the vast majority of the age group (Deutsche Rentenversicherung Bund 2010, pp. 158 and 165. For an

overview of the different types of pensions, see Brüssig 2010c).

The individual pension entitlements in the statutory pension insurance scheme are based on the wages and salaries from employment subject to statutory pension insurance scheme contributions. The amount of income generated individually compared to the average earnings of all insured persons is therefore the key factor in the calculation of a person's pension entitlement – and this applies to the entire insurance period. Anyone who worked for a long period while paying insurance contributions and achieved a high income will obtain a higher pension than employees who did not earn a high income and/or were only employed for a few years (for

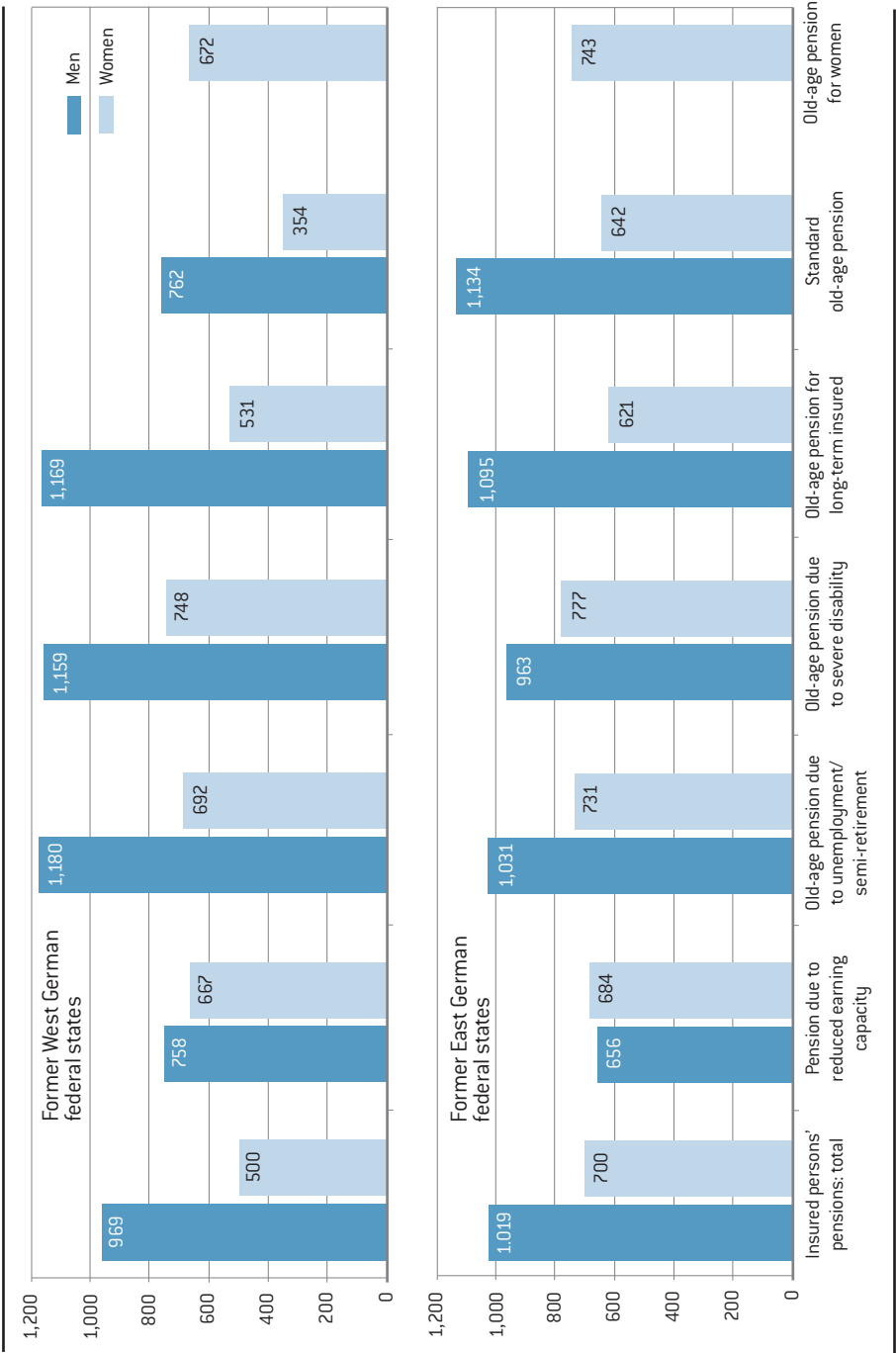


Figure 7: Average pension levels by pension type and gender (2009), former East and West German federal states; gross pension in euros at year-end (source: Deutsche Rentenversicherung [2010]: Rentenversicherung in Zahlen, Berlin, in: www.sozialpolitik-aktuell.de)

example, people who only made statutory pension insurance scheme contributions at the beginning of their careers, before becoming self-employed or working as a civil servant). The resulting large spread in pension levels is not reflected in the average pension shown in Figure 7.

Gender differences can be clearly seen in this representation, despite the distortion caused by determining the average pension. Especially in the former West Germany, among the cohort of current pensioners, female paid employment was associated with shorter employment and contribution periods, part-time work and lower incomes. The higher rates of insured persons' pensions (in total) for pensioners in eastern Germany compared to those in western Germany are quite noticeable (see Deutsche Rentenversicherung Bund 2010, pp. 158 and 165). Pension payments for women in eastern Germany were on average at least €200 higher than those for women in western Germany. This is due to the female participation rate having been around 20% higher in the former East Germany from the 1970s onwards (Schäffgen 1998, p. 144) and the lower wage differentials between the sexes there. Widowers' pensions are also accordingly higher.

However, it is important to note that, when considered by themselves, neither low nor high pension payments can tell us anything about the actual income situation of households, as this may be determined by other sources of income. Thus, although pension payments were higher in the east, unlike in the west, pension plans were the main source of income here: "However in western Germany, alongside pension plans (men: 69%; women: 62%), state pensions and other income such as investment income, and – for women – also support by their partner (29%) play a significant role as a predominant source of funding for significant proportions of the retired population" (Noll and Weick 2012, p. 3). There was also a considerable difference in

earnings between those drawing pension plans and individuals (only in western Germany) who drew a state pension. According to the evaluation of the micro-data sets from the Einkommens- und Verbraucherstichprobe 2008 (Income and Consumer Sample 2008) by Noll and Weick (ibid. p. 4), the mean household income of individuals who drew a state pension was nearly twice as high as that of people drawing pension plans.

Using data from the Deutsche Rentenversicherung (German statutory pension insurance scheme) available as of 2003, and in line with the results of the Sozio-ökonomische Panel (Socio-Economic Panel [SOEP]), Tatjana Mika (Mika 2006, p. 78) showed that, on an individual level, older people who were born in Germany had the highest pension payments (€868), "while repatriates, with an average of €716, are positioned in the middle, and migrants from Turkey and the former Yugoslavia, with an average of €683, receive the lowest personal payments" (ibid., p. 76). In addition, the statutory pension plan was "by far the most important source in migrant households" (ibid., p. 78).

As well as insured persons' pensions, widows' pensions were among the most important sources of income for older women.

Age group/ gender	Total pensioners	Average pension payments in euros
65–69 years (m)	2,254,632	971
70–74 years (m)	2,242,483	1,004
75–89 years (m)	1,401,149	1,018
65–69 years (f)	2,389,745	569
70–74 years (f)	2,540,515	546
75–89 years (f)	1,841,629	513

Table 14: Number of pensioners in absolute figures. Average pension payment in euros, as of 1 July 2009, throughout Germany (Deutsche Rentenversicherung Bund 2010, p. 148)

Table 14 provides information on the number of pensioners and their average pension payments. Figure 8 in the Appendix shows the ages of the recipients of widows'/widowers' pensions.

Drawing "basic provision in old age"

In line with Chapter 4 of the German Social Code, Book XII (SGB XII), persons in need who are aged over 65 may apply for welfare benefits as "basic provision in old age and reduced earnings capacity". If their pension entitlement is too low, this is taken into account when the basic provision is calculated. Figures from the end of 2010 are available from the Statistisches Bundesamt (Statistisches Bundesamt, 2011e; Schröder 2010). These indicate that 412,081 people over 65 were receiving the basic provision at the end of 2010. The federal averages were 2.04% of men (147,076 out of 7,201,072) and 2.75% of women (265,005 out of 9,643,221) aged 65 and over. Women in the former West German federal states (excluding Berlin) were particularly affected, where 30 out of 1,000 women aged 65 and over received "basic provision in old age", compared with 19 out of 1,000 residents in the former East German states (including Berlin). The state of North Rhine-Westphalia had the most recipients in absolute terms (112,245 people), but the highest rates were in the city states of Hamburg (5.53%), Bremen (4.94%) and Berlin (4.79%).

For around 70% of basic provision recipients aged over 65 (283,327 people), their old-age pension was calculated as being too low (Bundesregierung 2011, Rente mit 67, p. 14). Receipt of a survivor's pension is not reported separately here, but the figure of 14.1% from the year 2007 can be used as a guide (Bäcker and Kistler 2009, p. 17). Conversely, this means that about 20% did not have income from pension plans credited against the basic provision; presumably these were "primarily foreign nationals and formerly self-employed individuals who have not

acquired or were unable to acquire pension entitlements" (ibid.).



02.6

Assets, income and poverty

Overall, members of this cohort of 65- to 80-year-olds were relatively secure in material terms: they were less affected by poverty than the national average, and also less than has been forecast for coming generations as they get older. We have seen that many older people drew stable pensions. But the question of who will be secure in old age – and who will not – was determined by the success (in this regard) of their employment history. This was affected by social inequalities: there were significant differences in terms of income, the distribution of wealth and the risk of poverty – between people with differing levels of education and training, between the federal states in eastern and western Germany, between the sexes, and between those who had and had not experienced migration.

Assets

The incomes of older people were fed from multiple sources, as detailed in the previous section on employment and pensions. In the following, we present the distribution and extent of ownership of financial assets (cf. Table 15). The German Ageing Survey investigated this for the age group of 70- to 85-year-olds and the younger age group of 55- to 69-year-olds (whose figures are shown in brackets): in 2008, 23% (17.4%) had no assets and 68.6% (70%) had assets under €100,000. 8.5% (12.6%) owned assets of €100,000 or more (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 3-5).


It is interesting that the indicator of “no financial assets” in the older cohort being considered – unlike in the younger cohort – showed no significant east-west differences. While the 55- to 69-year-olds from the east had no assets more frequently than those from the west, with a difference of 8 percentage points, the differences in the older cohort without assets were very low: 22.4% in the west and 25.3% in the east had no financial assets. Women were more often found in this category; however, the difference between women and men was lower in the east. Considered overall, and depending on cohort and region, between one-third and half of older women only had asset reserves of under €5,000. In many cases, it would not be possible for these individuals to react to unforeseen costs (for example, if they were in need of assistance). Hardly anyone in the former East German federal states had assets in excess of €100,000: 0% of women and 3.5% of men. However, in the western federal states, 13% of men and 8% of

women had assets over €100,000.

A total of 58.5% of people aged between 70 and 85 (and 69.2% of 55- to 69-year-olds) throughout Germany in 2008 had assets in the form of property – most commonly western German men, of whom 65.2% (or 77.4%) owned real estate, followed by western German women at 60.7% (or 68.5%). In comparison, in eastern Germany, less than half of men (43.8%) and women (39.2%) aged 70 to 85 owned property (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 3-6).

Assets were distributed in a socially unequal way, and this inequality was passed on through inheritance. People with a low level of education, or those in the lowest quartile of the income groups defined in the German Ageing Survey, inherited assets only half as often as highly educated individuals and above-average earners (Motel-Klingebiel, Simonson and Romeu Gordo 2010, pp. 75 f.). In 2008, 62% of 70- to 85-year-olds (65% in the younger cohort)

Region	Age	Gender	Assets in euros				
			0	< 5,000	5,000– 25,000	25,000– 100,000	> 100,000
Germany	55–69	Men	14.2	12.5	24.2	34.2	14.9
Germany	55–69	Women	21.5	14.6	26.1	28.1	9.8
Germany	55–69	Total	17.9	13.5	25.1	31.2	12.3
Germany	70–85	Men	17.8	11.2	31.6	28.4	11.0
Germany	70–85	Women	27.4	15.7	28.0	22.3	6.6
Germany	70–85	Total	23.2	13.7	29.5	25.0	8.5
Western	55–69	Men	12.6	10.6	23.2	36.4	17.3
Western	55–69	Women	20.2	14.2	24.4	29.5	11.8
Western	70–85	Men	16.9	11.0	30.7	28.7	12.8
Western	70–85	Women	27.3	13.8	26.3	24.3	8.2
Eastern	55–69	Men	21.2	20.4	28.5	25.4	4.6
Eastern	55–69	Women	26.8	16.1	33.1	22.4	1.6
Eastern	70–85	Men	21.8	12.1	35.4	27.2	3.5
Eastern	70–85	Women	27.8	23.2	34.5	14.4	0.0

 Table 15: Distribution and amount of financial assets, 2008 (as a percentage) (DEAS 2008: Verbreitung und Höhe des Geldvermögens)

inherited assets, while 3% (15% in the younger cohort) were expecting an inheritance (ibid.). The surveys also show that western Germans inherited assets more often than eastern Germans, and the assets that they inherited were of significantly higher value – in western Germany, assets of €12,500 or over were inherited by 35.6% of older people, compared to only half as many (17.2%) in eastern Germany. Since these differences remain stable over time, Motel-Klingebiel, Simonson and Romeu Gordo (ibid. p. 76) describe a “continual strengthening of absolute social inequalities across the generations by means of inheritance”. A look at the debt situation shows that individuals aged over 70 were rarely in debt, while in eastern and western Germany about one in ten men aged between 55 and 69 had debts of more than €5,000 (see Table 16 in the Appendix).

Household income

The average net household income of German households has been calculated at €2,873 per month, based on the Einkommens- und Verbrauchsstichprobe privater Haushalte (Income and expenditure survey of private households) in 2009. Regardless of the various sources of income, 65- to 70-year-olds (based on the age of the main income earner) had an average household income of €2,497, compared to €2,372 for 70- to 80-year-olds (Statistisches Bundesamt 2011c, p. 549). Households of older people with a migrant background were significantly over-represented in the low income range of up to €1,300, and under-represented in higher income brackets (Menning and Hoffmann 2009, p. 19 f.).

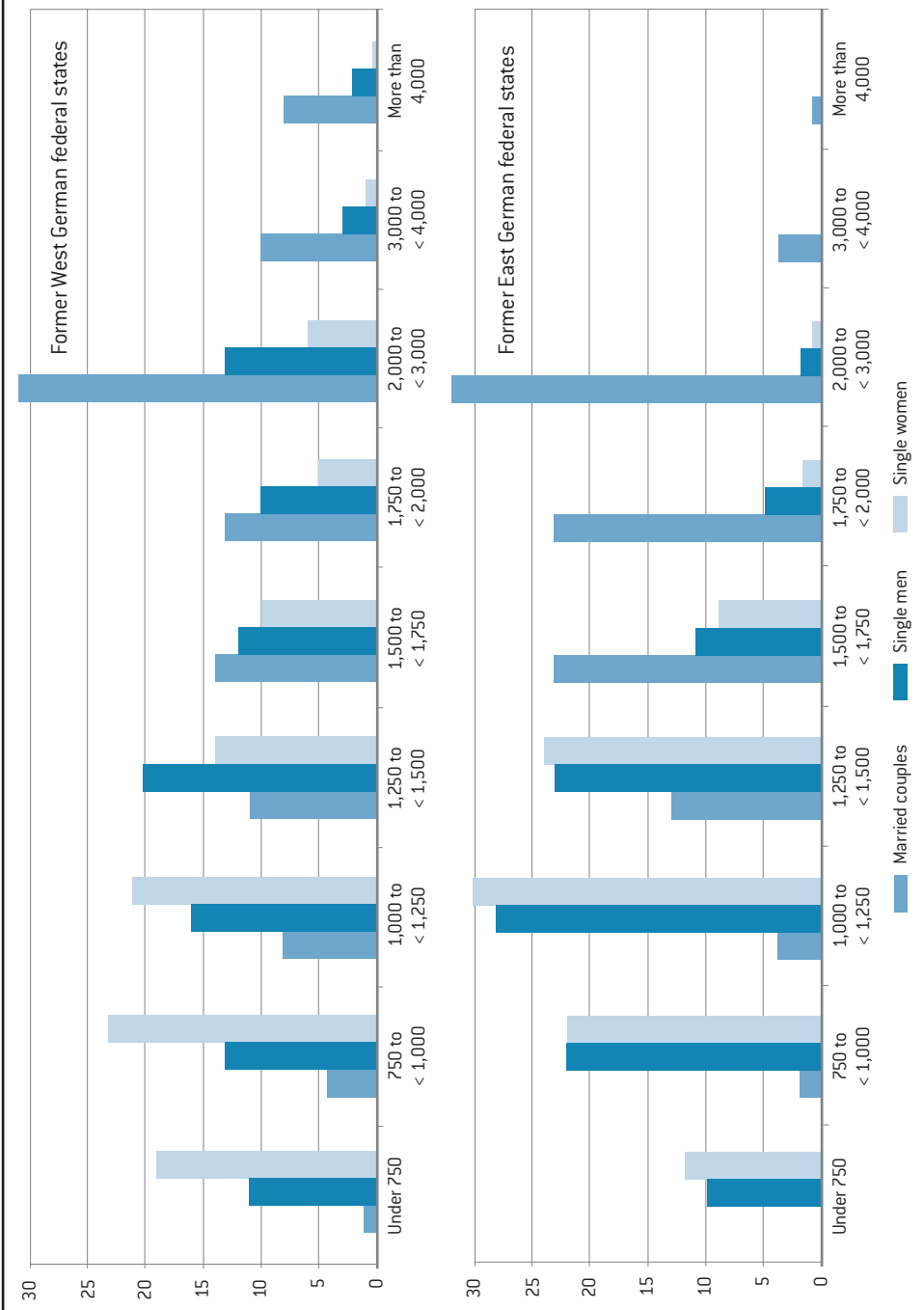
If different household sizes are taken into account in the income calculation, we refer to this as the monthly mean equivalised income.⁷ The monthly mean equivalised income of 40- to 85-year-olds amounted to €1,694 based on the 2008 German Ageing Survey (Motel-Klingebiel, Simonson and Romeu Gordo 2010, p. 69 f.; Motel-Klingebiel et al. 2010, Appendix of Tables A 3-1). This compares to €1,796 for the 55–69 age group, which was higher than for the younger and older cohorts – the income of 70- to 85-year-olds was only €1,518. However, there was significant social differentiation between genders, levels of education, and between eastern and western Germany. While the difference between western German men (€1,725) and women (€1,525) was €200, at just €100, this difference was only half as great in the former East German federal states.


The differences between eastern and western Germany are striking: older eastern Germans had, on average, only about 70% of the income of older western Germans. This means that a man in eastern Germany aged over 65 had about €500 per month less available to him than a person of the same age from the West. In addition, Motel-Klingebiel, Simonson and Romeu Gordo also pointed out (ibid. p. 69 f.) the income gap between the high- and low-skilled.

Figure 9 shows the extent to which older single women and men were particularly strongly represented in low income brackets.

Pensioner households are households in which the main income earner is a pensioner whose main source of funding is their pension. Pensioner households in the lower income brackets can be defined based on the analysis of the micro-census with

⁷ These calculations take into consideration that fact that multi-person households can operate more efficiently and thus achieve a higher level of prosperity than one-person households with the same per-capita income. An equivalence scale assigns a weighting to each person in the household.



 Figure 9: Distribution and amount of financial assets, 2008 (as a percentage) [DEAS 2008: Verbreitung und Höhe des Geldvermögens]

regards to net household income and household size. Looking at Germany as a whole, on average at least every tenth pensioner household in each age group (65–70, 70–75 and 75–80) had a net household income of only €900 or less per month. Pensioners in one-person households were at greater risk of having a low income. The largest group of individuals affected by low incomes comprised pensioners aged 65 to 70 living in one-person households in the former East German federal states, 31% of whom had to manage with no more than €900. In the former West German federal states, this was 23% (cf. Table 74 in the Appendix).

Poverty

There are numerous divergent approaches and metrics for the definition and measurement of poverty. The median net equivalised income has been used to define “relative poverty” throughout the EU since 2001. The median is resistant to “outliers” and marks the income of the persons who – after all individuals have been sorted in ascending order by their equivalised income – divide the population into exactly two halves. That is, half has more, and the other half has less income.

Individuals who have less than 60% of the median societal income are affected by “relative income poverty” (for example, in the German Ageing Survey) or “at risk of poverty” (for example, in the micro-census). In this sense, both the German Ageing Survey with data from the year 2008 based on the SOEP, and the calculations by the Statistisches Bundesamt based on the 2010 micro-census, provide information relating to those affected by or at risk of poverty. The latter give more detailed and current data, how-

ever, at the moment they are only publicly available for the 65+ age group as a whole. Because a breakdown by cohort and a comparison of eastern and western Germany is possible with the German Ageing Survey, we will begin with these results, which, while being a little older, do not differ greatly.

In the German Ageing Survey, individuals are classified as poor if they have less than 60% of the median societal income, on the basis of the SOEP data. The poverty line in this case was drawn at €772 in 2008.⁸ In 2008, 11.7% of 70- to 85-year-olds were affected by relative income poverty – in the former West German federal states this was 10.1% of 70- to 85-year-old men and 13.1% of women, and in the former East German federal states it was 7.2% of men and 13.6% of women (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 3-3). Other than with respect to some other indicators related to income and assets, few large fluctuations can be identified here due to gender or differences between eastern and western Germany. It is worth noting that in this particular age group, men in eastern Germany were the least affected by poverty, even if their average income was significantly lower than that of their peers in western Germany.

While in the former East Germany individuals acquired stable pension rights in employment histories that were mainly long and with few interruptions, the increased risk of poverty in western Germany can be explained by low outliers, including low-wage employment.

From the 1970s, the female participation rate in the former East Germany was around 20% above the rate in the former West Germany, and income inequality between men and women was less pro-

⁸ The poverty line based on SOEP data differs from that determined in the micro-census. In the micro-census, with a median equivalised income of €1,470, individuals were defined as being at risk of poverty if their equivalised income was under €882 (Statistisches Bundesamt 2011a, p. 339).

nounced than in the Federal Republic (Schäffgen 1998, p. 144). Therefore, looking at the figures for our cohort, average pension payments for women in eastern Germany were significantly higher than those of their peers in western Germany (Deutsche Rentenversicherung Bund 2010, pp. 158 and 165). Nevertheless, women aged from 70 to 85 fell under the poverty line equally often in eastern and western Germany alike (13%, see above). This is because women in western Germany were often able to compensate for lower pensions through higher widows' pensions or other income. However, western German women were also the most common recipients of welfare benefits for people aged over 65 ("Grundsicherung im Alter" i.e. basic provision in old age).

In the younger cohort of 55- to 69-year-olds, the relationship between eastern and western Germany was shifted. The high rate of income poverty among older people in eastern Germany in this cohort – 20.1% of men and 17.8% of women – was a reflection of the social downgrading that was experienced following 1989. However, western German men and women in this younger cohort were less affected by poverty (by about 4 percentage points) than in the age groups described previously.

The SOEP data also allows us to compare the risk of poverty (less than 60% of the median societal income, i.e. less than €772) to the figures on wealth (more than 20% of the arithmetic mean, i.e. €2,922 or more). From Table 17 it can be seen that the gap between eastern and western Germany in the younger cohort (55–69 years) was wider than that in the older group. According to these figures, one fifth of 55- to 69-year-olds in eastern Germany at the time of the survey – i.e. 59- to 73-year-olds in 2012 – was poor or at risk of poverty and had no assets that could be used as private provision for retirement.

In this context, preventing poverty from being reinforced in old age is a major challenge. At the same time, an increase in wealth can be seen nationwide in the younger cohort compared with the older group – among women throughout Germany in particular.

As already mentioned, the median calculated from the micro-census surveys is different to that based on the SOEP data. In the micro-census, with a median equivalised income of €1,470, individuals were defined as being at risk of poverty if their equivalised income was under €882 (Statistisches Bundesamt 2010a, p. 393). When the risk of poverty is broken

	Western			Eastern			All of Germany		
	M	F	Total	M	F	Total	M	F	Total
55–69 years									
Poor	6.1	8.8	7.4	20.1	17.8	18.9	9.0	10.8	9.9
Wealthy	13.6	11.6	12.6	2.7	3.4	3.1	11.4	9.8	10.6
70–85 years									
Poor	10.1	13.1	11.8	7.2	13.6	11.0	9.5	13.2	11.7
Wealthy	10.1	5.9	7.8	0.6	0.0	0.3	8.2	4.6	6.2

Table 17: Distribution of poverty (less than 60% of median societal income, i.e. less than €772) and wealth (more than 20% of the arithmetic mean, i.e. €2,922 or above) as a percentage (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 3-3, A 3-4, data based on SOEP, own representation)

down by social group based on the micro-census, it can once again be clearly seen that over-65-year-olds with a migrant background were disproportionately at risk of poverty, at just under 30%. Their pensions were often so low (and were not compensated by other income) that they fell below the poverty line (cf. Tables 75 and 76 in the Appendix). (Late) repatriates (considered German) were better off, with around 20% classed as being at risk of poverty. However, this was still an increased risk, despite their integration into the German social and political system. At 10%, a significant proportion of pensioners aged over 65 without a migrant background (with their pension as their main source of funds) also fell below the poverty line, with pensioners living alone being at increased risk of poverty in particular.

» 02.7 Subjective perception of material life situation

The German Ageing Survey also collected data on the subjective perception of the material life situation of those surveyed (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 3-13). The vast majority of older people aged between 70 and 85 were satisfied with this: 63.3% considered their standard of living to be “good” or “very good”. Only around 5% described their standard of living as “poor” or “very poor” – most infrequently eastern German men (1.4%), followed by western German men (4.4%) and women in western and eastern Germany (6%) (cf. Table 18 in the Appendix).

A significant difference between eastern and western Germany emerged in the younger cohort, which was even more pronounced among those aged 40–54 years. In the 55- to 69-year cohort, around 10% of

women and men from the former East German federal states evaluated their standard of living as “poor” or “very poor”. It is striking that in the eastern federal states, half of the 70- to 85-year-olds expected a future decline in living standards – possibly against the backdrop of rising prices and fears of crisis (ibid., A 3-14).

In response to the question, “Do you have enough money to be able to meet your needs”, 8.3% of 70- to 85-year-olds throughout Germany answered “not at all/not really”, 34.9% “to some extent” and to 56.8% “mostly/completely”. Women consistently evaluated their situation slightly worse than men. In the younger cohort (55–69 years), men in the former East German federal states in particular were dissatisfied with their financial situation: 23.3% of them (and 16.5% of women) replied with “not at all/not really”. This was more than twice as many as in the former West German federal states (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 3-15).

» 02.8 Conclusion

This chapter provides an overview of the various situations in which the approximately 12.7 million people aged between 65 and 80 experience ageing in Germany today. Woman or man, born in Germany, the former Soviet Union or Turkey, low or highly skilled, with an employment history in the former East or West Germany, with assets in their own property or living in one-person households with no reserves, with sufficient old-age pension or state pension, retired at 63 or with a “mini job” at 69 – we have seen how these factors are woven into the

inequalities in the circumstances, conditions and perceptions of ageing in the broad age range from 65 to 80 years. It is crucial to address the inequalities and vulnerabilities that are present, especially as consideration of averages may lead us to consider defining a materially secure “average older person” who is satisfied with his or her situation. We will now summarise the important findings in this regard.

At around 1.4 million individuals, older people with a migrant background represented 9% of 65- to 85-year-olds. They made up a substantial (and increasing) proportion of this age group in metropolitan areas. Accordingly, there is a strong need for a broad range of social services for this group, taking into account individuals’ migrant and employment histories. This will differ by region and will be required into old age. In addition, it must be noted that older people with a migrant background were disproportionately affected by poverty, at just under 30%.

Individuals are classified as poor if they have less than 60% of the median societal income. Based on the data from the 2008 German Ageing Survey, at least one in ten 70- to 85-year-olds was affected by poverty in this sense. It is worth noting that in this age group, men in eastern Germany were at the lowest risk of poverty, even though their average income was significantly lower than that of their peers in western Germany. According to the German Ageing Survey, women aged from 70 to 85 fell below the poverty line equally often in eastern and western Germany alike, at around 13%. In the younger cohort of 55- to 69-year-olds, the relationship between eastern and western Germany was shifted. The extremely high rate of income poverty among older people in eastern Germany in this cohort – 20.1% of men and 17.8% of women – was a reflection of the social downgrading that was experienced following 1989. In this context, preventing poverty from being reinforced in old age is a major challenge. With regard to income, it can be seen that those most

affected by low income at the time of writing were pensioners aged from 65 to 70 living in one-person households in the former East German federal states, one third of whom had to manage with no more than €900.

Around one in five older people did not have any assets. Depending on the cohort and region, between a third and half of older women only had asset reserves of less than €5,000. In many cases, it would not be possible for these individuals to react to unforeseen costs (for example, to adapt their home in line with differing needs).

When considered by themselves, neither low nor high pension payments can tell us anything about the actual income situation of households, as this may be determined by other sources of income. Thus, although pension payments were higher on average in eastern Germany, unlike in western Germany, pension plans were the main source of income here. In western Germany, state pensions, income from assets and financial support from a partner were important sources of income.

For people between 65 and 69 years of age, 8–10% of their average net household income was generated by employment. In line with ILO definitions, 666,000 over-65-year-olds (6% of 65- to 74-year-olds and 1% of people aged 75 or older) were counted as employed in the micro-census in 2009. However, the figures from the Bundesagentur für Arbeit suggest far more robust employment activity among older people: in June 2011 it registered over 700,000 low-paid employees aged 65 and older. According to the German Ageing Survey, in 2008, around one in ten pensioners aged between 60 and 69 was in employment in addition to drawing a pension. Their motivation was often enjoyment of work, but a third gave financial reasons for being in paid employment. Overall, the data on these important issues is limited and to some extent contradictory.

The vast majority of older people aged between 70

and 85 were satisfied with their own standard of living. A significant difference between eastern and western Germany emerged in the cohort of 55- to 69-year-olds, and was more pronounced among the age group below this. In the 55- to 69-year cohort, around 10% of women and men in the former East German federal states evaluated their standard of living as “poor” or “very poor”. It should be noted that this finding tends to be associated with a high risk of social disintegration, loneliness and dissatisfaction, which is discussed in the following chapter.

03

» Social relationships

This chapter examines the social relationships of older people. First we will review their marital status and types of households, number of children and grandchildren. Then we will discuss forms of social involvement: what do we know about the family and inter-generational relationships of people in this age group, and their relationships with people outside their family structures? Whom do women and men feel emotionally connected to, who supports them, who gives them advice, who comforts them?

» 03.1 Lifestyles and households

The German Ageing Survey collected data on how many older people were living in partnerships. This showed that in 2008, more than half of 70- to 85-year-olds and two-thirds of 55- to 69-year-olds lived with their spouse in a common household (see Table 19 in the Appendix).

Table 20 provides detailed information on the marital status of older people, confirming that marriage represented the main family situation in this age group. Older people within this age range increasingly experienced widowhood – women in particular. However, the number of divorced people was slightly higher among the younger cohorts.

Age	Single		Married		Widowed		Divorced	
	M	F	M	F	M	F	M	F
65–69	7.0	4.6	78.0	65.3	5.7	19.5	9.3	10.5
70–74	5.7	4.9	78.7	56.5	8.9	30.6	6.6	8.1
75–79	4.7	5.8	75.7	42.0	14.8	46.0	4.8	6.2

Table 20: Population on 31 December 2009 by age and marital status (as a percentage) (Statistisches Bundesamt 2011c, p. 43)

Widowhood

Many older people in this later phase of life experience the death of their partner (most commonly the death of the husband). Widowhood was predominantly a female phenomenon: men under 75 years were reported as widowed very rarely (Statistisches Bundesamt 2011c, p. 43). However, a third of women in the 70–74 age group were widowed, and in the 75–79 age group this rose to almost half of women (see also Table 21 in the Appendix). This was partly due to the higher life expectancy of women, but also the fact that 77% of married men aged over 65 in 2009 had a younger partner (Statistisches Bundesamt 2011b, p. 18, see Figure 10 in the Appendix).

According to the German Ageing Survey, in 2008 divorced/separated people comprised 6% of the group of 70- to 85-year-olds (10% in the 55–69 cohort) and 4% were single (5% in the 55–69 cohort). The proportion of couples in this age group

in non-married households or not cohabiting was very low (Engstler and Tesch-Römer 2010, pp. 169 f.).

Households

The overall age group of 65- to 80-year-olds (based on the age of the main income earner) represented 8,334,000 households in 2009: 65- to 69-year-olds lived in 2,868,000 households, 70- to 74-year-olds in 3,198,000 and 75- to 79-year-olds in 2,268,000 households (cf. Table 22).

One-person households

Among 65- to 69- and 70- to 74-year-olds, one-person households comprised around a third of all households, compared to half of households for 75- to 79-year-olds. Individuals in this group were primarily widowed older people, and the proportion increased with age (see Figure 11 in the Appendix).

Age of main income earner	Number of households in total	Of which: One-person households	Of which: Multi-person households				0
			Households in total	Household members per household			
				2	3	4+	
65–69	2,868	1,066	1,802	1,634	134	33	1.70
70–74	3,198	1,317	1,880	1,774	88	18	1.63
75–79	2,268	1,136	1,131	1,083	41	7	1.53
65–79 in total	8,334	3,519	4,813	4,491	263	58	1.62

Table 22: Household size by age of the main income earner, in thousands (Statistisches Bundesamt 2011f, p. 26)

Age	Gender	Very good	Good	Average	Poor	Very poor
55–69	Men	9.0	51.9	27.3	8.5	3.3
55–69	Women	15.3	45.7	25.8	10.6	2.6
55–69	Total	13.0	48.0	26.4	9.8	2.9
70–85	Men	3.6	37.9	35.0	18.5	5.2
70–85	Women	8.3	38.1	35.1	15.1	3.4
70–85	Total	7.4	38.1	35.1	15.7	3.7

Table 23: Evaluation of life without a partner (by partnerless individuals), 2008 (as a percentage) (DEAS 2008: Bewertung der Lebenssituation ohne Partner)

Over 80% of them were women. A total of 4,537,000 people living alone (i.e., living in a one-person household⁹) were counted in the 65–85 age group – representing almost a third of all people living alone (Statistisches Bundesamt 2011f, pp. 55 f.).

Older people living alone are worthy of special attention here, as they are faced with other pressures than those who share a household with a partner or other person: they have a higher risk of loneliness and lack of social support, and an above average risk of poverty (see Chapter 02). When dealing with the loss of their spouse, older people who had just been widowed often complained of a lack of support (cf. Statistisches Bundesamt et al. 2008, p. 377, calculations based on the European Social Survey of 2004/2005). On the other hand, single people living alone had already adjusted to the single lifestyle; during the course of their lives they had often created social network structures that were also viable as they grew older (cf. Vaskovics et al. 2000). At the same time, one cannot simply equate “alone” with “lonely”, nor can partnerships be viewed as a resource per se. In old age, as in all phases of life, they can be a source of either satisfaction or stress.

While in many partnerships, the partner is the main source of discussion, advice and consolation, (cf. BMFSFJ 2001, p. 211) on the other hand, problems such as violence or addiction, or the care or assistance that a (usually male) partner may need can be both mentally and physically stressful. Table 23 shows that (older) men rated life without a partner worse than (older) women and that, overall, the younger cohort experienced this situation more positively than the older ones.

Table 24 in the Appendix also provides information on how often widowed older people lived in one-person households or in multi-generational environments – for example, moving in with one of their adult children (and possibly the child’s family) following the death of their partner.

⁹ People who live in shared accommodation for longer than three months and who do not keep house for themselves (for example, in nursing homes or prisons) are not included in the micro-census surveys of private households.

Region	Age	Very good	Good	Average	Poor	Very poor
Germany	55–69	26.5	52.6	17.0	3.1	0.9
Germany	70–85	29.4	54.0	12.7	2.8	1.1
Western	55–69	26.1	52.0	17.9	3.1	0.9
Western	70–85	29.1	54.6	12.3	2.8	1.3
Eastern	55–69	28.1	55.2	13.3	2.9	0.5
Eastern	70–85	30.5	51.9	14.2	2.8	0.7

Table 25: Evaluation of relationship with family, 2008 (as a percentage) (DEAS 2008: Bewertung der Beziehung zur Familie)

03.2 Family and inter-generational relationships

Family relationships represented a significant form of social involvement for the age group described here. In 2008, over 80% of 70- to 85-year-olds evaluated their family relationships as “good”, while only 4% experienced them as “bad” or “very bad”. They did not differ significantly from the younger cohorts in this, and there was no evidence of any trend in family relationships being perceived as subjectively better or worse over time (Motel-

Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 8-13).

Partnerships were also generally experienced as satisfactory – although more women than men rated them as poor (see Table 26 in the Appendix).

Relationship with children

In 2008, 87% of 55- to 69-year-olds and 89% of 70- to 85-year-olds had children (Mahne and Motel-Klingebiel 2010, p. 194). Over a tenth (13% and 11%) had no living children. As a proportion of all parents with children in the 70–85 age group, at least 5.5% of women and 9.1% of men (15% of men in eastern Germany) were step-parents (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 7-7). The percentage of people without children was slightly higher in the younger cohort of 55- to

Age	Gender	No living children	1 living child	2 living children	3 living children	> 4 living children
55–69	Men	13.7	22.8	43.3	14.2	6.0
55–69	Women	13.0	24.5	41.2	13.7	7.6
55–69	Total	13.3	23.7	42.2	14.0	6.8
70–85	Men	10.3	20.3	37.4	20.3	11.6
70–85	Women	11.7	22.9	35.3	16.8	13.2
70–85	Total	11.1	21.8	36.2	18.3	12.6

Table 27: Number of living children, 2008 (as a percentage) (DEAS 2008: Anzahl lebender Kinder)

Region	Age	The closest adult child lives ...			
		in the neighbourhood	in the same town	in another town, max. 2 hours away	farther away
Germany	55–69	16.0	27.3	42.8	14.0
Germany	70–85	19.8	33.8	36.6	9.8
Western	55–69	15.7	26.6	45.0	12.7
Western	70–85	20.3	33.2	37.2	9.3
Eastern	55–69	16.9	30.0	34.2	18.9
Eastern	70–85	17.8	36.2	33.9	12.2

Table 29: Distance to nearest adult child, 2008 (as a percentage) (DEAS 2008: Wohnortentfernung zum nächsten erwachsenen Kind)

69-year-olds, at around 13% (Mahne and Motel-Klingebiel 2010, p. 173).

Nearly all older people aged 70 to 85 described their relationship with their children as “very close” (90.7%) or “medium” (6.9%), with only 2.4% rating it as “not close” (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 8-5). Women reported closer relations and more frequent contact with their (adult) children, but there was little difference between genders and between eastern and western Germany. In their subjective perception of emotional closeness to their adult children, there was also little difference between families with and without a migrant background – at least according to an evaluation of the (outdated) data from the German Ageing Survey in 2002. Helen Baykara-Krumme analysed the data on family relationships from the German Ageing Survey 2002 to identify similarities and differences between families with and without a migrant background¹⁰ (Baykara-Krumme 2007). The analysis showed that emotional attachment to children was equally stable over time in these groups (ibid., pp. 30, 31).

The close relationship was also reflected in frequent contact with the adult children (including by telephone). For well over two-thirds of the older people considered here, this was at least weekly on average (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 8-4). In addition, almost a further third were in monthly contact with their adult grandchildren (ibid., A 8-6, see Table 28 in the Appendix).

Across all age groups, women had more frequent contact with their children on average. It is striking that among men in eastern Germany, there was a large group (a quarter of 55- to 69-year-olds) that only had monthly or even less frequent contact with their adult children.

Looking once again at Baykara-Krumme’s evaluation of the data from the 2002 German Ageing Survey comparing families with and without a migrant background, it is clear that in families with a migrant background, the frequency with which older people contacted their adult children living outside the household was high: almost a third spoke to or saw them on a daily basis (Baykara-Krumme 2007, p. 30, based on data from the DEAS 2002).

¹⁰ Families with a migrant background in the 2002 German Ageing Survey were identified using a sampling technique based on citizenship via the Residents’ Registration Offices, cf. Engstler and Motel-Klingebiel 2010, p. 41.

About half of 70- to 85-year-olds lived in the same area as at least one adult child (or even in the same household or building), and only one in ten lived more than two hours away from their closest child. The distance was slightly higher in the younger cohort – among those in eastern Germany in particular, almost 20% lived farther than two hours away from their adult children.

Baykara-Krumme's evaluation of the data from 2002 shows that, at 27.5%, it was slightly more common for older people with a migrant background to live in the same household or neighbourhood as their families (compared to 21.5% of older people without a migrant background in the 70–85 age group). At the same time, at 6.9%, they were also more likely to have their children living farther than two hours away or abroad, compared to 1.6% of older people without a migrant background in the 70–85 age group (Menning and Hoffmann 2009, p. 16, according to calculations by Baykara-Krumme 2007 based on data from the DEAS 2002).

Grandchildren

77% of women and men aged 70–85 and just under half of 55- to 69-year-olds had grandchildren (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 8-1). Almost 80% of 70- to 85-year-olds described their relationship with them as “close” (ibid., A 8-7), and two-thirds were in regular contact with their grandchildren (see above and A 8-6). The grandchildren were already grown up in most cases, so it is no surprise that only 17.8% of people of this age group took care of their grandchildren compared to 30.8% among the younger cohort of 55- to 69-year-olds. In Germany as a whole, over 90% of women and men aged between 70 and 85 experienced being a grandparent as “important” or “very important”, and just 1.2% of people in this age group said it was “unimportant” (ibid., A 8-14).

Mutual support

A central finding of the German Ageing Survey was the dense network of support relationships through which family members provided each other with practical and financial support.

Just under a third of 55- to 69-year-olds had parents who were still alive; 20% of these supported their parents in practical ways, such as in the home. In contrast, only 2% of parents of 70- to 85-year-olds were still alive, and 13% of these received support from their children, who were already very old themselves (Motel-Klingebiel, Wurm and Tesch-Römer 2010, pp. 203 f.).

28% of 55- to 69-year-olds who had children provided them with practical help, as did 4.6% of 70- to 85-year-olds. On the other hand, this age group also received practical help: 11.9% from their children and 3% from their grandchildren (ibid.). This pattern of support has been stable since 1996 (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 8-9). When we explicitly consider the assistance provided in the home, it can be seen that with increasing age – particularly for women – the amount of support provided to others decreased, and more support was received. Reports of helping at home were more frequent from men. However, the nature of this assistance cannot be determined from the data; in the context of gender-based division of labour, in which some household chores are rendered invisible due to their being “a matter of course”, this data should be interpreted with caution (cf. Table 30).

As well as practical support, family members also provided financial or material support: 70- to 85-year-olds primarily provided financial or material support to their children (17.4%) and grandchildren (18%). For those whose parents were still alive, 12% in this age group provided them with support, while conversely 6.5% were supported by their parents (Mahne and Motel-Klingebiel 2010, p. 203). Within

Age	Gender	Help given and received in the household	
		Helped others in household	Received help from others in household
55–69	Men	32.7	23.1
55–69	Women	28.8	22.5
55–69	<i>Total</i>	30.7	22.8
70–85	Men	20.6	26.3
70–85	Women	11.2	30.3
70–85	<i>Total</i>	15.2	28.6

Table 30: Help given and received in the household, 2008 (as a percentage) (DEAS 2008: Geleistete und empfangene Hilfe im Haushalt)

one year, 15% made private transfers of financial or material support valued at €1,000 or more (and another 14% transferred lower sums), while only 2% in this age group received private transfers (Motel-Klingebiel, Simonson and Romeu Gordo 2010, p. 75). The younger cohort of 55- to 69-year-olds provided financial or material support to children (28%), grandchildren (11.7%) and parents (2.5%) (Mahne and Motel-Klingebiel 2010, p. 203).

with friends and acquaintances and for women – unlike men – this did not decrease in the older cohort (cf. Table 32 in the Appendix). However, as identified in various ways by the indicators of social (dis)integration shown here, there was still a significant group of people (especially in eastern Germany) that had very little social contact, was seldom or never visited and was at great risk of social isolation.

The Datenreport (Data Report) by the German Statistisches Bundesamt in 2008 also collected data on social relationships. When asked about their social contacts, 40% of over-65-year-olds in western Germany and 28% in eastern Germany said that they met with friends at least once a week, which is slightly different to the information from the German Ageing Survey. However, 9% of people in western Germany and 4% in eastern Germany reported not having anyone whom they could talk to about confidential or personal matters. Across all age groups, it was also shown here that people who had been widowed (and as previously shown, this was primarily older women) were often missing someone in whom they could confide – the figures were 14% in western Germany and 10% in eastern Germany (Statistisches Bundesamt et al. 2008, pp. 376 f., calculations based on the European Social Survey 2004/2005).

03.3 Extrafamilial networks

According to the German Ageing Survey, 70- to 85-year-olds had an average of four and 55- to 69-year-olds an average of five people in their extrafamilial social network (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 9-1). Table 31 shows that, at up to 30%, older people in eastern Germany more commonly reported having no-one or only one person who they would describe as “personally important with regular contact”. Over two thirds of 55- to 69-year-olds reported active contact

Region	Age	Gender	People important to me with regular contact		
			None or 1	2 to 4	> 5
Germany	55–69	Men	20.7	35.4	43.9
Germany	55–69	Women	16.6	37.3	46.1
Germany	55–69	<i>Total</i>	18.6	36.4	45.0
Germany	70–85	Men	22.2	40.3	37.6
Germany	70–85	Women	21.2	43.5	35.3
Germany	70–85	<i>Total</i>	21.6	42.1	36.3
Western	55–69	Men	18.5	35.1	46.4
Western	55–69	Women	15.0	36.5	48.5
Western	70–85	Men	21.2	39.4	39.4
Western	70–85	Women	18.6	43.9	37.5
Eastern	55–69	Men	30.0	36.5	33.5
Eastern	55–69	Women	23.3	40.5	36.3
Eastern	70–85	Men	26.3	44.0	29.7
Eastern	70–85	Women	31.8	41.8	26.4

Table 31: Size of personal network, 2008 (as a percentage) [DEAS 2008: Größe des persönlichen Netzwerks]

In the German Ageing Survey, respondents were asked whether extrafamilial networks were a source of advice and comfort. In 2008, 26.4% of women and 13.7% of men aged 70 to 85 found comfort in people outside the family (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 9-7). Comparison with earlier surveys shows no change in this respect – in contrast to younger cohorts who received more comfort from outside the family, with this trend clearly increasing since the 1996 survey. 12.6% of 70- to 85-year-old men (9.6% of 55- to 69-year-olds) and 19.6% of 70- to 85-year-old women (13.4% of 55- to 69-year-olds) said they had a need for more advice and comfort (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 9-9).

Because social support is an important resource for managing psychosocial stress and thus for health and well-being, in its study entitled “Gesundheit in Deutschland aktuell 2009” (German Health Update 2009), the Robert Koch Institute collected

data on the extent to which women and men experience appropriate social support – differentiated by educational level and eastern versus western Germany (RKI 2011a).

The degree of subjectively experienced social support was measured in line with the Oslo-3 Social Support Scale, which is defined by three variables. Survey participants were asked about 1) the number of people whom they considered to be close to them, 2) their experience of concern offered by other people and 3) how easy it was to get practical help from neighbours.

The evaluation showed the following: based on the aspects of social support defined above, men and women in eastern Germany (including Berlin) aged 65 to under 80 experienced a low level of social support more commonly than older people in western Germany. This difference was most noticeable among people with a low level of education. Among the group with a “basic education”, over a fifth of

Region	Age	Gender	Loneliness		
			Low	Medium	High
Germany	55–69	Men	70.6	27.9	1.6
Germany	55–69	Women	79.4	18.4	2.2
Germany	70–85	Men	75.6	23.3	1.2
Germany	70–85	Women	78.1	19.8	2.1
Western	55–69	Men	69.5	28.9	1.6
Western	55–69	Women	78.6	19.2	2.2
Western	70–85	Men	74.2	24.6	1.3
Western	70–85	Women	77.3	20.8	2.0
Eastern	55–69	Men	75.2	23.4	1.4
Eastern	55–69	Women	82.7	15.2	2.1
Eastern	70–85	Men	81.6	17.7	0.7
Eastern	70–85	Women	81.4	15.9	2.7

Table 33: Perceived loneliness, 2008 (as a percentage) (DEAS 2008: Empfundene Einsamkeit)

men and women in western Germany experienced only “limited support”, compared to just under a third of women and men in eastern Germany. It can also be seen that people with a lower level of education experienced low social support more commonly than those with a higher educational level, independent of regional differences. Among those with an average or higher level of education, the differences between men in eastern and western Germany were lower, while for women this was somewhat more pronounced: 17.1% of women with a higher level of education in eastern Germany and 10.2% in western Germany had a low level of support (ibid.).

As already shown, older women were more likely to have experienced the death of a partner. Is this group particularly at risk of loneliness? According to the German Ageing Survey, women were in fact most likely to report that they were “very lonely”, with very little difference between eastern and western Germany among the cohorts aged 55–69 and 70–85. The 70- to 85-year-old women in the former East German federal states reported the highest degree of

loneliness. Men were less likely than women to report being “a little lonely” and were more commonly “somewhat lonely”. Especially in conjunction with the data on social (dis)integration, the fact that almost 30% of 55- to 69-year-old men and almost 25% of 70- to 85-year-old men described themselves as “somewhat” or “very lonely” indicates a significant risk of loneliness and lack of social support for a small, particularly vulnerable sub-group of the women and men in the age group being considered here.

03.4 Conclusion

It was found that individuals’ social relationship structures underwent significant change between the ages of 65 and 80, although some aspects remained

very stable. Most continued to appreciate their family relationships and partnerships and found satisfaction in these, while extrafamilial networks were not as strong at this age as in younger cohorts. There was close contact with adult children and grandchildren. Around half of people in this age group lived close to their families, with whom they exchanged practical as well as financial assistance. However, the ageing that occurs during the 15 years between 65 and 80 brings about profound changes in social relationships (although these changes vary between individuals with different backgrounds and environments): grandchildren grow up and no longer need childcare, parents who are still alive need (increased) care or assistance and/or die. A third of those aged 55 to 69 supported others in the household, but with increasing age and physical limitations, these individuals became recipients of assistance. But, most profoundly, around half of the women in the age group being considered experienced the death of their partner – often after having cared for and supported him in the last years of his life. Men were widowed far less frequently, as 77% were older than their wives and men also have a shorter life expectancy. Unlike people who are single, individuals who have been widowed following the death of their partner usually have to adjust to living on their own – with the challenge of having to restructure their social relationships to avoid loneliness and isolation. Services that enable individuals to meet and get to know people in the neighbourhood, for example, and are appropriate to the needs and interests of older people in this phase of life, can be particularly important. Socio-environmental design of the living environment that invites individuals to spend time in public spaces is just as important as low-threshold services provided, for example, in senior centres or at neighbourhood get-togethers, to facilitate the formation and maintenance of social contacts. It was noted that lack of social contact, support persons and people to talk to, as well as loneliness, negatively impacted the daily experience of

social life in a particularly vulnerable sub-group of older people. The data suggests that older people with a low educational background were affected in particular, as well as those who experienced the social downgrading and upheaval following 1989 in eastern Germany.

04

» Health

As people age, health problems and their management play a greater role in everyday life. While the proportion of people with health limitations is still relatively low at the age of 65, the proportion of people with complex health problems that can compromise independent living increases sharply over the next 15 years of life.

» 04.1 Health status

The process of ageing varies widely among individuals, as does the occurrence of disease and functional limitation. There is an established relationship between health situation and socio-economic status⁴¹ that can be seen in the greater frequency of

certain diseases (such as cardiovascular disease) among individuals in lower socio-economic groups, and which is evident through to old age (cf. RKI 2010c). Differentiated analysis shows that there are different influences on health status in old age: as far as possible, the data presented will be broken down by gender, educational level, eastern/western Germany as well as German/non-German and migrants. There is very little representative data on the health status of people with a migrant background and foreign nationals living in Germany in this age group.

It should also be noted that the age groups in many studies are not further differentiated over the age of 60 or 65, so data relating to people aged over 80 will also be present in the results.

Subjective health

Subjective health refers to respondents' assessment of their own health status, independent of med-

Women (65–80 years)	Very good	Good	Moderate	Poor	Very poor
<i>Total</i>	11.0	39.8	36.8	10.7	1.5
Low level of education	9.2	35.4	41.1	12.8	1.5
Medium level of education	13.9	46.6	30.3	7.5	1.7
High level of education	18.0	57.0	20.3	3.9	0.8

Men (65–80 years)	Very good	Good	Moderate	Poor	Very poor
<i>Total</i>	11.1	46.3	33.1	8.1	1.3
Low level of education	7.6	41.4	39.5	9.9	1.6
Medium level of education	13.2	53.0	26.4	6.1	1.2
High level of education	19.1	52.3	22.6	5.4	0.5

Table 34: Assessment of subjective health status, 65- to under-80-year-olds, by gender and educational level, 2010 (as a percentage)
(primary source: RKI, GEDA 2010, own calculations)

ical diagnoses and findings. Studies have shown that objectively measurable health status rarely coincides with self-assessments made by older people and the very old. However, in old age, subjective health assessment is a better predictor of mortality than a person's objective health status¹² (Tesch-Römer and Wurm 2009, p. 14).

In the study entitled "Gesundheit in Deutschland aktuell" (German Health Update [GEDA 2010]), which was conducted as part of the health monitoring activities undertaken by the Robert Koch Institute, the respondents were asked to rate their general health themselves (see Table 34): "How is your health in general? Is it very good, good, moderate, poor or very poor?". In the age group from 65 to under 80, 50.8% of women and 57.4% of men

described their health as "very good" or "good" (GEDA 2010, own calculations). This compares to 61.3% of women and 60.7% of men in the younger cohort aged from 55 to under 65 (BZgA 2011). The results also confirm the known relationship between health and social inequality, shown here by the differences in educational status. Women and men with a low level of education reported being in very good or good health less frequently than men and women with a higher level of education. This trend is seen in younger age groups and continues into old age.

11 Socio-economic status is often represented by educational level. Educational levels are constituted using a standardised approach (ISCED or CASMIN) taking educational and professional qualifications into account, for example, in the study entitled "Gesundheit in Deutschland aktuell" (German Health Update [GEDA]) from the Robert Koch Institute.

12 The assessment of subjective health is influenced by psychological and social resources that affect health and life expectancy.

» 04.2 Morbidity

Overall health status and impairment

In old age, the probability of multi-morbidity increases, i.e. the simultaneous presence of several diseases or diagnoses. This is verified by the results of the German Ageing Survey¹³, which collected data on the number of medical conditions that individuals had. Among 64- to 69-year-olds in 2008, over half of respondents (53%) reported having two to four conditions, and just under one in ten in this age group (9%) reported five or more conditions. This proportion doubled among 70- to 75-year-olds to 20%, but increased only slightly among the next age group of 76- to 81-year-olds, at 21%. In the latter age group in particular, the number of conditions reported was lower in this cohort compared to previous surveys. In 1996, 31% of the 76- to 81-year-olds surveyed reported having five or more conditions. Furthermore, the proportion of people in this age group who reported having zero or one condition(s) increased by five percentage points (from 15 to 20%) compared to 1996 and 2002. Comparing the different waves of the survey (in 1996, 2002 and 2008), it is clear that older people reported fewer and fewer medical conditions (BMFSFJ 2009, p. 22). This suggests that very old individuals at the time of the later surveys were healthier than in previous years.

There is no representative data on the objective health status of older people with a migrant background in the age group of 65- to 80-year-olds (RKI

2008, p. 100). However, it can be assumed that their living and working conditions being less favourable on average would have an overall negative effect on their health. Therefore, an increased risk of illness can be assumed for older people with a migrant background, as has already been indicated in some studies. For example, in the micro-census in 2005 it can be seen that people aged 45 or over with a migrant background had higher sick leave figures than those without a migrant background (cf. in summary: RKI 2008a, p. 100).

Illnesses can affect everyday life to varying degrees. However, with multi-morbidity in old age, quality of life is primarily affected by permanent impairment caused by chronic diseases. In the GEDA 2009, respondents were asked: "To what extent are you permanently restricted by disease when carrying out your everyday activities? By permanently, we mean for at least the last six months." The three response categories were "substantially restricted", "restricted, but not substantially" and "not restricted".

Among over-65-year-olds, a quarter of women (24.2%) and just under a fifth of men (19.4%) reported being substantially restricted by disease.

Just under a third reported not being substantially restricted, while slightly less than half felt that they were not restricted at all. Women with a lower educational level reported being substantially restricted more frequently than women with a higher level of education; this difference was less pronounced among men. No regional differences could be determined (RKI 2011a, pp. 57 f.).

In the German Ageing Survey, physical limitations were identified more accurately by asking about impairment when carrying out certain activities. The

13 In the German Ageing Survey (DEAS), a representative cross- and longitudinal section of people aged over 40 were surveyed throughout Germany.

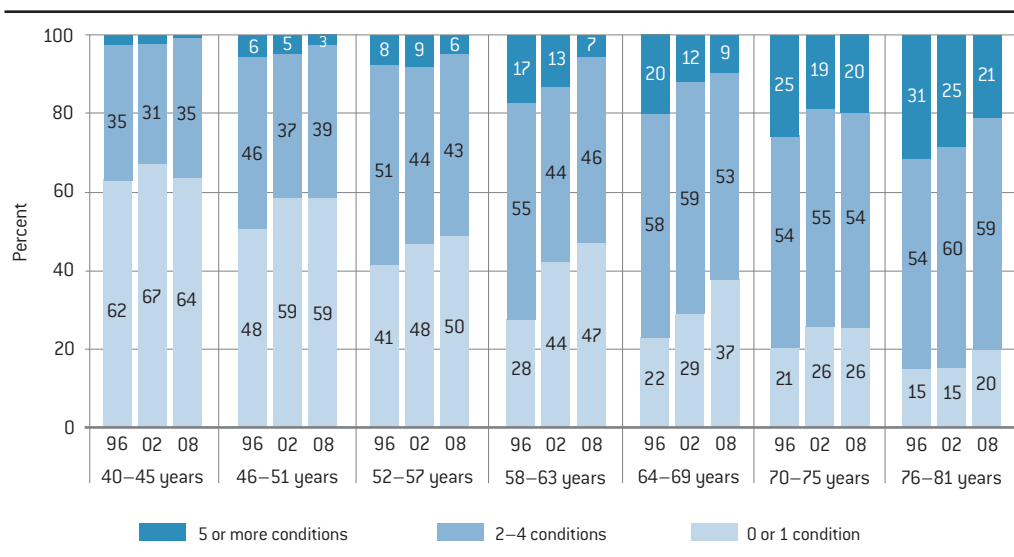


Figure 12: Number of conditions reported in 1996, 2002 and 2008 (BMFSFJ 2009, p. 22)

data shows that even among those aged 55 to 69, 60% reported being restricted in strenuous activities (for example, when lifting heavy objects or walking fast), and just under a third (31%) felt restricted when kneeling and bending. The 70- to 85-year-olds reported having significant physical restrictions considerably more often: 85% had difficulty carrying out strenuous activities, and 41% reported major restrictions. In this age group, more than half (55%) felt restricted when kneeling and bending (18% major restrictions), 44% when lifting and carrying heavy shopping bags (14% major restrictions), a third (32%) when walking long distances¹⁴ (14% major restrictions), and 28% when climbing stairs (one set of stairs, 8% of them had major restrictions). 18%

reported restrictions when bathing and dressing (5% major restrictions).

Restrictions in carrying out the activities asked about here, such as shopping and personal care, affect an individual's ability to manage independently in everyday life (cf. Figure 40 in the Appendix).

According to the German Ageing Survey, people with a lower level of educational attainment were more frequently affected by physical restrictions than those with a higher level of education. 70- to 85-year-olds with a higher level of education had similar restrictions to the cohort of 55- to 69-year-olds with a lower level of education, who were 15 years younger on average (BMFSFJ 2009, p. 22).

¹⁴ "Crossing several roads on foot".

Most common medical conditions

The most important impairments and conditions affecting people aged from 65 to under 80 will be examined in more detail in this section. This analysis will include the prevalence, that is, the relative frequency of the condition, and the incidence, i.e., the relative frequency of new cases within a certain period of time. The prevalence shows how often the disease occurs in a particular group of people, and the incidence describes the risk of certain conditions in a population group.

Impairments in vision and hearing

Just over a third (34%) of women and almost a quarter (23.1%) of men aged 65 and over¹⁵ reported impairments in their vision (despite corrective lenses/glasses, where applicable), 3.3% of women and 1.2% of men reported being unable to read newspaper articles or recognise faces at a distance of four meters (RKI 2011a¹⁶, p. 64). Causes of visual impairment included cataracts (a clouding of the lens of the eye that often develops in old age) (RKI 2011a, p. 63). The prevalence of cataracts increases with age: for women aged 65 and over it was 28%, which was above the prevalence in men of 17% (RKI 2010a, cited from www.gbe-bund.de). Cataract surgery to treat the clouded lens and restore vision is one of the most commonly performed surgical procedures.

While women were affected by restricted vision more often than men, there was a slight opposing trend in the hearing of those aged 65 and over. 36.9% of women and 41.9% of men in this age group reported hearing difficulties (despite having a hearing aid in some cases), while 5.6% of women and 6.8% of men reported having great difficulty with

hearing. 1.1% of women and men reported being completely unable to hear (RKI 2011a, p. 67). A social gradient can also be seen in these impairments: in all age groups, people with a higher level of education reported fewer difficulties with vision and hearing (ibid., pp. 64 and 67).

Diseases of the musculoskeletal system

Impairments of the musculoskeletal system occur more frequently with increasing age and can lead to functional restrictions and loss of quality of life – in some cases, endangering the individual's ability to manage independently in everyday life. Women were more often affected by musculoskeletal conditions in older age: diseases of the musculoskeletal system and connective tissue represented the second most common diagnosis among women aged from 65 to under 80, and the fourth most common diagnosis among men in this age group.

This gender difference can also be seen among individuals in this age group who received treatment in retirement and rehabilitation centres, where musculoskeletal disorders represented the most common diagnosis for women and the second most common diagnosis for men (Statistisches Bundesamt 2011g, cited from www.gbe-bund.de).

Chronic back pain was reported more frequently with increasing age. In the GEDA 2010, nearly a third of respondents aged from 65 to under 80 (30.2%) reported chronic back pain in the past twelve months, with women at all educational levels being affected more frequently than men. Men and women with a low level of education reported back pain significantly more frequently than those with a higher level of education (35% vs. 18.4%) (GEDA 2010, own calculations).

15 It should be noted that this data also includes information relating to the very old (80+).

16 In the GEDA 2010, 22,050 people aged 18 and over were interviewed, of whom 3,574 were aged from 65 to under 80.

Osteoarthritis is one of the most common joint diseases, involving changes and degeneration in the joints, particularly due to excess wear. The occurrence of osteoarthritis increases with age: 44.3% of individuals aged from 65 to under 80 reported having been diagnosed with osteoarthritis. Female gender is a major risk factor for this disease, as well as increasing age. In the GEDA 2010, more than half of women (52.2%) and only a third (34.2%) of men reported having osteoarthritis (GEDA 2010, own calculations). While in the cohort aged from 45 to under 65, those with a lower level of education developed osteoarthritis more frequently, this difference balanced out among the older age groups, suggesting that the disease occurred later among people with a higher level of education (RKI 2011a, p. 91).

Significant risk factors for arthritis¹⁷ (inflammatory joint disease) are female gender and older age. Arthritis occurs less frequently than osteoarthritis. 13.7% of women and 8.9% of men aged from 65 to under 80 had been diagnosed with arthritis (GEDA 2010, own calculations).

Gout is caused by increased uric acid levels, resulting in the deposit of uric acid crystals in body tissues (Tausche et al. 2009, p. 549). This is influenced by diet and lifestyle, including the following risk factors: a diet rich in purines (e.g. meat), alcohol (especially beer) and being overweight (Choi, Liu and Curhan 2005, p. 287, Choi et al. 2004, p. 1279).

The prevalence of gout (how frequently it occurs) is 1.4% across all age groups, and men's risk of the disease is up to nine times that of women (Tausche et al. 2009, p. 549). In men aged 65 and over, gout is often one of several diseases in people with multi-morbidity (prevalence: 10%), along with high blood pressure and dyslipidaemia (raised cholesterol lev-

els). This type of multi-morbidity has a prevalence of less than 6% in women (van den Bussche et al. 2011, p. 4). In Germany, gout is often also accompanied by diabetes (Annemans et al. 2008, p. 962).

Osteoporosis is a loss of bone density due to the excessively rapid loss of bone substance and structure. The bones of people affected by osteoporosis have a lower breaking point, which is why this condition is associated with a greater risk of bone fractures. It is more common among older people, with women being affected more often than men. The prevalence of osteoporosis rises sharply in women from age 65 in particular: At 24.5%, women in this age group have almost a 4.5-fold higher prevalence of osteoporosis than men (5.7%) (RKI 2011a, p. 98).

There are numerous other risk factors in addition to age and female gender, including lack of exercise and poor diet, as well as underlying conditions and the use of certain medications (Dachverband Osteologie [DVO] 2009, cited from RKI 2011a, p. 97). Fractures due to osteoporosis, especially in the hip area, can lead to significantly lower quality of life and restrictions in independent living and are associated with high medical expenses (Endres 2006 and Schumacher et al. 2007, cited from RKI 2011a, p. 97).

Diseases of the lungs and bronchi

In old age, chronic lung disease is often accompanied by shortness of breath, secondary conditions and permanently restricted ability. Almost every tenth person aged from 65 to under 80 reported having been previously diagnosed with bronchial asthma (9.8% of women and 9% of men). The 12-month prevalence¹⁸ was 6.2% for women and 6.4% for men in this age group (GEDA 2010, own calculations). No significant differences in educational level

17 In the GEDA, respondents were asked: "Have you ever had a diagnosis from a doctor of arthritis, rheumatoid arthritis or chronic polyarthritis?"

18 The 12-month prevalence indicates whether the disease occurred among respondents in the past twelve months. In the GEDA, respondents were asked: "Have you had this condition in the past twelve months?"

have been determined in relation to the occurrence of bronchial asthma (RKI 2011a, p. 70).

Chronic Obstructive Pulmonary Disease (COPD) is a collective term for chronic obstructive bronchitis and emphysema. Older age, smoking and environmental influences (such as the inhalation of gases and dust in the workplace) are important risk factors in the development of this disease. Among 60- to 69-year-olds, 7.6% of men and 8.8% of women were affected by COPD, while among individuals aged 70 and over, 15% of men and 8.0% of women were affected (Geldmacher et al. 2008, p. 2611). Women aged 70 and over were less likely to be smokers (ibid.), reducing their risk of COPD.

The 12-month prevalence of chronic bronchitis (cough and sputum production for at least three months) was 7.2% for women aged 65 to under 80 and 7.4% for men in this age group. The lifetime prevalence was 11.1% for both men and women (GEDA 2010, own calculations). The incidence of the disease increases with age (RKI 2011a, p. 88). Among men with a lower educational level, the disease was significantly more common from the age of 65, compared to men with higher educational levels. Smoking is the most significant risk factor for the disease (ibid.).

Diabetes mellitus

The incidence of diabetes mellitus increases over all with age. It should also be noted that diabetes is not always diagnosed or recognised. Diabetes mellitus type 2 is the most common form of diabetes to occur in adulthood, at around 80 to 90% of cases. This is characterised by a decrease in the normal action of insulin and a relative lack of insulin secretion, which often goes unnoticed for a long period of time. Statements about prevalence can, therefore, only be made about diagnosed and thus known diabetes in the German population (Heidemann, Du and Scheidt-Nave 2011, pp. 1 f.).

Of people aged from 65 through to those over 80, almost one in five men (19.9%) and 17.2% of women indicated having been previously diagnosed with diabetes.

The disease was present in the past twelve months in 18.9% of men and 15.5% of women in this age group (GEDA 2010, own calculations). Women with a lower level of education had a higher risk of developing diabetes (RKI 2011a, p. 73).

Once diagnosed, diabetes mellitus type 2 can be treated in various ways, with the main objective being the reduction and stabilisation of the individual's blood glucose level. This can be achieved by weight loss with the help of changes in diet and physical activity, as well as by oral anti-diabetic medication, insulin or a combination of methods (Kempf and Martin 2011, p. 160; Kerner et al. 2001, p. 19). Approximately 44% of diabetics were treated with oral anti-diabetic medication, and around 31% with insulin or a combination of insulin and oral anti-diabetic medication. Only a quarter of people with diabetes were treated exclusively through diet (Köster et al. 2011, p. 379). However, even for older people, physical exercise and a balanced diet comprise the basis for the treatment of diabetes. Oral anti-diabetic medication and/or insulin should only be used if these interventions do not result in improvement in blood glucose levels (Hader et al. 2004, pp. 43 f.).

Diabetes can lead to serious secondary conditions and long-term complications (Heidemann, Du and Scheidt-Nave 2011, p. 1; Kempf and Martin 2011, pp. 160 f.). Results of the MONICA/KORA study¹⁹, for example, show that the incidence of myocardial infarction (heart attack) has increased by 1% in men with diabetes in recent years, whereas the incidence has declined in men without diabetes (Icks et al. 2009, p. 1838). Approximately 13% of diabetics in the KORA study had retinopathy (a disease of the retina which is difficult to treat and can lead to blindness)

[Icks et al. 2006, p. 75]. Diabetics of both sexes have a higher risk of developing cardiovascular and vascular disease – for example, the risk of stroke is about twice as high in older people with diabetes as among those without diabetes. Diabetics are also around eight times more likely to have severe kidney disease than those without a metabolic disease [Diehm 2011, p. 61; Icks et al. 2011, p. 267]. The risk of amputation (usually of the foot) is around seven times higher in diabetics than in those without diabetes [Lawall 2011, p. 66]. There is no information on age-group-specific prevalence of the long-term complications of diabetes. However, the prevalence of most complications increases with the duration of the disease and also with age [Hader et al. 2004, pp. 36 f.]. There are currently no representative studies available on diabetes prevalence for people with a migrant background living in Germany. However, experts assume that the prevalence of diabetes in the population of older people with a migrant background is higher than that in those without a migrant background in Germany [Icks et al. 2011, p. 149].

Cancer²⁰

According to the Gesellschaft der epidemiologischen Krebsregister in Deutschland [Association of Population-based Cancer Registries in Germany [GEKID]], 46,512 men and 30,682 women aged 65 to 69 had cancer in 2009.

The number of new cases among the slightly older group of 70- to 74-year-olds was 50,864 men and 30,685 women. Although there were fewer men in the older than the younger cohort, the number of

new cancer cases was higher among men in the older cohort. In the group of 75- to 79-year-olds, 35,893 men and 25,822 women had cancer, with fewer people in this cohort in total. Despite the higher proportion of women in the older cohorts, in all three age groups women developed cancer less frequently overall than men in the same age group.²¹ This also reflects the incidence of cancer, which increases with age but is always lower in women than in men, with the exception of breast cancer and uterine cancer. Women aged between 65 and 80 were most likely to be affected by breast cancer, colorectal cancer and lung cancer, while men in the same age group were most likely to be affected by prostate cancer, lung cancer and colorectal cancer [GEKID 2011; see Table 35 in the Appendix].

When considering the risk of developing cancer, it becomes clear how widespread the disease is today: at the age of 60, men have a 49.8% risk of ever developing cancer and a 15.8% risk of developing cancer over the next ten years. At the same age, women have a 36.9% risk of ever developing cancer and an 11.2% risk of developing cancer over the next ten years. At the age of 70, the risk of developing cancer is 44.8% for men and 30.3% for women, while the risk of developing cancer in the next ten years is 25.4% for men and 14.9% for women, [lifetime risk: 50.7% for men and 42.8% for women]. The risk of dying from cancer is 25.6% for men aged 60 and 18.6% for women, and at 70 years old it is 23.1% for men and 16.2% for women [lifetime risk of dying from cancer: 25.9% for men and 20.2% for women] [RKI 2012, p. 22]. In other words, every second 60-year-old man

19 MONICA = Multinational monitoring of trends and determinants in cardiovascular disease; KORA = Kooperative Gesundheitsforschung in der Region Augsburg [Cooperative Health Research in the Augsburg Region].

20 The data reported here is based on entries in the cancer registries of the federal states, which are not always complete. This should be taken into consideration when interpreting the data.

21 Cf. Table 1 in Chapter 02.1 for details of the size of the age cohorts.

Men aged	Risk of developing cancer		Risk of dying of cancer	
	in the next 10 years	ever	in the next 10 years	ever
60 years	15.8% (1 in 6)	49.8% (1 in 2)	5.9% (1 in 17)	25.6% (1 in 4)
70 years	25.4% (1 in 4)	44.8% (1 in 2)	10.9% (1 in 9)	23.1% (1 in 4)
Lifetime risk		50.7% (1 in 2)		25.9% (1 in 4)

Women aged	Risk of developing cancer		Risk of dying of cancer	
	in the next 10 years	ever	in the next 10 years	ever
60 years	11.2% (1 in 9)	36.9% (1 in 3)	3.7% (1 in 27)	18.6% (1 in 5)
70 years	14.9% (1 in 7)	30.3% (1 in 3)	6.5% (1 in 15)	16.2% (1 in 6)
Lifetime risk		42.8% (1 in 2)		20.2% (1 in 5)

Table 36: Cancer incidence and mortality risk in Germany by age and gender, ICD-10 C00–97 without C44, based on data from 2008 (RKI 2012, p. 22, own representation)

will (statistically) develop cancer in the course of his remaining life, while one in four will die from it. Among women aged 60, more than one in three will develop cancer while almost one in five will die from it.

The incidence of cancer is higher for men than for women. While the data shows an increase among men aged from 60 to under 79 with each wave of the survey (cf. 1980, 1990 and 2006), the number of cases among those aged 80–84 and 85+ decreased compared to the previous surveys. This can also be seen among the women, however, the number of cases in 2006 was lower than the number in 1990

for women aged 70 and over, and this figure decreased compared to both of the previous surveys from the age of 85 (see Figure 13 in the Appendix).

In 2010, compared to deaths by all causes, the proportion of deaths caused by “new malignancy” was 43.1% of 65- to 70-year-olds, 37.6% of 70- to 75-year-olds and 29.6% of 75- to under-85-year-olds. Overall, more men than women died from malignant tumours (Statistisches Bundesamt 2011).

Cardiovascular disease

The large group of cardiovascular diseases includes the subgroups of coronary heart disease

(CHD²²), which is a chronic disease of the coronary arteries that results in a reduction in the blood supply to the heart muscle, and cerebrovascular disease, which affects the blood vessels of the brain.

Typical symptoms of a heart attack:

- Severe chest pain lasting for more than five minutes, which may radiate to the arms, shoulder blades, neck, jaw and/or upper abdomen,
- severe tightness, strong pressure in the chest, anxiety,
- in addition to chest pain: shortness of breath, nausea, vomiting,
- feeling faint (in some cases without pain), possible loss of consciousness,
- paleness, sallow complexion, cold sweat.
- Note: in women, it is not uncommon for shortness of breath, nausea, upper abdominal pain and vomiting to be the only warning signs.

Coronary heart disease (CHD) and myocardial infarction (heart attack) are among the leading causes of death in adults in industrialised countries (RKI 2011a, p. 82). In the age cohort of 65- to 80-year-olds under consideration, heart attack is the second highest cause of death. Women aged between 65 and 69 are an exception: heart attack is the third highest cause of death in this group (Statistisches Bundesamt 2011s, cited from www.gbe-

bund.de). The symptoms of myocardial infarction may be different in women and men. Women experience significantly more pain in the left arm, back, left shoulder blade, neck or angle of the jaw. Women also report nausea with vomiting and fear of death significantly more frequently than men (RKI 2006, p. 22). Timely detection and prompt treatment are crucial factors for survival. Per 100,000 residents, of 333 women suffering an acute heart attack, about 151 (45.4%) die, and of 896 men having a heart attack, about 394 (44%) die. The mortality rate increases with age, reaching 51.7% among 70- to 74-year-old men and 49.2% among women in this age group (Helmholtz Zentrum München 2011, cited from www.gbe-bund.de). Overall, more men than women suffered from and died of heart attacks in the entire age cohort of 65- to 80-year-olds (Statistisches Bundesamt 2011g, cited from www.gbe-bund.de; Statistisches Bundesamt 2011i, cited from www.gbe-bund.de).

The prevalence of coronary heart disease for the entire group increased significantly in the group aged 65 and over: 19.1% of women and 28.3% of men aged 65+ reported having been previously diagnosed with coronary heart disease. (In comparison, in the 45–65 age group this was 3.5% of women and 8.6% of men.) Men aged 65 and over with a medium level of education had the highest prevalence rates, at 30.1% (RKI 2011a, p. 83), while among those with a higher and lower level of education about a quarter of men (26% vs. 25.8%) were affected by coronary heart disease. Among women aged 65 and over with a lower educational level the prevalence was 23.3%,

22 One common symptom of coronary heart disease is angina pectoris. There are different types of angina, including stable angina pectoris (chest tightness, symptoms/pain on exertion) and unstable angina pectoris (onset of symptoms/pain may occur at rest). Unstable angina is one of the conditions covered by the term "acute coronary syndrome". The term "coronary heart disease" also includes restricted circulation without pain, acute myocardial infarction (obstruction of a coronary artery), cardiac insufficiency induced by CHD (heart failure) and sudden cardiac death (RKI 2006, pp. 8/13).

while, at 15% and 14.5% respectively, women with a medium and higher level of education reported significantly lower rates. The CHD prevalence for men from eastern Germany was 32.7%, which is higher overall than that of men from western Germany, at 26.9%²³ (RKI 2009a, cited from www.gbe-bund.de).

Cerebrovascular disease is a group of conditions including stroke (RKI 2007, p. 27). A stroke can be either a cerebral infarction or cerebral haemorrhage: cerebral infarction is caused by reduced blood supply to the brain, and cerebral haemorrhage is caused by leaking of blood into the brain tissue (Diehm 2011, pp. 59 f.).

High blood pressure (hypertension)

High blood pressure or hypertension is a major risk factor for cardiovascular disease and many other diseases. Risk factors for high blood pressure are predominantly age, gender, genetic traits and various adverse nutritional aspects and living conditions. The risk of developing hypertension increases in middle age (RKI 2011a, p. 128). Among people aged from 65 to under 80, more than half (men: 57.5%, women: 57.7%) had previously been diagnosed with hypertension, and 50.1% of respondents in this age group had suffered from hypertension in the past twelve months (GEDA 2010, own calculations).

Urinary incontinence

Incontinence (involuntary leaking of urine) was recognised by the WHO as a disease in 1998. It can

take various forms (for example, stress incontinence and urge incontinence), and can significantly affect the quality of everyday life. Estimates of the prevalence of incontinence indicate that it affects around 11% of people aged over 60. The number of people with incontinence increases significantly from the age of 70: from the age of 74, incontinence affects around 30% of women and 42% of men (cf. in summary: Seizmair 2011, p. 23). It can be assumed here that actual figures are even higher, as incontinence is often not admitted due to shame and taboo (ibid.). Incontinence can have a variety of causes, and often several of these may be present, for example, physiological triggers (such as bladder sphincter weakness), other underlying conditions such as prostate disease, urinary tract infections or tumours, the use of multiple medications, neuronal changes and psychosocial factors. Studies have also shown that a large proportion of people (50–70%) who suffer from incontinence do not seek professional help (ibid., pp. 27 f.).

Infectious diseases²⁴

Infectious diseases are often severe in old age and can be life-threatening. The Robert Koch Institute collects data on this, but information is only available for the age group of people aged up to 70 (RKI 2010d).

In 2010, the infectious diseases reported among the age group of 65- to under-70-year-olds were primarily diarrhoeal diseases: norovirus gastroenteritis (viral diarrhoea) with 181.1 cases per 100,000 resi-

23 This difference was greatest among those with a higher level of education: in this case, 22% of men in western Germany were affected by coronary heart disease, compared to 34.6% of men in eastern Germany (RKI 2009a, cited from www.gbe-bund.de). There is no data for men from eastern Germany with a lower level of education, and there was no difference for individuals with a medium level of education.

24 HIV is a relevant infectious disease in younger age groups, but it is only of minor importance among those aged from 65 to under 80. In 2010, a total of 90 positive laboratory cases were reported among those aged from 60 to under 70, which was similar to previous years [2008: 90, 2009: 97]. Primarily men were affected (81 men, 9 women), and in the older age group of individuals aged 70 and over, the number was much lower (23 cases, women: 1, men: 22) (RKI 2010d, cited from www.gbe-bund.de).

dents, campylobacter enteritis (bacterial diarrhoea) 56.7 cases per 100,000 residents, rotavirus (diarrhoea) with 24 cases and salmonellosis with 22 cases per 100,000 residents. Other infectious diseases occurred less frequently: in 2010, there were only 1.1 cases of influenza reported per 100,000 (50 people). However, the 2009 pandemic influenza A was a new strain, H1N1, also referred to as “swine flu”, which led to 15.7 cases per 100,000 residents (789 people). This amounted to significantly more influenza cases among people aged 60 to under 70 than in previous years. Both sexes are equally affected by the influenza virus (RKI 2010d, cited from www.gbe-bund.de; RKI 2009d, p. 477; RKI 2011b, p. 154²⁵). See Chapter 04.9 for information on the uptake of flu vaccinations.

Methicillin-resistant *Staphylococcus aureus* (MRSA)

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a notifiable infectious disease that has received a lot of media attention in recent years. This is a bacterium that is resistant to methicillin and other beta-lactam antibiotics (EARSS 2009, p. 56). MRSA is now the most common antibiotic-resistant pathogen and is responsible for prolonged hospitalisation and increased mortality (*ibid.*). The bacteria were found almost exclusively in hospitals until the late 1990s, but now they are also found in other environments as well as increasingly among farm animals since 2005 (RKI 2011c, p. 233).

As older people are treated in hospitals more frequently, they are at particular risk from these bacteria. Risk factors, many of which apply to older people in particular, include: chronic long-term care, antibiotic therapy in the past six months, catheters, dialy-

sis, skin ulcers, gangrene, chronic wounds, deep soft-tissue infections and burns (RKI 2011c, p. 234).

The MRSA rate in Germany in 2008 was 19%, which had increased compared to the previous year (EARSS 2009, p. 58). At 21%, the MRSA rate was highest in the group of people aged 65 and over, with men and women equally affected, meaning that one in five people in this group were carriers (EARSS 2009, pp. 126 f.). Colonisation with MRSA bacteria does not necessarily mean that the people affected will develop an infection, but they are at increased risk and can continue to spread the pathogen unless appropriate action is taken.

Only about 16% of MRSA colonisation is acquired in hospital, compared to around 32% from rehabilitation centres. The other MRSA cases are already present prior to admission to hospital or a rehabilitation centre (NRZ 2011a, p. 2; NRZ 2011b, p. 1). This is in contrast to the Netherlands, where more measures to combat MRSA have been undertaken, resulting in a much lower detection rate of less than 1%, and just 2% in the 65+ age group (EARSS 2009, pp. 148 f.). The measures undertaken there include increased testing of high-risk patients (Epping et al. 2010). The Netherlands also has a well-defined policy on antibiotics which has resulted in the targeted use of antibiotics. In other European countries with a less systematic approach to the use of antibiotics, the frequency of MRSA cases is higher (Epping et al. 2010, pp. 1 f., EARSS 2009, p. 56).

25 There is no data available from this source on individuals aged 70 and over.

» 04.3 Accidents

Falls

The risk of falls increases with age (cf., for example, Rupprecht 2009). Around a third to a quarter of people aged over 65 have a fall at least once per year (Rapp and Becker 2009, p. 25; Rupprecht 2009). Residents of retirement or nursing homes have more frequent falls (Rapp and Becker 2009). No gender differences have been identified with regard to the risk of falls (Rupprecht 2009). In a study in southern Germany, Rupprecht found that more than half of falls occurred in homes and 20% during leisure activities (ibid.). Falls are associated with significant health risks, especially bone fractures. Consequently they present a risk to independent living due to both permanent functional limitations and an increased fear of falling. There are many causes of falls in old age: heart disease (for example, due to arrhythmia or changes in blood pressure), impaired vision or hearing and the use of multiple medications can all contribute to a greater risk of falling. Other diseases such as osteoporosis increase the risk of protracted health impairment due to fractures resulting from falls. The risk of falls can be reduced through targeted training (fall prevention) (Rapp and Becker 2009) and minimising risk factors at home (adequate lighting, removing falling hazards such as thresholds) and in the residential environment (lighting, safe stairs).

Road accidents

What are the risks for older people on the roads? The German Statistisches Bundesamt records the

number of accidents differentiated by form of transport, age and gender (Statistisches Bundesamt 2011i). According to their figures, 40,500 people (20,621 men and 19,879 women) aged over 65 were injured in road traffic accidents in 2010. This corresponds to 240 casualties per 100,000 residents in the 65+ age group. The data shows that people aged from 65 to under 80 were involved in road accidents less frequently than younger people. This can also be seen within the age group under consideration: most accidents among over-65-year-olds occurred between the years of 65 and around 75; accidents declined steadily after this, in line with the mobility rate. The older people injured were most commonly car drivers and passengers (114 in 100,000), followed by cyclists (63 in 100,000). The proportion of injured pedestrians was even smaller, at 36 in 100,000. Overall, men were more likely than women to be injured in road traffic accidents (Statistisches Bundesamt 2011j, cited from www.gbe-bund.de).

» 04.4 Mental illness

Mental health is of great importance for quality of life and daily living. According to estimates based on various studies, around a quarter of people aged over 65 (or over 70) are affected by mental illness (cf. in summary: Weyerer and Bickel 2007, p. 55). As well as dementia (see below), the main mental illnesses affecting older people are personality disorders and neuroses (especially depression) (ibid.).

Mental illnesses are not always medically diagnosed and the burden that they represent is perceived subjectively, so self-reported psychological

stress is a good indicator of psychological well-being for older people. In the GEDA 2009, the Robert Koch Institute asked about the number of days within the last four weeks when the mental health of the respondents was not good according to their own assessment, as well as the number of days on which the respondent was restricted in everyday activities by his or her mental state. In the evaluation, respondents were classified as psychologically stressed if they were restricted for at least 14 days within the last four weeks due to their mental state (RKI 2011a, p. 79). Among those aged 65 and over, this was the case for 11.5% of women and 6.6% of men, which was fewer people than among younger age groups (RKI 2011a, p. 79). According to the data, men and women with a lower level of education were more likely to be affected by psychological stress than those with a medium or higher level of education (cf. Table 37).

	Women	Men
Total	13.2	8.3
45–64 years		
Total	13.5	9.7
Lower educational level	16.4	15.1
Medium educational level	13.1	9.9
Higher educational level	11.9	7.5
65 and over		
Total	11.5	6.6
Lower educational level	13.9	9.6
Medium educational level	9.1	7.7
Higher educational level	9.2	2.9

Table 37: Assessment of being restricted due to psychological stress (as a percentage) (RKI 2011a, p. 80, own representation)

In 2010, 1,259 women per 100,000 residents and 1,070 men per 100,000 residents aged over 65²⁶ received hospital treatment for mental or behavioural disorders.²⁷

While among men aged from 65 to under 70, mental and behavioural disorders due to psychoactive substance use were the most common diagnoses (ICD-10: F10–F19, which includes alcohol dependence, for example), among women in this age group the most common diagnoses were mood (affective) disorders (ICD-10: F30–F39, including depression). With increasing age, the diagnosis “organic, including symptomatic, mental disorders” (F00–F09), which includes dementia, became more important (Statistisches Bundesamt 2011g).

Experts are of the opinion that many mental disorders (such as depression and anxiety disorders) have their roots in traumatic experiences of National Socialism and war. However, war trauma is often not recognised, “because these are mass phenomena, the individual effects of which are denied” (Stein 2009, p. 76). In a relevant study, Glaesmer et al. found that 40 to 50% of people who were born before the end of World War II reported of traumatic experiences (Glaesmer et al. 2010, cited from Glaesmer 2012). Psychological adjustment and stabilisation processes may be diminished through psychosocial changes in old age, such as the loss of social relationships and a professional role or an increasing need for care. Traumatising situations may then be reactivated, for example, through feelings of helplessness and dependency (Kipp 2009, p. 71). Against this background, a greater awareness of these processes appears to be required, including in the context of medical and psychotherapeutic treatments. Representative data on the mental health of

²⁶ Across all age groups: 1,418 cases per 100,000 residents.
²⁷ ICD-10: F00–F99 Mental and behavioural disorders.

people with a migrant background and persons without German citizenship is not currently available. People who are mentally ill and have a migrant background are under-represented in psychiatric and psychotherapeutic care, and are over-represented among those with severe mental or psychotic illnesses and involuntary admissions (Haasen and Yagdiran 2000, cited from RKI 2008, p. 110).

Depression

Depression is one of the most common mental illnesses. In the age group under consideration, there are typically a number of major changes that can be regarded as risk factors for depression, such as retirement, health restrictions and loss of family members and colleagues from social networks (Weyerer and Bickel 2007, p. 115). Nevertheless,

comparison with the lifetime prevalence²⁸ for the age group under consideration shows that those aged 60 and over and particularly those aged 70 and over were less likely to have been previously diagnosed with depression than individuals in the cohort aged 50 to 59. (cf. Figure 15). This indicates that, in the future, a higher proportion of older people will have been diagnosed with depression. It remains unclear whether these increased figures relate to a higher disease prevalence, more sensitive diagnostics or differences in perception (cf. BZgA 2011, p. 45).

It may be that depression is diagnosed less frequently in old age because it is interpreted as a normal, age-appropriate mental state, however, this is incorrect.²⁹ In this age group, depression is also more frequently associated with other symptoms than in younger people, for example, memory prob-

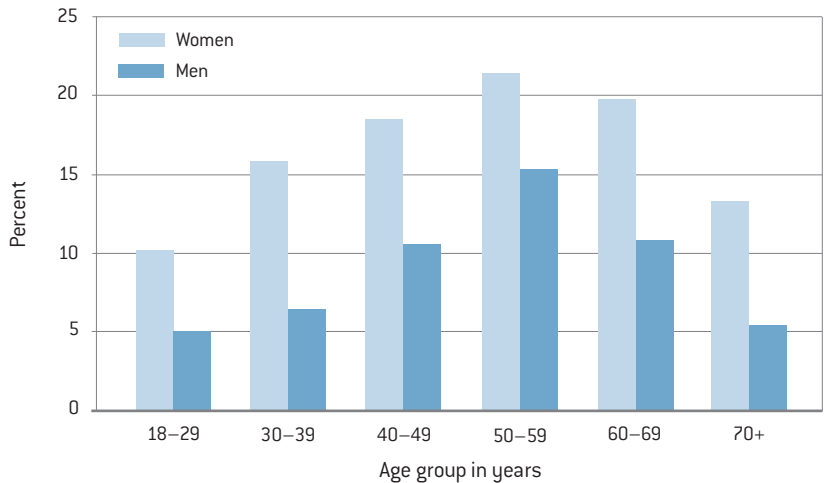


Figure 15: Proportion of people who have ever been clinically or therapeutically diagnosed with depression in the population aged from 18 years (RKI 2010e, p. 20)

²⁸ Lifetime prevalence refers to the proportion of people who will develop a disease during the course of their lives.
²⁹ Psychological well-being increases with age despite objective constraints (Stoppe 2008, cited from RKI 2010e, p. 23).

lems, sleep disorders, restlessness and irritability, making the diagnosis more difficult (Stoppe 2006, cited from RKI 2010e, p. 24). The prevalence is estimated to be particularly high among individuals in residential care. Studies have determined that up to 40–50% of retirement home residents have depressive symptoms and 15–20% suffer from major depression (Ernst and Angst 1995, cited from Weyerer and Bickel 2007, p. 120; see also Schneekloth and Törne 2009, p. 95). Depression frequently occurs following a stroke or a heart attack and can also be caused by chronic pain (RKI 2010e, p. 24).

In the GEDA 2009, 7.3% of women and 3.3% of men aged 65 and over reported having been diagnosed with depression in the past twelve months. Women reported having been diagnosed with depression more frequently in all age groups and at all educational levels (RKI 2011a, p. 76, see Table 38 in the Appendix).

Depression is treated with medication more frequently with increasing age. Under treatment of older people with depression was identified through analysis of health insurance data, both in terms of psychotherapy and pharmacotherapy (Grobe et al. 2006, cited from RKI 2010e, p. 24).

It is estimated that 15% of people with major depressive disorder die by suicide. Depression is a factor in approximately 40–70% of all suicides (RKI 2006, cited from RKI 2011a, p. 76).

Men are three times more likely to take their own lives than women. Although the number of suicide attempts decreases with age, the number of completed suicides does not: compared to all age groups, it is at its highest among over-75-year-olds (Stoppe 2006, Wilk et al. 2007, cited from RKI 2010e, p. 25). In older people, other factors and behaviours caused

by depression such as withdrawal, staying in bed, loss of appetite or low fluid intake can quickly become life-threatening (RKI 2010e, p. 25).

Dementia

Dementia is one of the most common psychiatric illnesses in older people (RKI 2005a, p. 7). Dementia is a syndrome caused by disease of the brain. It is usually chronic or progressive in nature, with disturbance of multiple higher cortical functions including memory, thinking, orientation, learning capacity, language and judgement (Dilling et al. 1993, cited from RKI 2005a, p. 7).

The term dementia groups together the following medical conditions:

- degenerative dementia (e.g., dementia in Alzheimer's disease),
- vascular dementia (multi-infarct dementia),
- dementia due to metabolic, nutritional or toxic causes (e.g., alcohol-induced dementia),
- dementia caused by inflammation or communicable diseases (e.g. dementia in HIV disease),
- dementia following craniocerebral trauma (Förstl et al. 2003, cited from RKI 2005a, p. 8).

Alzheimer's disease accounts for around two-thirds of cases of dementia, while vascular dementia represents 15–20% of cases (RKI 2005a, pp. 8 f.). Parkinson's disease can also lead to dementia.³⁰ Age is the most important risk factor in the prevalence and incidence of dementia, particularly in Alzheimer's disease (ibid., p. 10). Depending on the data basis, the prevalence of dementia among 65- to 69-year-olds is calculated at around 1–1.5%, and this increases with age, rising to as much as 30% among those aged 90 and over (for example, Bickel

30 An average of 40% of individuals with Parkinson's disease develop dementia, rising to 80% with increasing duration of the disease (Weindl 2011, p. 124).

	Western Germany		Eastern Germany		Total	
Age	Women	Men	Women	Men	Women	Men
65–69	1.3	1.5	1.4	1.6	1.3	1.5
70–74	3.0	3.2	3.1	3.0	3.1	3.2
75–79	6.9	5.6	6.8	5.5	6.8	5.6

Table 39: Dementia prevalence by age, gender and region (as a percentage) (Ziegler and Doblhammer 2009, own representation)

2005, cited from RKI 2005a, p. 11). Among 65- to 74-year-olds, women are slightly less likely to be affected by dementia, and it is only in the older age groups that the proportion of women with the condition increases (Ziegler and Doblhammer 2009).

Dementia is the most common reason for admission into residential care, and the proportion of people suffering from dementia in residential care has increased in recent decades: currently, around 60% are affected by dementia. Almost half of people who need care in private households suffer from dementia, and the proportion of people affected increases sharply with the nursing care level (RKI 2005a, p. 7). The situation for people with a migrant background who suffer from dementia can be particularly difficult. Family members and those suffering from dementia are less likely to seek out support or counselling services and obtain professional support less frequently (Jonas 2007).

04.5

Life expectancy and mortality

In the years 2008–2010³¹, a 65-year-old man had a future life expectancy of more than 17 years; a 75-year-old had over ten years and an 80-year-old almost eight years. The future life expectancy for women exceeded that of men in all of the age groups under consideration. Statistically, a 65-year-old woman still had more than 20 years to live, a 75-year-old woman over twelve years and an 80-year-old around nine years (cf. Table 40) (Statistisches Bundesamt 2011k, cited from www.gbe-bund.de).

Age in the year 2008/2010	Male life expectancy	Female life expectancy
65 years	17.33	20.56
70 years	13.74	16.41
75 years	10.47	12.49
80 years	7.71	9.06

Table 40: Average future life expectancy in years (2008/2010) (Statistisches Bundesamt 2011k, cited from www.gbe-bund.de)

31 The German Statistisches Bundesamt calculates life expectancy in three-year averages; the latest figures relate to the years 2008 to 2010.

In 2010, the mean life expectancy³² was 82.44 years for women and 77.16 years for men (RKI 2011d, p. 16). In Germany as a whole, the mean life expectancy for women was 5.2 years higher than for men (2006/2008). However, with increasing age, the difference in life expectancy between the sexes decreased: from the age of 65 years, the life expectancy for women was only 3.3 years longer than for men (ibid., p. 15). Life expectancy is also related to socio-economic status. For women at risk of poverty (60% of median income), the mean life expectancy at birth was around eight years less than that of women in high income groups, while in men, this difference was eleven years (RKI 2010c). There was very little difference in life expectancy between eastern and western Germany in the over-65 age group (RKI 2011d, p. 11).

As expected, the number of deaths per year increased with age. The proportion of deaths was higher among men in the age group under consideration.

This did not change until the age of 80, due to the higher life expectancy of women. The number of deaths per 100,000 residents is called the death rate. In 2010, there were approximately 1,364 deaths per 100,000 residents among 65- to under-70-year olds, approximately 2,083 deaths among 70- to under-75-year-olds and 3,694 among 75- to under-80-year-olds (Statistisches Bundesamt 2011f). The most common cause of death among 65- to under-70-year olds was neoplasm (cancer), followed by cardiovascular disease (approximately 369 in 100,000) (Statistisches Bundesamt 2011f). Among

70- to under-75-year-olds, 800 people in 100,000 died of cancer and 672 in 100,000 of cardiovascular disease (cf. Table 41). Men who died of cancer were primarily affected by lung, colorectal and prostate cancer, while women died primarily from breast, colorectal and lung cancer, as well as cancer of the female genital organs (RKI 2011d, p. 39).

It was not until the 75- to under-80 age group that more people died of cardiovascular disease than cancer (approximately 1,436 in 100,000 residents died of cardiovascular disease, while approximately 1,124 in 100,000 died of cancer). This shift in the causes of death was independent of gender, place of residence within Germany or migrant background. Among the very old (80–85 years), almost twice as many people died of cardiovascular disease than of cancer³³ (Statistisches Bundesamt 2011f, cited from www.gbe-bund.de). The figures for the other main causes of death of 75- to 80-year-olds were much lower. They included respiratory disease (300.5 in 100,000), diseases of the digestive system (167.3), and endocrine, diet-related and metabolic diseases (such as diabetes) (130.0 in 100,000), which play a lesser role in the younger age groups.

Approximately 44 in 100,000 residents aged between 65 and 69 died from injuries, poisoning and other external causes. These causes of death became more important in the older age groups (70–74 years: around 58 cases, 75–80 years: around 96 cases per 100,000 residents) (Statistisches Bundesamt 2011f, cited from www.gbe-bund.de).

32 The mean age of death is calculated from the number of deaths and age at death. The life expectancy indicates "how many years of life a particular age group could have on average if the underlying mortality rates remain the same. The mean life expectancy or life expectancy at birth gives this figure for newborns, while the future life expectancy at age 65, for example, gives the figure for 65-year-olds." (RKI 2011d, pp. 7 f.).

33 One problem with the reporting of causes of death is that, in many cases, only one cause of death is recorded and multi-morbidity is not taken into consideration (RKI 2011d, p. 27).

Cause of death	Total deaths (all ages)	65–69 years: cases per 100,000 residents	70–74 years: cases per 100,000 residents	75–79 years: cases per 100,000 residents
Cardiovascular disease (I00–I99)	352,689	369	672	1,436
Neoplasms (cancer) (C00–D48)	225,141	597	800	1,124
Respiratory disease	60,515	92	154	301
Diseases of the digestive system	42,684	77	105	167

Table 41: Most common causes of death: total deaths in absolute figures (rounded) (Statistisches Bundesamt 2011, cited from www.gbe-bund.de)

Cancer and cardiovascular diseases caused two-thirds of all deaths in the age group under consideration. While men were more likely to die of cancer, women were more likely to die of cardiovascular disease (RKI 2011d, p. 29).

04.6 Health behaviour and risks

The assessment of health behaviour in old age varied depending on the questions asked and the approach taken by the research. The Robert Koch Institute found a relationship between healthy lifestyle, age and social status (RKI, 2011e, p. 4). This relationship was more pronounced in women than in men.

Questions about health behaviour were also asked in the GEDA 2009 telephone survey on health. Data was collected on five lifestyle factors and individuals were said to have a healthy lifestyle if at least four of the five factors were answered positively.

The five lifestyle factors were:

1. No risky alcohol consumption
2. Not smoking
3. Healthy weight
4. Physical exercise
5. Fruit and vegetable consumption (ibid., p. 3).

The results showed a decrease in old age in the number of people who led a healthy lifestyle as defined here, although this was less pronounced in women (ibid., p. 4). Among those aged from 65, the proportion of people with a healthy lifestyle dropped from 22% to 14% in women and from 19% to 9% in men. The proportion continued to fall to 10% among people aged 70 and over. In evaluating these figures, it should be noted that physical exercise decreases

with age, in some cases due to mobility limitations (cf. Menning 2006, p. 20), and having a “healthy weight” is less common in older age, so for these reasons alone it is more difficult for people in the older age group to meet four of the lifestyle requirements. However, when health consciousness was assessed using the following question: To what extent do you take care of your health in general?, there was an upward trend in the 60–69 age group (cf. Menning 2006, p. 16). 55.5% of women aged between 60 and 69 and 52.3% of those aged 70 and over indicated that they take very good care of their health, while in the younger age groups it was below 50%. This age-related increase in health consciousness was greater among men than women: 53% of men aged from 60 to 69 and 57.2% of men aged 70 and over reported taking good or very good care of their health, while in the younger age groups it was between 38.4% (18–29 years) and 44.1% (50–59 years).

Sport

Physical exercise protects against numerous chronic diseases (such as cardiovascular disease). It helps to prevent age-related decline in muscle mass, osteoporosis and falls (Wurm, Schöllgen and Tesch-Römer 2010, p. 109).

Respondents were asked about physical exercise³⁴ in the German Ageing Survey 2008. While 53% of those aged 55 to under 69 reported engaging in physical exercise one or more times per week, among those aged 70 to under 85 it was only 36%. People with a low level of education reported doing physical exercise less often than people with a high level of education. 81% of respondents aged 70 to under 85 with a low level of education reported doing

physical exercise less than once per week or never, while among those with a high level of education this was just 47% (Wurm, Schöllgen and Tesch-Römer 2010, p. 110 f.).

Over the three waves of the German Ageing Survey (1996, 2002 and 2008), there was an increase in the proportion of people doing physical exercise in all cohorts up to the age of 76, at all educational levels, in both sexes and in both eastern and western Germany (cf. Figure 41 in the Appendix). In the age group from 76 to under 81, the proportion of people doing physical exercise has hardly changed in the past twelve years. One possible explanation is that people in this age group cannot regularly engage in physical exercise because their health restrictions are too great (ibid., p. 113). For this reason, it is often more appropriate to ask about physical activity rather than physical exercise. This includes all movement of skeletal muscle (for example, in gardening), not just in the narrow sense of physical exercise (RKI 2011a, p. 103). In the GEDA 2009, respondents were asked about the number of days per week on which they were so physically active that they broke into a sweat or became out of breath, and the duration of the activity (RKI 2011, p. 103). 34.7% of men and 27.2% of women aged 65 and over were physically active for more than 2.5 hours per week (ibid., p. 104). However, because physical activity was recorded over a different time frame than physical exercise, these data sets cannot be compared.

Dietary behaviour

Among those aged from 65 to under 80, cooking is seen as a female preserve: just under three-quarters of women in this age group – and only a quarter of men – reported being able to cook well or very well.

34 Respondents were asked whether and how often they engaged in physical exercise, for example, swimming, exercise classes, ball games, hiking.

More than half of men said that they could cook only a little, not very well, or could not cook at all, compared to only 1.9% of women (Max Rubner-Institute 2008a, p. 107).

The daily energy intake recommended by the Deutsche Gesellschaft für Ernährung (German Nutrition Society) is 2,300 kcal/day for men aged 65 to 80³⁵ (DGE 2009). The average intake for men was 2,191 kcal/day, however, 38.5% of men consumed more calories than they need.

The DGE recommendation for women in this age group is 1,800 kcal/day. On average, women consumed 1,753 kcal/day, although 42.8% of women consumed more calories than necessary (Max Rubner-Institut 2008b, p. 236). Carbohydrates should comprise 50% of a persons' energy intake.

This is why respondents were asked the following question in the GEDA 2009: *How often do you eat fruit? (Every day, at least once a week, less than once a week, never)*. It was found that fruit consumption increased with age in both sexes compared to younger people: among those aged 65 and over, 71.5% of men and 83.4% of women ate fruit

daily.³⁶ Highly educated men and women in this age group were more likely to consume fruit daily than people of the same age with a lower level of education (RKI 2011a, p. 110).

Fewer people consumed vegetables³⁷ daily, both overall and in the cohort of people aged over 65. 40.6% of men and 54.4% of women ate vegetables daily. For men, vegetable consumption increased with age and peaked in those aged 65 and over. Women consumed more vegetables than men in all age groups (RKI 2011a, p. 109).

Overweight and obesity

Being overweight is a risk factor for many diseases, such as cardiovascular disease, diabetes mellitus and diseases of the musculoskeletal system. The World Health Organisation (WHO) definitions of obesity and being overweight are independent of age. The classifications for adults are: underweight (BMI³⁸ < 18.5), normal weight (18.5–24.9), overweight (25.0–29.9), class 1 obesity (30.0–34.9), class 2 obesity (35.0–39.9) and class 3 obesity (> 40).

Gender	Age	Average	Under 18.5	18.5 to under 25	25 to under 30	30 and over
Male	65 to < 70 years	27.4	0.3	26.8	51.6	21.3
	70 to < 75 years	27.4	0.3	25.8	52.9	21.0
	75+ years	26.5	0.8	34.0	49.7	15.5
Female	65 to < 70 years	26.4	1.6	40.5	38.3	19.7
	70 to < 75 years	26.8	1.3	36.1	40.9	21.6
	75+ years	25.9	2.8	42.4	38.2	16.6

Table 43: Population distribution by body mass index, 2009 (as a percentage) (Mikrozensus 2011b: Fragen zur Gesundheit 2009, cited from www.gbe-bund.de)

35 This age group includes people aged 80.
 36 On average, across all age groups and both sexes, 62.3% of respondents consumed fruit daily.
 37 Potatoes did not count as vegetables in this survey.
 38 BMI: Body Mass Index: Weight (kg)/height (m) squared.

However, when age is taken into account, the results are slightly different, giving a recommended BMI for over-65-year-olds of 24 to 29. Table 42 in the Appendix shows average heights and weights, broken down by gender and age group. It can be seen from this table that the above recommendation was exceeded by approximately one in five men and women aged between 65 and 75. Among those aged 75 and over, it was around one in six people (cf. Table 43).

People with a lower level of education have a higher prevalence of obesity than people with a higher level of education: in the group aged over 65, over a quarter (26.4%) of those with a lower level of education were obese, compared to just 14.3% of those with a higher level of education. At all educational levels, the proportion of overweight individuals in eastern Germany was higher than that in western Germany (RKI 2009c, cited from www.gbe-bund.de).

In men with a migrant background, the proportion who were overweight (BMI greater than or equal to 30) did not differ from that of men with German citizenship. Among women in the age group from 65 to under 75, the proportion of women with a migrant background who were very overweight was higher than that of German women, but this difference was not seen in women aged 75 and over (RKI 2008, pp. 52 f.).

does not play a major role in old age and is currently not considered to be widespread (DHS 2011, p. 6). However, data on illegal drugs is only collected up to the age of 64, for example in the epidemiological survey by the Bundesministerium für Gesundheit (Federal Ministry of Health) (Kraus and Papst 2010). As the addiction survey also collected data on the use of alcohol and pills, and an increase in users of illegal drugs and people with addictions is to be expected with the ageing of the post-war generation (cf. Geyer 2009, p. 341), extension of the survey to include people aged over 64 appears advisable.

Tobacco

In the group aged 65 and over (that is, including people aged over 80), the percentage of current smokers was lower than in younger age groups. 13.7% of men and 8.7% of women aged 65 and over smoked daily or occasionally. Approximately half of men and nearly one-fifth of women were former smokers, while 36.6% of men and 73.1% of women had never smoked. In all age groups, men with a lower level of education were more likely to smoke. There was no difference in this regard between women aged 65 and over with differing levels of education (RKI 2011a, p. 118, see Figure 16 in the Appendix).

A comparison of the 2005 micro-census data for Germans and non-Germans aged 65 and over shows that, at 17.4%, the proportion of male smokers was higher among non-Germans (people who do not have German citizenship) than it was among German men. The proportion of smokers was comparable among German and non-German women (RKI 2008, p. 56).

Alcohol

Alcohol consumption was lower in the group aged 65 and over in comparison with younger cohorts; dif-

04.7 Addiction in old age

Findings on the use of tobacco, alcohol and pills in people aged from 65 to under 80 are presented in the following section. Consumption of illegal drugs

ferentiated data for the age groups over 65 is not available. On average, across all age groups, nearly a quarter of women and 12.9% of men reported never drinking alcohol. The proportion of respondents with levels of alcohol consumption that were harmful to health (risky consumption) was 21.5% of women and 33.8% of men. The proportion of people who never drank alcohol was higher on average in the group aged 65 and over. The proportion of older people with risky consumption was lower, but at 28.4% for men and 17.8% for women, it was still high (cf. Table 44). It should be noted that the limit for low-risk consumption used here refers to healthy adults. For older people, the limit is more difficult to determine, because a person's health status and other factors affect the tolerability of alcohol (DHS 2011, p. 22). Alcohol is often less well tolerated by older people and metabolised more slowly. It is striking that risky consumption was higher among those with a higher level of education, while the proportion of people who never drank was particularly high among those with a lower level of education (RKI 2011a, p. 122).

The Deutsche Hauptstelle für Suchtfragen e.V. (German Centre for Addiction Issues [DHS]) suggests that alcohol-related disorders (alcohol dependence and abuse) are less likely in older than in younger people (DHS 2011, p. 23). Firstly, the number of people who overcome their alcohol dependence or abuse increases with age, partly due to the lower tolerance of alcohol in old age, and secondly, severely alcohol-dependent people often do not reach the age of 65. However, due to demographic changes, the DHS predicts an increase in the number of older people with alcohol problems and – based on the different alcohol consumption habits of women born in or before 1945 – an increasing proportion of women affected (ibid., pp. 23 f.). The problematic use of alcohol in old age can also be seen in the number of hospital admissions due to alcohol intoxication, which has risen significantly over the past decade (Statistisches Bundesamt 2011v). Detrimental effects of alcohol consumption in old age can include accidents in the home (such as falls), reduced physical and mental performance, premature ageing of

	Non-drinkers	Moderate	Risky consumption*
<i>Men in total</i>	15.7	55.9	28.4
Lower educational level	24.0	54.7	21.3
Medium educational level	15.9	55.5	28.6
Higher educational level	10.5	57.5	32.0
<i>Women in total</i>	34.5	47.7	17.8
Lower educational level	40.9	44.4	14.7
Medium educational level	29.3	50.9	19.8
Higher educational level	21.6	51.3	27.1

* Harmful alcohol consumption was assessed using the Alcohol Use Disorder Identification Test Consumption (AUDIT-C) consisting of three questions: 1. How often do you have a drink containing alcohol, for example, wine, beer, mixed drinks, spirits or liqueurs? (Response options: never, once a month or less, 2 to 4 times a month, 2 or 3 times a week, 4 or more times a week). 2. How many alcohol units do you have on a typical day when you are drinking? (Response options: 1 to 2; 3 to 4; 5 to 6; 7 to 9; 10). 3. How often do you have six or more drinks on one occasion, for example, with dinner or at a party? (Response options: never, less than monthly, monthly, weekly, daily or almost daily). 0 to 4 points are allotted to the responses in ascending order, giving a total score of 0 to 12 points. A score of ≥ 4 for women and ≥ 5 for men indicates risky consumption (RKI 2011a, p. 121).

Table 44: Alcohol consumption of men and women aged 65 and over (as a percentage) (RKI 2011a, p. 122, own representation)

organs, liver disease, organic brain damage and cancer (for example, cancer of the oesophagus, pancreas or rectum). The unpredictable interaction of alcohol with various medications also poses health problems (ibid., p. 25).

» 04.8 Pharmacotherapy (prescription medications)

The use of prescribed medications increases sharply in the age group under consideration. Overall, two thirds of all daily doses of prescription medication are prescribed for patients over the age of 60. People in retirement or nursing homes receive significantly more medication than people in private households (DHS 2011, pp. 38 f.).

In 2009, people aged from 65 to under 70 were prescribed 1,058.8 daily doses per insured person per year (approximately 2.9 per day), 70- to under 75-year-olds were prescribed 1,213.1 daily doses (approximately 3.3 per day) and 75- to under-80-year-olds were prescribed 1,429.7 daily doses (approximately 3.9 per day) (defined daily doses [DDD] per insured person covered by statutory health insurance in 2009 by medication groups; Coca and Nink 2010, pp. 938 f.). The average across all ages was 487.6 defined daily doses per insured person per year.

The Berlin OMAHA study includes data on the use of medication in over-65-year-olds. This shows that 36.2% of 65- to under-70-year olds took more than four prescribed medicines concurrently. The proportion rose sharply with age: two-thirds (65.9%) of people aged over 70 took more than four different pre-

scribed medicines. No significant educational or gender differences have been established (Knopf et al., 2011). Reliable figures on the use of non-prescription medications are not available. The risk of adverse side effects and interactions increases sharply with the number of different medications taken.

Due to the prevalence of cardiovascular disease in people aged from 65 to under 80, the medications that were most frequently prescribed were antihypertensive medications, angiotensin-converting enzyme (ACE) inhibitors, beta-blockers and calcium antagonists (Coca and Nink 2010, pp. 938 f.).

The proportion of older people with prescriptions for sleep medications (hypnotics such as benzodiazepines) increased continuously from the age of 65 – and more markedly among women than men (Glaeske 2011, pp. 89 f.). These medications are associated with a high potential for dependency and significant side effects, and their benefits are controversial, especially in long-term use (ibid.).

Changes in pharmacokinetics and pharmacodynamics (absorption, drug metabolism, etc.) in old age often lead to adverse drug reactions. The Priscus list, which was developed by experts, lists medications that are considered unsuitable for older people as they are associated with higher risks (hospitalisation, falls) (Holt, Schmiedl and Thürmann 2010).

The interactions between medications and alcohol deserve particular attention. Any increase or decrease in the effect of the medication, caused by these interactions, can lead to cardiovascular problems, higher risk of accidents or greater dependency (DHS 2011, p. 40).

The epidemiological studies on substance use which were undertaken as part of the survey on addiction by the Institut für Therapieforchung (Institute for Therapy Research [IFT]) only included data on substance use between the ages of 18 and 64. There is thus a lack of informative studies per-

taining to over-65-year-olds as well as an underestimation of the problematic use of medications in old age [Glaeske 2011, pp. 90 f.]. It is known that medication dependency affects women more frequently than men [DHS 2011, p. 47]. In particular, very high medication use can cause problems including falls, cognitive deficits, social withdrawal, loss of balance and mood swings [ibid., p. 52]. There is no representative data available on the prevalence of medication use and dependence in people with a migrant background [RKI 2008, p. 56].

04.9
Health promotion

The objectives of health promotion in old age comprise 1. preventing or delaying specific age-related changes and age-related diseases, 2. preventing diseases which are not necessarily age-related, but which occur with higher probability in old age, 3. reducing disease-related problems, and 4. preventing deterioration of general condition [Schütz and Wurm 2009, p. 162]. In old age, health promotion is not just about preventing or postponing the onset of disease, but also preservation and recovery of quality of life in spite of [chronic] disease.

Visits to doctors and participation in screening and preventive checkups

92.3% of women and 91% of men aged 65 and over reported having visited a doctor in the past twelve months (excluding dental visits). Over-65-year-olds were slightly more likely than average to have visited a doctor (women: 87.8%, men: 84.4%) [RKI 2011a, p. 141]. While almost all respondents aged 65+ had

seen a doctor in the past twelve months, participation in screening tests was lower, especially among the very old. Although there was increased willingness to participate in screening tests among 65- to under-70-year olds when compared to the younger age groups, this dropped once again in the older age groups. From the age of 36, individuals with statutory health insurance are entitled to screening tests with their family doctor every two years (a health checkup as per Section 25 of the SGB V [German Code of Social Law, Volume 5], cf. BMG 2012).

While women in the younger age groups were more likely than men to participate in screening tests, these differences were no longer noticeable in the age group under consideration. Fewer people aged under 65 participated in screening tests (for example, 48.4% of women aged 60 to under 65). The proportion of individuals who participated in health checkups was the largest in the cohort of 65- to under-70-year-olds, compared to all other age groups [Zentralinstitut für die Kassenärztliche Versorgung 2010]. However, four out of ten people in this age group had not taken up the offer, although almost all of them had seen a doctor in the previous twelve months.

Age	Gender	Proportion participating
65–69	Men	62.6
	Women	62.2
70–74	Men	51.6
	Women	51.2
75–79	Men	48.4
	Women	48.1

Table 45: Participation in screening tests: had a checkup in 2009–2010 (two-year interval, taking participation in the previous year into account) (as a percentage) [Zentralinstitut für die Kassenärztliche Versorgung 2010, own representation]

Women aged over 20 are entitled to annual gynaecological cancer screening and women aged 30+ are entitled to a breast examination. Women aged between 50 and 69 can have a mammogram every two years. However, the risk of breast cancer continues beyond the age of 70, albeit somewhat reduced (ten-year risk of disease from the age of 60: 4.1%, from 70: 3.4%, RKI 2012, p. 66). Although the risk of developing cervical, uterine and ovarian cancer is lower overall, it does not decrease with increasing age (RKI 2012, Krebs in Deutschland, p. 70).

In 2010, 48.2% of women aged from 65 to under 70, 34.7% of women from 70 to under 75 and 23.6% of women from 75 to under 90 participated in cancer screening tests (Zentralinstitut für die Kassenärztliche Versorgung 2010).

Men are eligible for prostate cancer screening from the age of 45. 36.8% of men aged from 65 to under 70, a third (33.7%) of men from 70 to under 75 and 31.3% of men from 75 to under 80 participated in prostate cancer screening (Zentralinstitut für die Kassenärztliche Versorgung 2010). The risk of developing prostate cancer in the next ten years is 4.6% at 60 years of age and increases from 70 years to 6.6% (RKI 2012, p. 82). However, the prevalence of testicular cancer decreases sharply in later life: from the age of 50 it is only 0.1% (ibid., p. 86).

Colorectal cancer occurs more frequently with increasing age. Over half of those affected develop the disease over the age of 70 (RKI 2012, p. 36). An annual Haemoccult test is available for people aged 51 and over with statutory insurance, and every two years from the age of 55. This is a faecal occult blood test (FOBT) that tests for non-visible blood in the stool. The cost of the test is covered by statutory health insurance. The proportion of people having the Haemoccult test was highest among 65- to under-70-year olds, compared to younger and older age groups (Zentralinstitut für die Kassenärztliche Ver-

sorgung 2010, see two-year interval). However, uptake of this test tended to decrease with increasing age, although the risk persists: in 2009 and 2010, 35.9% of men aged from 65 to under 70, 28.7% of men from 70 to under 75 and 26.6% of men from 75 to under 80 had a Haemoccult test. For women, it was 46.6% of those aged from 65 to under 70, one third (33%) of women from 70 to under 75 and over a quarter (26.5%) of women from 75 to under 80 (Zentralinstitut für die Kassenärztliche Versorgung 2010). Colonoscopy is another screening test for the early detection of colorectal cancer. From the age of 55, costs are also covered by statutory health insurance for two colonoscopies with an interval of ten years. From 2003–2010, over a quarter (26.6%) of women aged 65 to under 70, one-fifth (20.8%) of women aged 70 to under 75 and 13.7% of women aged 75 to under 80 had a colonoscopy. The figures were similar for men: a quarter (24.6%) of the younger cohort (65 to under 70), one-fifth (20.9%) of men aged 70 to under 75 and 15.7% of men aged 75 to under 80 had a colonoscopy.

The proportion of people who participated in skin cancer screening was also highest in the cohort of 65- to under-70-year-olds compared to other age groups, at 21.8% of women and 23% of men (Zentralinstitut für die Kassenärztliche Versorgung 2010). The incidence rates increase with age, especially in men (RKI 2012, p. 62). However, fewer people in the older cohorts participated in this screening test: in the cohort of 70- to under-75-year-olds, it was 15.8% of women and 17.9% of men, while among those aged 75 to under 80, it was 13.9% of women and 16.3% of men (Zentralinstitut für die Kassenärztliche Versorgung 2010).

Dental checkups

Participation in annual dental checkups was lower among people aged 65 and over than in the younger age groups. Nevertheless, 70.1% of women and

64.5% of men aged 65 and over participated in dental checkups. There were notable differences here between groups with differing levels of education: people with a lower level of education took advantage of dental checkups less frequently than people with a higher level of education (RKI 2011a, p. 144). Causes of the decline in participation with increasing age presumably lie in the increased loss of teeth and an associated change in attitude towards the need for dental checkups (Born et al. 2006, cited from RKI 2011a, p. 143). However, a dental examination also serves to promote oral health, so individuals would be well advised to take advantage of this in spite of any loss of teeth (ibid.).

Influenza vaccination

The Ständige Impfkommision [Standing Vaccination Committee (STIKO)] at the Robert Koch Institute recommends that people aged over 60 have the seasonal influenza (flu) vaccination each year (RKI 2011a, p. 134). In the winter season of 2007/2008, 61.1% of people aged over 64 had the flu vaccination. This vaccination rate is twice as high as the average across all ages of 31%. Three-quarters of people aged over 65 in eastern Germany were vaccinated, so the vaccination rate here was significantly higher than the 57.2% rate in western Germany (RKI 2010 f., cited from www.gbe-bund.de).

Tetanus vaccination

The percentage of people who have adequate immunity to tetanus, that is, who have been vaccinated against tetanus in the past ten years, decreases from the age of 65. Approximately two-thirds (63.2%) of women and 67.3% of men aged 65 and over had been vaccinated against tetanus in the past ten years, while in the younger age groups, around three-quarters of respondents reported having been vaccinated. Among individuals with a lower

level of education, the proportion of people who had been vaccinated in the past ten years was lower (RKI 2011a, p. 138).

Participation in health promotion classes

In 2010, people aged over 60 years participated in 571,769 health promotion activities subsidised by their health insurance provider (known as individual health promotion). The number of participants has tripled since 2004. Exercise classes were the most popular (466,343 in 2010), followed by classes on avoiding specific risks and stress-related conditions (81,445), classes on diet and nutrition (22,624) and classes on the responsible use of stimulants and addictive substances (1,357) (Medizinischer Dienst des Spitzenverbandes Bund der Krankenkassen e.V. 2011, cited from www.gbe-bund.de). Unfortunately, the data for people aged 60 and over is summarised, so no further differentiation can be made on the basis of age.

Data on participation in behavioural health promotion activities in the prior twelve months was recorded in the GEDA 2009. This showed that 14.3% of men and 21.8% of women aged between 65 and 79 participated in at least one activity in the prior twelve months. The proportion of participants in health promotion classes was greater among those with a higher level of education. Classes on diet and nutrition are an exception, in which this relationship has not been established (RKI 2011a, p. 26).

The data collated here on the health promotion classes participated in by people aged from 65 to 79 shows that these were primarily wholly or partially self-financed. When compared to other age groups and across all health promotion topics, these classes were least likely to be fully funded by health insurance (RKI 2011a, p. 29, see Figure 18 in the Appendix). Access to these classes is very important for the prevention of numerous diseases, including

among the very old. Because greater financial investment is needed from the older age groups, it is less likely that people with lower incomes will be able to access behavioural health promotion activities. However, these people would particularly benefit from health promotion classes due to their greater burden

of disease. Data on the participation in health promotion services and screening tests by people with a migrant background is not currently available. It is assumed that these services and tests are accessed less frequently by people with a migrant background (cf. in summary: RKI 2008, pp. 121 f.).

Women	Diet		Exercise		Relaxation		At least one activity	
	%	[95% CI]*	%	[95% CI]	%	[95% CI]	%	[95% CI]
Total (men and women)	5.1	[4.7–5.5]	12.8	[12.2–13.3]	4.7	[4.3–5.0]	16.0	[15.4–16.7]
Women in total	6.0	[5.5–6.6]	16.7	[15.8–17.6]	6.3	[5.8–6.8]	20.8	[19.9–21.8]
Educational level								
Lower educational level	5.0	[3.8–6.5]	12.1	[10.2–14.4]	3.6	[2.5–5.0]	15.7	[13.5–18.2]
Medium educational level	6.5	[5.9–7.2]	17.8	[16.8–18.9]	6.7	[6.1–7.4]	22.1	[21.0–23.2]
Higher educational level	6.1	[5.3–7.0]	20.5	[19.2–22.0]	9.3	[8.4–10.3]	25.1	[23.7–26.6]
Age group								
18–29 years	4.0	[3.1–5.2]	8.7	[7.5–10.2]	3.5	[2.7–4.6]	11.9	[10.4–13.7]
30–44 years	5.7	[4.9–6.7]	15.1	[13.8–16.5]	6.7	[5.8–7.6]	19.3	[17.8–20.8]
45–64 years	8.1	[7.1–9.2]	20.8	[19.3–22.4]	9.0	[8.0–10.1]	26.0	[24.3–27.7]
65–79 years	5.0	[3.9–6.4]	18.5	[16.3–20.9]	4.2	[3.2–5.4]	21.8	[19.5–24.3]

Men	Diet		Exercise		Relaxation		At least one activity	
	%	[95% CI]	%	[95% CI]	%	[95% CI]	%	[95% CI]
Total (men and women)	5.1	[4.7–5.5]	12.8	[12.2–13.3]	4.7	[4.3–5.0]	16.0	[15.4–16.7]
Men in total	4.1	[3.6–4.7]	8.7	[8.0–9.4]	3.0	[2.6–3.4]	11.1	[10.3–11.9]
Educational level								
Lower educational level	4.1	[2.5–6.5]	5.7	[4.0–8.0]	1.8	[0.9–3.5]	8.3	[6.1–11.1]
Medium educational level	4.0	[3.4–4.7]	8.5	[7.6–9.5]	3.0	[2.5–3.6]	10.7	[9.7–11.8]
Higher educational level	4.5	[3.9–5.3]	10.9	[9.9–12.0]	3.7	[3.1–4.3]	13.5	[12.4–14.7]
Age group								
18–29 years	2.5	[1.8–3.5]	7.4	[6.2–9.0]	2.7	[2.0–3.8]	9.3	[7.9–11.0]
30–44 years	2.5	[1.9–3.4]	6.7	[5.6–8.0]	2.8	[2.1–3.7]	8.6	[7.4–10.0]
45–64 years	5.1	[4.2–6.3]	9.9	[8.7–11.2]	3.5	[2.8–4.4]	12.3	[10.9–13.7]
65–79 years	6.5	[5.0–8.3]	10.7	[8.9–12.7]	2.6	[1.8–3.7]	14.3	[12.2–16.7]

* The numbers in parentheses indicate the confidence interval (CI). This provides information on the accuracy of the percentages shown in the tables. In these tables from the Robert Koch Institute, there is 95% confidence that the true value of the percentage figure lies within the confidence interval specified (RKI 2011a, pp. 49 f.).

Figure 17: Participation in behavioural health promotion activities in the past twelve months by gender, educational level and age (as a percentage) (RKI 2011a, p. 26)

Prescription of therapies

Various therapies are used to reduce the level of impairment caused by a disease or condition, halt its progression or allow the disease or condition to heal. Therapies that may be prescribed include physical therapy modalities and physiotherapy, voice, speech and language therapy and occupational therapy. The AOK health insurance provider⁴⁰ has a therapy database that provides information on prescriptions for therapies in the age groups under consideration (Waltersbacher 2012, p. 17). Across all age groups, women were prescribed therapies more frequently than men. One in five men (20.7%) aged from 65 to under 70, 22.5% of men from 70 to under 75 and just under a quarter (24.3%) of men from 75 to under 80 who were insured with AOK were prescribed therapies in 2010. 29.2% of women aged from 65 to under 70, 31.2% of women from 70 to under 75 and 33.1% of women from 75 to under 80 who were insured with AOK were prescribed therapies (i.e. around a third of women in each age group). Apart from boys aged between five and ten years old, the use of prescribed therapies was highest in the age group from 75 to under 80, but this decreased in the older cohorts (cf. Figure 42 in the Appendix). In very old age, the main therapies used were physiotherapy and physical therapy modalities (ibid., p. 41).

» 04.10 Rehabilitation

The objective of interdisciplinary geriatric rehabilitation is the restoration of independence (for example, after a fall or stroke), as well as health promotion activities such as training on health behaviour (Schütz and Wurm 2009, p. 164). It can be provided either on an inpatient or outpatient basis. The German Statistisches Bundesamt reports on the diagnostic data of patients in preventive care and rehabilitation facilities. In 2010, 220,520 men and 266,384 women aged from 65 to under 80 received treatment in preventive care and rehabilitation facilities (with more than 100 beds) (Statistisches Bundesamt 2010b). Figure 19 shows that preventive care and rehabilitation treatments were most commonly used by people aged from 50 to 59, followed by people aged from 70 to 74. It can also be seen that women in the older age group were significantly more likely than men to participate in preventive care or rehabilitation treatments.

In women aged from 65 to under 80, diseases of the musculoskeletal system and connective tissue were the most common diagnoses in preventive care and rehabilitation facilities. For men in this age group, cardiovascular diseases were the most common diagnoses. The average length of stay for people in the age group under consideration was 22.3 days, which was less than in younger patients and less than the average across all age groups (all ages:

⁴⁰ It should be noted that the AOK makes use of a different structure for their insured persons than that used by other statutory health insurance providers, so the data is not representative. It is used when there is no other information available on a particular topic.

average length of stay = 25.6 days) (ibid.). Also see Table 46 in the Appendix.

Of the 1,807 specialist departments in preventive care and rehabilitation facilities, 147 are geriatric departments (7,348 beds). 103,271 patients were treated there in 2010, and most of these were transferred from hospitals (Statistisches Bundesamt 2011t, p. 14). Geriatric care therefore represents a relatively small proportion of all specialist departments in preventive care and rehabilitation facilities. However, outpatient geriatric rehabilitation activities were not statistically recorded.

04.11 Healthcare costs

Healthcare costs⁴¹ in Germany for the age group from 65 to under 85 amounted to almost €97 billion in 2008 (Statistisches Bundesamt 2011m, cited from www.gbe-bund.de). Overall, most of the costs were attributable to cardiovascular diseases, fol-

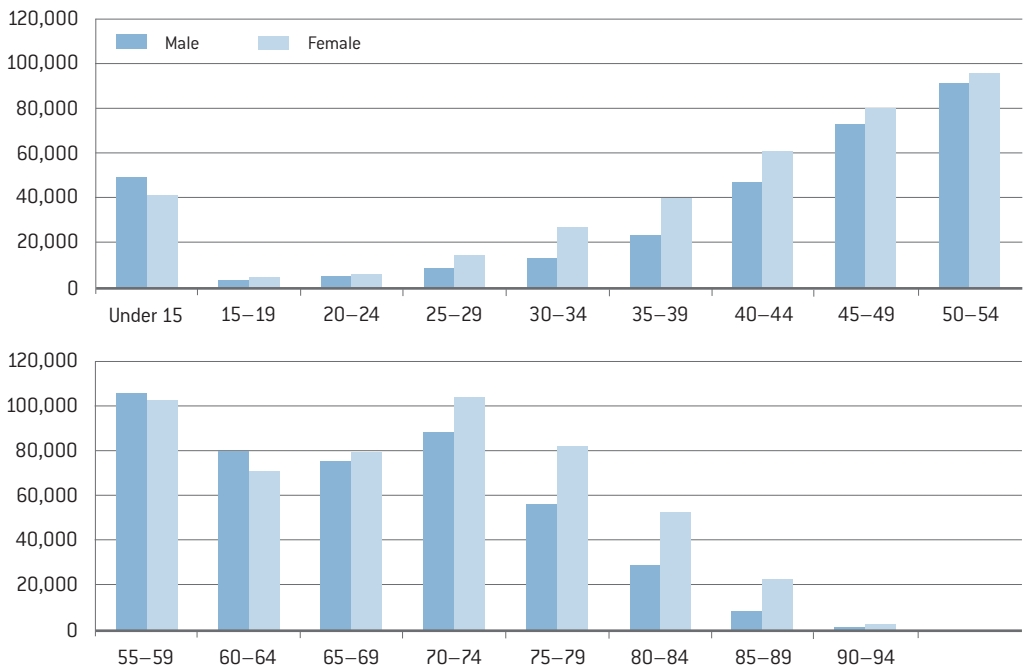


Figure 19: Diagnostic data from preventive care and rehabilitation facilities with more than 100 beds (cases) (Statistisches Bundesamt 2010b, cited from www.gbe-bund.de, own representation)

⁴¹ Healthcare costs are the monetary resources used in health care that are directly associated with a medical curative treatment or a preventive, rehabilitative or nursing service. This includes service providers' administrative costs, as well as all public and private institutions that finance health care services in Germany.

lowed by diseases of the musculoskeletal system and connective tissue as well as diseases of the digestive system. Among men aged from 65 to under 85, the highest costs were associated with cardiovascular diseases followed by neoplasms (cancer) and diseases of the digestive system, in line with gender-specific disease frequencies. In women, it was cardiovascular diseases followed by diseases of the musculoskeletal system. Costs for mental and behavioural disorders as well as diseases of the digestive system were in third place for women (Statistisches Bundesamt 2011u, cited from www.gbe-bund.de).

In 2008, healthcare costs in the age group from 65 to under 85 were €6,520 per person.⁴² These expenses were divided roughly equally between both sexes (men: €6,580, women: €6,470). It was not until the over-85 age group that the healthcare costs of women were higher than those of men (Statistisches Bundesamt 2011u). It is often assumed that demographic change will be accompanied by increased healthcare costs. However, age is not the only important consideration here. There are several factors that affect healthcare costs and these are only partly age-dependent (Nöthen and Böhm 2009, p. 244).

The economic calculations from the German Statistisches Bundesamt provide information on monthly household expenditure on healthcare (goods and services for health care). In households where the main income earner was aged from 65 to under 70, €108 per month was spent on healthcare. This spending increased to €162 per month if the main income earner was aged from 70 to under 80. On average, households in the former West German fed-

eral states spent more money on healthcare (65–70 years: €117, which was equivalent to 4.4% of the average net household income; 70–80 years: €189, equivalent to 7.5% of the average net household income) than households in the former East German federal states (65–70 years: €77, equivalent to 3.9% of the average net household income; 70–80 years: €80, equivalent to 4.2% of the average net household income)⁴³ (Statistisches Bundesamt 2011n, pp. 50 f.). In comparison, the standard rate for the basic provision in old age (valid since 1 January 2012) includes around €16 per month for healthcare.

04.12 Place of death

As the topic of death and dying takes on increasing importance in the age group from 65 to 80, the question of end-of-life care should also be considered. There are no age-differentiated figures available on the use of palliative care, including the new option of specialist outpatient palliative care introduced in 2007, and places of death are not included in the statistics. Thus, there is no data on how many people die in nursing homes, hospices or at home and to what extent this corresponds with their wishes. The only figure available is the number of people who die in hospital. This results in different estimates for the distribution of places of death.

According to estimates by Jaspers and Schindler

⁴² In 2008, the average healthcare cost across all residents was €3,100.

⁴³ Calculation from net household income reported in the source above (western Germany: 65–70: €2,664, 70–80: €2,522; eastern Germany: 65–70: €1,984, 70–80: €1,909)

(2004, p. 23) which are based on various studies, more than 40% of people die in hospital, 15–25% in residential care and a quarter to a third at home (see Table 47 in the Appendix).

» 04.13 Conclusion

Although the subjective health of people aged from 65 to under 80 was evaluated more negatively than in the younger cohorts, half of these people considered their health to be good or very good. However, more than half reported having two to four medical conditions, and physical limitations in daily activities were also increasingly likely. Diseases of the cardiovascular and musculoskeletal systems were the most common conditions, and people in this age group used preventive care and rehabilitation facilities to treat diseases of the musculoskeletal and cardiovascular system in particular. People with lower socio-economic status were more likely to have physical limitations and be affected by various diseases, such as cardiovascular disease, diabetes and stroke.

Compared to previous generations, people in this age group of 65- to 80-year-olds were healthier, had less disease and a longer life expectancy. The most common causes of death were cardiovascular diseases and neoplasms (cancer). Once again, there were socio-economic differences here: people with lower incomes died significantly earlier than people with higher incomes.

Although a healthy lifestyle was less common than in younger cohorts, there was increased aware-

ness of health in this age group, which can be seen in various ways. There was a high uptake of screening and preventive checkups in the age group from 65 to under 70, even though this decreased again from the age of 70. It was also found that physical exercise had increased over the prior decade in people up to the age of 75. Consumption of fruit was more common than in younger age groups. People in this age group participated in health promotion classes, especially exercise classes, and most paid at least part of the costs themselves. However, it was estimated that one-quarter of older people suffered from mental illness, particularly depression, but this was not always recognised or treated. The number of completed suicides was highest in the age group over 75.

The use of addictive substances such as alcohol and tobacco decreased with age, but was still high among some people. Current data on the use of addictive substances (e.g., alcohol, illegal drugs and medications) is not currently available for people aged over 65, although an increase is expected here in future.

The number of medications prescribed increased sharply in this age group, due to the greater burden of disease. A survey of actual medication use among people aged over 65 would be useful, as the concomitant use of various medications in old age may be associated with a risk of dependence (for example, with sleep medications) as well as general public health risk. Stricter prescription controls would also be useful, as well as counselling and education of consumers.

It should be noted that there is no current and representative data available on the health status of older people with a migrant background, their use of health promotion and rehabilitation services, or other factors relating to the health of this group.

05

» Giving and receiving care

The topic of care affects people aged 65 to 80 in two ways: firstly, the risk of needing care or assistance oneself increases noticeably with age. Secondly, there are many people in this age group who, as carers, provide care or support to their spouses or life partners, very old parents, neighbours or friends. This is associated with a variety of stresses on health.

In this chapter, frequencies and distributions relating to people in this age group in need of care and assistance are presented by age, gender and nursing care level. The types of care available to people in this age group who need care and assistance are outlined, distinguishing between residential and outpatient forms. The people providing care for this age group are also identified, and their physical, mental and financial burden is examined.

» 05.1 People in need of care in the age group from 65 to 80

When people who need care are referred to in this chapter, this is based on the definition of “people in need of care” used in the Pflegestatistik (nursing care statistics)⁴⁴ and the Pflegeversicherungsgesetz (SGB XI) (Care Insurance Law, German Code of Social Law, Volume 11). According to this definition, people are considered to be in need of care if they are expected to require long-term help due to a physical or mental illness or disability for at least six months.

44 See the nursing care statistics glossary at <http://www.gbe-bund.de>.

Only those who receive services in line with the German Code of Social Law, Volume 11 are included in the nursing care statistics. This is based on the decision made by the nursing care insurance provider or private insurance company on the need for care, and assignment of the individual to the appropriate nursing care level⁴⁵ (from I to III) following an assessment. In order for a nursing care level to be assigned, the individual must demonstrate a significant need for care. Even at nursing care level I, this must amount to at least 90 minutes per day, of which 45 minutes must be “basic care” (such as personal care and nutrition).

However, older people are often reliant on help in everyday life before, or without ever, crossing the threshold of a recognised need for care. For this reason, the most recent major representative survey throughout Germany on the situation of people in need of care in private households also included people in need of assistance. In this study, people were considered to be in need of assistance if they primarily needed assistance with household tasks, although their limitations in activities of daily living had not been assigned a nursing care level (Schneekloth and Wahl 2006, pp. 15 f.). In 2002 – more recent figures of comparable validity are not available – there were just under 1.4 million people in need of care, plus almost twice as many people with daily assistance needs, and another 1,064 million with a weekly need for assistance across all age groups. This was equivalent to 8.9% of the population in private households in the 75–84 age group being in need of care, with another 17.7% who were primarily in need of assistance (Schneekloth 2006, pp. 64 f.). It can be assumed that this ratio of people in

need of care to people in need of assistance of 1:2 has not changed significantly since then. Among 70- to 85-year-olds in 2008, more than a quarter (26.3%) of respondents to the German Ageing Survey reported receiving assistance in the household, in the younger group of 55- to 69-year-olds the figure was 22.8% (cf. Table 30 in Chapter 03.2) (DEAS 2008: Geleistete und empfangene Hilfe im Haushalt).

The nursing care statistics published by the German Statistisches Bundesamt provide data on people in need of care (Statistisches Bundesamt 2011, Pflegestatistik 2009). According to these figures, less than 2% of people in Germany aged under 65 were in need of care; from the age of 81 it was one in five people and from the age of 90 it was over 50% (cf. Figure 20 in the Appendix). The period of life between 65 and 80 years is thus a time of gradual increase in the need for assistance and care, although there is great variation in individual needs. In 2009 there were 661,413 people in need of care in the age group from 65 to 80.

The distribution across the nursing care levels (cf. Table 48 in this chapter and Figure 20 in the Appendix) also shows that in the youngest age group (65 to 70 years), men were more likely to be in need of care, and this was true for all levels of care. This trend was reversed in the oldest age group under consideration.

⁴⁵ Nursing home residents were also included in the survey if they had been transferred directly to a nursing facility following a stay in hospital and were receiving services in line with the German Code of Social Law, Volume 11, but had not been assigned to a particular nursing care level. In these cases, the nursing care level is frequently assigned retroactively, so this group of people was also included on the survey date.

Nursing care level	Gender	People who need care per 100,000 residents, by age group			
		Total	65 to < 70	70 to < 75	75 to < 80
Nursing care levels	Total	2,858	2,657	4,743	9,899
	Men	1,924	2,790	4,673	8,774
	Women	3,757	2,534	4,803	10,741
Nursing care level I	Total	1,525	1,481	2,655	5,612
	Men	1,018	1,529	2,514	4,690
	Women	2,013	1,438	2,776	6,301
Nursing care level II	Total	962	863	1,562	3,198
	Men	662	930	1,622	3,082
	Women	1,250	801	1,510	3,285
Nursing care level III	Total	358	296	499	1,047
	Men	234	310	509	967
	Women	478	282	491	1,108
Not yet assigned to a level of care	Total	13	17	26	41
	Men	10	21	27	35
	Women	16	13	25	46

Table 48: People in need of care per 100,000 residents by age, gender and level of care (Statistisches Bundesamt 2011r, Pflegestatistik 2009, www.destatis.de)

05.2 Provision of care

Four different ways of arranging care can be distinguished: care only provided by family members or friends (care allowance), care provided by outpatient care services (allowance in kind), mixed forms (combined services) and residential care in nursing homes. Shared care communities (“Pflegerwohn-gemeinschaften”) are enjoying increasing popularity. Depending on the care contract, these communities

are either classified as outpatient care with an allowance in kind or as residential care. Table 49 in the Appendix shows the distribution across the different types of provision. In each of the age groups under consideration, two thirds to almost three quarters of people in private households who were in need of care were cared for by family members, often with support from outpatient care services. Men aged up to 70 who were in need of care were at greater risk of being admitted to a residential care facility than women. However, this trend was reversed among older age groups. According to a recent study on the effects of the Gesetz zur strukturellen Weiterentwicklung der Pflegeversicherung (German Nursing Care Insurance Reform Act), the

proportion of younger nursing home residents has decreased while the proportion of older residents has increased; from 1999 to 2012, the average age increased by one year to 82 years (BMG 2011, p. 121) (cf. Figure 21).

The trend towards an increasing proportion of very old individuals in residential care, which was identified by comparing the ages of residents in 1994 and 2005, thus seems to be continuing (Schneekloth and Törne 2009, p. 85) (cf. Figure 43 in the Appendix).

Other socio-demographic structural characteristics of nursing home residents were reported in the same study. The figures showed that, in 2005, only 9% of women, but 30% of men in nursing homes were married in all age groups, while 73% of women and 38% of men were widowed. The proportion of naturalised and non-German immigrants among residential care residents was 3% in all age groups in 2005 (Schneekloth and Törne 2009, p. 86).

People in need of care with a migrant background living in private households were less likely to live alone, and were younger on average, than the corresponding group of people without a migrant background (cf. Figure 22 in the Appendix). 42% of them were aged between 60 and 80, compared to 34% of people in need of care who did not have a migrant background. 29% were over 80 years old, compared to 49% of people without a migrant background (BMG 2011, p. 60).

Around half of the people in need of care in private households in the age group from 60 to 79 were male and around half were female; it was only in the older age groups that the proportion of women rose to 76%. Almost all individuals who were cared for in private households (86%) had children, over half were married and 36% were living alone (cf. Figure 23 in the Appendix).

	1999	2010
<i>Gender</i>		
Male	21	24
Female	79	76
<i>Age groups</i>		
Under 60	6	5
60–75	16	14
75–90	58	57
90 and over	20	23
Average age	81	82

Figure 21: Structural characteristics of residents of residential nursing facilities; where totals do not equal 100 = data not available (BMG 2011, p. 121)

The level of care that a person required was not the only influence on whether a person in need of care lived in a private household or in a nursing facility. Geographic location was also noted as a significant factor. Cross-comparison of the nursing care statistics across administrative districts showed large regional differences in the proportion of people in need of care who were living in residential care facilities, although there was no age differentiation in the data presented (Statistische Ämter des Bundes und der Länder 2012). In 2009, 39.8% of all individuals in need of care in Schleswig-Holstein lived in residential nursing homes, while in Hesse, the state with the lowest rate of people in residential care facilities, only just under a quarter of people in need of care lived in a nursing home (24.9%). The national average for the proportion of people in need of care who were living in residential care facilities was 29.9%. How these differences relate to differing regional control of the development of outpatient or residential care or to differing cultural approaches to nursing care has not been explored.

05.3
Carers

Most older people would prefer to live in their own home until the end of their life, or at least live in a private household and not in a nursing home. With increasing frailty, they predominantly receive the necessary care and assistance from their personal environment. Unfortunately, the nursing care statistics do not capture the informal care that is provided by family members rather than by professional carers as part of the services offered by nursing care insurance. According to the 2008 German Ageing Survey, 13.4% of 55- to 69-year-olds and 10% of 70-

	1998	2010
<i>Relationship</i>		
Wife/female partner	20	19
Husband/male partner	12	15
Daughter	23	26
Son	5	10
Daughter-in-law	10	8
Son-in-law	0	1
Mother	11	10
Father	2	1
Other relative	10	4
Neighbour, friend	7	6
<i>Living in ...</i>		
Same household	73	66
Separate household	27	34

Figure 24: Relationship of the primary carer to the person in need of care in 1998 and 2010 (as a percentage), basis: Hauptpflegepersonen Pflegebedürftiger in Privathaushalten (BMG 2011, p. 27)

to 85-year-olds provided care and assistance to others at the time of the survey (DEAS 2008: Erbringen von Hilfe- und Pflegeleistungen). More recent figures can be found in a study on the effects of the Gesetz zur strukturellen Weiterentwicklung der Pflegeversicherung (German Nursing Care Insurance Reform Act) (BMG 2011). This showed that the total number of carers has increased with the number of people in need of care, although it did not state the actual number of carers (BMG 2011, pp. 26 f.). While the proportion of carers aged from 65 to 79 compared to all carers has fallen from 27% to 24%, the proportion aged over 80 has risen from 5% to 9%. Care in the home is still primarily provided by women, although men are catching up, both as husbands caring for their wives and sons caring for parents, as can be seen from Figure 24 (BMG 2011, p. 27).

As Figure 25 in the Appendix indicates, women are more likely to take on the role of carer at a younger age, and the distribution of female carers is more broadly spread across all age groups than that of male carers. First they are more likely to be carers for their own parents, and then for their spouse. In contrast, it is only in very old age that men are more likely to be carers, presumably for their spouses. However, following the death of their parents and their spouse, women in very old age are required to take on the role of carer less frequently.

05.4
The burden of providing care

The 2011 BMG report provides very little data on age differentiation regarding the issues outlined below. This means that there is currently a certain

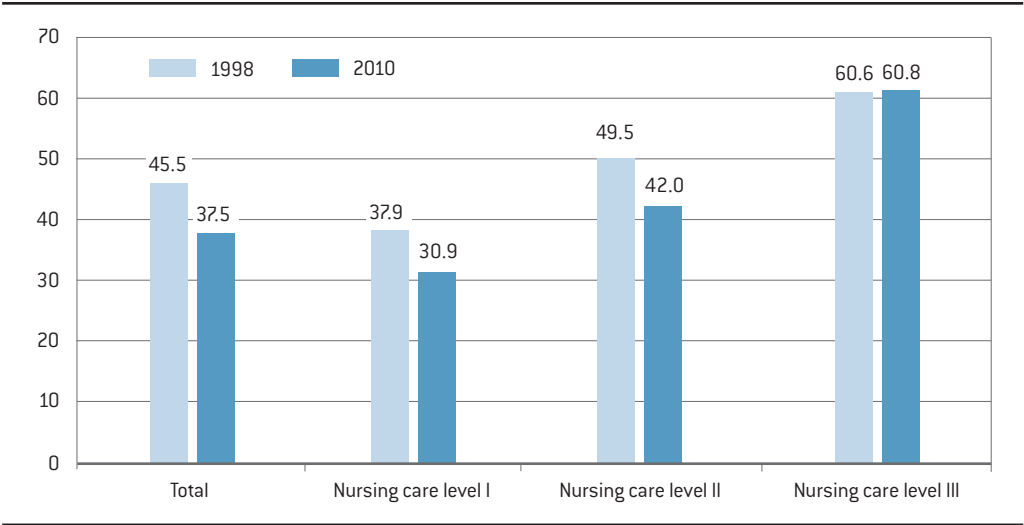


Figure 26: Amount of time spent by main carer on provision of care in private households in 1998 and 2010 (hours per week); basis: Hauptpflegepersonen in Privathaushalten mit pflegebedürftiger Person (BMG 2011, p. 29)

amount of distortion surrounding the topic of care that is difficult to assess, but often quite significant. This is due to the considerable changes in the care needed, life circumstances, social networks and the burden perceived by carers for individuals aged over 80 in particular, all of which are quite different in the age group from 65 to 79. However, developments such as the decline in the number of married carers, as well as the increase in the number of divorced and single carers, are a reflection of trends in society as a whole that can also be observed in people aged from 65 to 80.

The amount of time spent on providing care decreased during the period from 1998 to 2010 from an average of 45.5 hours (1998) to 37.5 hours per week (2010), but this was still almost equivalent to full-time employment. As expected, the amount of time depended on the nursing care level, but in 2010 this was still more than 30 hours a week at nursing care level I (cf. Figure 26). Across all age groups,

almost half of carers felt “quite” burdened and nearly a third “very” burdened, as shown in Figure 27 in the Appendix.

While carers in younger age groups face the increasingly urgent problem of reconciling paid work with the provision of care, this no longer plays an important role for carers in the age group under consideration. However, this is more likely to be a factor for the people in need of care, as their potential carers may have difficulty in reconciling these two demands. The proportion of carers in paid employment is increasing in any case, independent of how many hours per week they spend in paid employment. Among carers under 65, the proportion was 59% in 2010 (cf. Figure 28). Slightly more male than female carers were in paid employment, and there was a significantly greater proportion of male (72%) than female carers (42%) working over 30 hours per week (BMG 2011, p. 30). 15% of carers who were employed when they began providing care had to

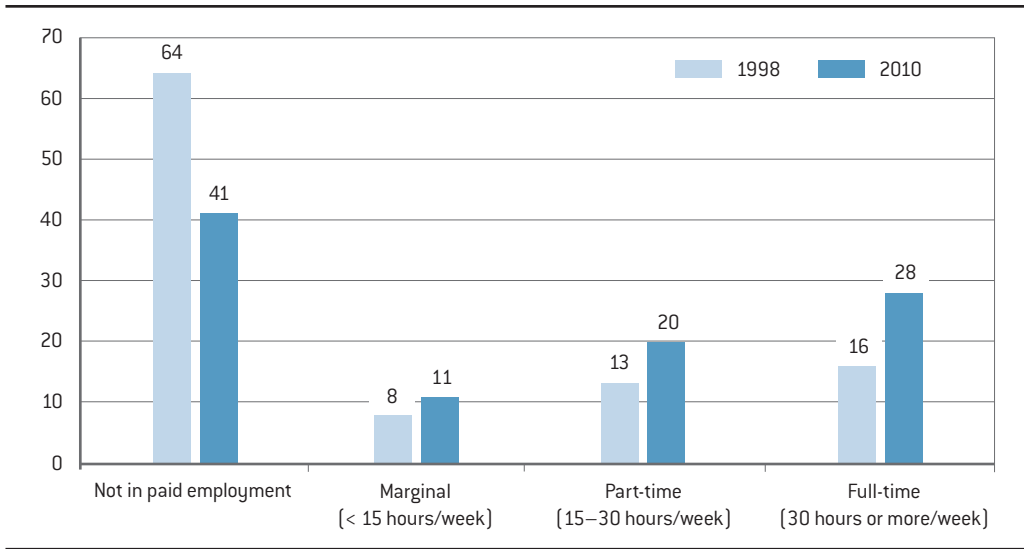


Figure 28: Employment status of main carers in 1998 and 2010 (as a percentage); basis: Hauptpflegepersonen in Privathaushalten mit pflegebedürftiger Person (BMG 2011, p. 31)

give up their paid employment due to the demands of care, and another 34% had to reduce their working hours.

In 2010, across all age groups, people in need of care living in private households paid an average of €247 per month themselves for care-related costs, in addition to the nursing care insurance benefits received. The figures also show that the higher the nursing care level, the more they paid (BMG 2011, p. 46). 17% of all people in need of care paid for outpatient care services every month, in addition to the allowance in kind provided by their nursing care insurance. One of the main reasons for this was the benefit modules provided by the nursing care insurance not fitting the individuals' needs. 56% of the self-financed spending on professional assistance was for basic care and 29% for household management (BMG 2011, pp. 47 f.).

The cost of a place in a residential care facility comprises the cost of care and what are known as

“hotel costs” for catering and accommodation. The self-funded contribution, which is in addition to the benefits provided by the nursing care insurance, has increased in recent years and is several times higher than the private expenditure on care in private households. There are large regional differences in this contribution, for example between the former East and West German federal states. According to the AOK Pflege-Navigator search portal, which allows for research on residential nursing facilities throughout Germany, the self-financed contribution at nursing care level I was between €30 and €50 per day (as per May 2012) – although this was not the upper limit. The information in the Pflegereport 2010 shows that private households spent €2.13 billion on care in the home and €9.28 billion on residential care per year (cf. Figure 29) (Barmer GEK 2010, pp. 90 f.).

Source of expenditure	In billion euros	As % of public/ private expenditure	As % of total expenditure
<i>Public expenditure</i>		100.0	
Social nursing care insurance	19.14	84.0	56.0
Private nursing care insurance	0.62	2.7	1.8
Welfare benefits	2.75	12.1	8.0
Welfare for war victims	0.28	1.2	0.8
<i>Private expenditure*</i>		100.0	
Nursing home**	9.28	81.3	27.1
Domestic care	2.13	18.7	6.2
<i>Total</i>			100.0

* Estimates

** The nursing home costs used here are from 2007. Source: BMG, soziale Pflegeversicherung; Verband der privaten Krankenversicherung e.V., Zahlenbericht 2007/2008; Statistisches Bundesamt, Sozialhilfestatistik, Kriegssopferfürsorgestatistik

Figure 29: Public and private expenditure for people in need of care (Barmer GEK 2010, p. 90)

05.5 Conclusion

The need for care and assistance is an important topic for people aged between 65 and 80, both in terms of giving and receiving care. The studies examined in this report showed that between a fifth and a quarter of people in this age group received assistance in the household, and 8.9% of 75- to 85-year-olds had a recognised nursing care level. For each person in need of care there were approximately two in need of assistance.

In the age group under consideration, more than two-thirds of the people in need of care were living in private households, where they were predominantly cared for by family members. The older the person in need of care, the more frequently outpatient care

services were also involved in their care. The average age of residents in residential nursing facilities has increased in recent years.

Care in the home is still primarily provided by women, although men are catching up, both as husbands caring for their wives and sons caring for parents. The average number of hours spent providing care was 37.5 hours per week in 2010, and 77% of carers felt "quite" or "very" burdened, representing a risk to their own health. People in need of care in private households spent an average of €247 per month to meet their needs, in addition to the benefits provided by their nursing care insurance.

06

» Leisure

Old age opens up new perspectives and opportunities for many people. Retirement offers new freedoms, with no further need to distinguish between leisure time and working hours. For many older people, being able to structure this leisure time to suit themselves is both a need and a challenge. Achieving this goal requires initiative, mobility, information and – often – the right services, as well as time and money. Important aspects such as health, social participation and education are key factors in increasing quality of life. An active approach to structuring day-to-day activities can support these aspects and facilitate active living in old age. Other influences on older people's activities and leisure time include attitudes and values, their sense of self-worth, and any discrimination that they may experience.

» 06.1 Quality of life, values and religion

What values do older people hold? How religious are they, and how happy? The German Ageing Survey collected data on the subjective sense of well-being of older people (Tesch-Römer et al. 2010, pp. 263 f.). Their subjective well-being was determined using a range of suggested answers, such as “I am satisfied with my life”, “My living conditions are excellent”, or “My life is virtually ideal in most aspects”. Participants rated these statements using five different answers, from “completely agree” to “completely disagree”. On this basis it was established that, for the year 2008, 61% of 55- to 69-year-

olds and 62% of 70- to 85-year-olds enjoyed a relatively high level of satisfaction, whereas a relatively low level of satisfaction was reported in only 4% of both age groups.

These figures did, however, show regional, educational and gender differences: older people in the former West German federal states reported a higher level of satisfaction (62.7% and 63.5%) than those from the former East German federal states (53.9% and 56.9%) (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 12-1).

In the younger age group, women were more satisfied than men, while men were more satisfied than women in the older age group. In analysing this reversal, it should be noted that the older age group comprised a much larger proportion of single (i.e. widowed) women, many of whom had to manage on a low income while also dealing with health problems. The poor assessment of quality of life by older men in the former East German federal states probably also reflects issues of social downgrading that were experienced following German reunification, in addition to a poorer situation on average in material terms. In addition, older people in the former East German federal states were often the victims of age discrimination: in 2008, 16.7% of men and 15.2% of women aged between 55 and 69, and 9.1% of men and 16.7% of women aged between 70 and 85 in the former East German federal states and East Berlin reported that they had been disadvantaged because

of their age during the previous 12 months. These figures were substantially higher than those for older people in western Germany, where 9.8% and 11.2% of women (aged 55–69 and 70–85, respectively) and 9.2% and 8.6% of men experienced discrimination based on their age (DEAS 2008: *Erlebte Altersdiskriminierung*).

Satisfaction levels increased in line with educational level, although the German Ageing Survey made no distinction between age groups in this instance (Tesch-Römer et al., 2010, pp. 272/273). The correlation between perceived positive quality of life and a high level of education was strengthened between 1996 and 2008. This result suggests that the perception of a satisfactory life depended increasingly on individual resources such as education and thus, in general, on a higher income.

Since 1980, the ALLBUS studies have surveyed the values held by Germans on the basis of the Inglehart index.^{46 47} Based on these figures, the 2011 Datenreport by the German Statistisches Bundesamt presented the values of individuals aged over 65 in 2008 as follows: 31% of older people in western Germany and 33% in eastern Germany fitted the value profile of “materialists”, whereas 11% of those in western Germany and 5% of those in eastern Germany fitted the profile of “post-materialists” (Statistisches Bundesamt et al. 2011o, p. 388). Compared to all other age groups, older people thus leaned more strongly towards materialism than post-materialism.

46 With regard to the Inglehart index: “There are different typologies of values. Although controversial, the theory of changing values developed by Ronald Inglehart, which is taken as the basis here, has been tested on a broad base of data over a lengthy period. For western industrialised nations, Inglehart postulates a move away from material values – a desire for affluence – and a tendency towards post-material values which go beyond those of material well-being and lie mainly in the areas of self-realisation and public participation. The Inglehart index establishes value priorities by having participants choose the more important and less important alternative between each of two material objectives – ‘maintaining peace and orderliness’ and ‘combating rising prices’ – and two post-material objectives: ‘protecting the right to freedom of expression’ and ‘more influence by citizens over government decisions’. If both material objectives are selected, the participant is classed as a ‘materialist’; if both post-material objectives are selected, the participant is classed as a ‘post-materialist’.” (Statistisches Bundesamt et al. 2011o, p. 385).

47 Only individuals with German citizenship participated in the ALLBUS study.

The 2011 Datenreport also described the “Assessment of fairness of the individual’s own share of Germany’s well-being” based on the 2008 figures from the ALLBUS study. In this case, the participants were asked whether they had a fair share of the general well-being in Germany in comparison to others in the country: *“Do you believe you have a fair share, more than your fair share, somewhat less or much less?”* (ibid., p. 389). While 65% of the older people in western Germany aged over 65 believed they had a fair or more than their fair share, the situation was exactly the opposite for the older people in eastern Germany: 64% believed that they had much less or less than their fair share.

Another subject that the Datenreport discussed, based on the ALLBUS study, was the attitude of Germans towards the role of women (ibid., pp. 393 f.). The participants were presented with various statements on women and employment and the differentiation of roles between men and women. Although the perception of women in all age groups in eastern Germany was more egalitarian than in western Germany, the difference was particularly marked in the 65+ age group. The statement, *“It is much better for everyone involved if the man is fully committed to his professional life and the woman remains at home and looks after the house and the children”* met with the response “completely agree” or “tend to agree” from 65% of older western Germans and 27% of older eastern Germans. The statement, *“It is more important for a woman to help her husband with his career than to pursue a career of her own”* met with agreement from 48% of older people from western Germany and 19% of older people from eastern Germany. 70% of older western Germans and 24% of older eastern Germans thought that *“A young child will definitely suffer if its mother is working”*. In the over-65 age group, there has been a continuous shift from traditionally conservative towards egalitarian attitudes since 1991, in both western and eastern Germany.

To what extent do older people maintain connections with churches and faith communities? The Sechster Altenbericht (Sixth Report on the Situation of the Elderly), prepared in 2010 for the Bundesministerium für Familie, Senioren, Frauen und Jugend (Federal Ministry for Family Affairs, Senior Citizens, Women and Youth [BMFSFJ]), showed that the social services performed by churches and faith communities played a traditionally large role in supporting and caring for older people (BMFSFJ 2010a, p. 412). The extent to which church communities created “structures of opportunity” for civic engagement by older people was also often underestimated. What do older people believe in? According to the Sechster Altenbericht, with reference to an ALLBUS study from 2006, practising Christians were primarily elderly and female. Almost one-third of western Germans and about half of eastern Germans who were members of Protestant churches were aged 60 or over, and: “Among the members of the two major denominations, those most frequently attending church services or Mass were women aged 60 to 74 [30%]. Among the 75–89 age group, 27% of women still reported that they attended church at least once a month” (ibid. pp. 412 f.). Compared to Christianity, adherence to the Islamic faith was associated with stronger religious values among older people, according to the Sechster Altenbericht: 40% of Muslims aged over 60 described themselves as “highly religious” and a further 51% as “moderately religious” (BMFSFJ 2010a, p. 411). 35% of older Muslims performed the obligatory prayers five times a day and 27% stated that they wore a headscarf. After the two main religions in Germany, Christianity and Islam, non-believers constituted the third-largest group, particularly in eastern Germany. 33% of eastern Germans aged over 60 identified themselves as convinced atheists.

» 06.2 Leisure time: culture, travel and clubs

For the age group under consideration, “leisure” was an area of some ambivalence in terms of how they live their lives. When they reach retirement age, most 65- to 80-year-olds are free to choose what to do with their lives in the absence of professional obligations and have more time available for leisure activities. Evidence of the growing importance of this area can be seen in the increase in the expenditure on these activities with increasing age. Compared to other age groups, households whose main income earners were aged between 65 and 80 spent the greatest proportion of their budget (nearly 13%) on leisure activities (Statistisches Bundesamt et al. 2011a, p. 352). As reported by the German Statistisches Bundesamt, the leisure activities on which people spent the most money (together with leisure activities not specified in greater detail) were books, magazines and travel (package tours) (Statistisches Bundesamt et al. 2011a, p. 352).

According to a study on behalf of the Bundesministerium für Wirtschaft und Technologie (Federal Ministry of Economics and Technology) in 2009, 27% of all short trips and also 27% of all holiday travel (i.e. five or more days) in 2007 were taken by people aged over 60 (Grimm and Lohmann 2009, pp. 9 f.). However, these figures should not belie the fact that approximately 10% of pensioner households had a net monthly household income of less than €900

and were unable to spend their leisure time in this way (cf. Chapter 02.5).

Older people visited cultural events infrequently: 77.6% of 55- to 69-year-olds and 85.4% of 70- to 85-year-olds in Germany stated that they attended cultural events less than once a month, or never (DEAS 2008: Besuch kultureller Veranstaltungen). People in eastern Germany participated in cultural events to an even lesser extent than people in western Germany – a finding that may be related to the range of events on offer in eastern Germany (cf. Table 50 in the Appendix).

There was also an east/west difference in the involvement of older people in club activities. Many older people were active in organised associations.⁴⁸ At 68.7%, it was predominantly men in the 55–69 age group in western Germany who were members of at least one club, group or organisation. More than half of western German women in this age group (59.9%) also reported being members of at least one organisation. Conversely, far fewer eastern German men (47.4%) and women (45.1%) aged from 55 to 69 were members of a club or organisation. This regional difference was even more pronounced among the very old: 62% and 52.3% of western German men and women aged from 70 to 85, respectively were members of at least one club, compared to only 45.3% and 28.1% respectively of men and women of the same age in eastern Germany. The marked difference between eastern and western Germany was also evident in the type of club memberships. Whereas, for example, 37.5% of western German men aged from 55 to 69 were members of a sports club, the comparable figure for eastern German men was only 12.9%; cf. Table 51 in the Appendix (DEAS 2008: Mitgliedschaftsbereiche in Vereinen, Gruppen, Organisationen).

48 Membership of clubs, groups or organisations was recorded as part of the German Ageing Survey, but this does not correspond exactly to the voluntary engagement that often forms part of club activities and is described further below.

How do older people themselves experience their leisure activities? According to the German Ageing Survey, 71.1% of 55- to 69-year-olds and 71.4% of 70- to 85-year-olds rated their leisure activities as “good” or “very good”. Only a small number of older people described their leisure activities as “poor” or “very poor”, regardless of age, gender and whether they lived in eastern or western Germany. A more finely differentiated survey at a local level, however, would certainly have highlighted quite different results reflecting the range of activities available locally. The worst rating for how individuals viewed their leisure time, at 13.9% “poor” or “very poor”, came from women aged 70 to 85 in eastern Germany, including the former East Berlin (DEAS 2008: Bewertung der Freizeitgestaltung).

06.3
Civic engagement,
volunteering and
further education

Civic engagement and volunteering

To what extent are older people engaged within and for society? The studies and surveys that deal with this question describe this subject using a variety of terms. There are references to volunteering and participation, and to civic or voluntary engagement. The survey of volunteers records civic engagement at five-year intervals and forms the basis for the details below. The 2010 survey processed data

from 2009 (BMFSFJ 2010b). According to the BMFSFJ publication “Monitor Engagement”, which summarises the results of the latest survey of volunteers, civic or voluntary engagement is understood as “an individual action that is characterised by its voluntary nature, the absence of any aim for personal material gain, and a focus on the common good” (BMFSFJ 2011, p. 4). Private support activities involving family members and friends do not count as civic engagement under this definition, since the “need for the activity to have a public character is not satisfied” (BMFSFJ 2010c, p. 10). It is sometimes not easy, however, to establish a clear distinction between these definitions, and the use of an umbrella term runs the risk of overlooking important individual aspects. The survey of volunteers therefore expressly drew attention to the fact that “even today ... research into engagement lacks theoretical integration of terms such as public participation, voluntary or civic engagement, civil society, the ‘third sector’ and social capital” (BMFSFJ 2010b, p. 49). Therefore, the terms used in the information that follows are those of the various source materials.

The survey of volunteers showed the engagement of 65- to 74-year-olds to be positive: “These individuals invest a large proportion of the leisure time that they have gained following the end of their working life⁴⁹ by becoming engaged in various ways”

Age group	1999	2004	2009
65–74	26%	31%	33%
Over 74	17%	19%	20%
Average, population overall	34%	36%	36%

Table 52: Rate of engagement by age and over time (BMFSFJ 2011, p. 8, own representation)

49 This refers to members of the 65–74 age group.

Age group	Individuals voluntarily engaged in age group	Men voluntarily engaged	Women voluntarily engaged
65–69	37%	40%	36%
70–74	30%	37%	25%
Over 75	20%	24%	18%

Table 53: Voluntary engagement by age and gender (BMFSFJ 2010b, pp. 159/169)

(BMFSFJ 2011, p. 6). However, in the group aged over 74, described here as “the very old”, the level of engagement declined substantially. About a third of older people and a fifth of the very old were involved in some form of civic engagement, according to the survey of volunteers. The figures had risen slightly since the first survey in 1999 (cf. Table 52).

In all age groups, men were more likely than women to be involved in some form of civic engagement (BMFSFJ 2010b, p. 169). In the 60–64 age group, 40% of men and 32% of women were engaged in voluntary activities. In the 65–70 age group, there was a similar level of engagement by men and women, but this declined again substantially for women in the older age groups. The gender-specific differences in the survey of volunteers were explained by the suggestion that, while women tend to play a key role in social aspects of society, men traditionally have a strong role in club activities and in political and professional engagement. It should also be noted that, among the over-75s, there is an above-average proportion of women of very advanced age who are prevented by health problems from being involved in greater civic engagement.

The German Ageing Survey also recorded the extent to which older men and women were involved in public life, and in which areas. The expression used in the German Ageing Survey, however, was “social participation” rather than “engagement” (Naumann and Romeu Gordo 2010, pp. 118 f.). The authors distinguish between professional and non-

professional participation here. Because the 65- to 80-year-olds are largely no longer professionally active, the results reflect only non-professional participation for this group. The expression “non-professional participation” includes voluntary engagement, for instance, the assumption of roles in clubs, societies or self-help groups, as well as other educational activities outside the home, such as participation in courses, presentations or political events.

The results largely confirm the finding of the survey of volunteers that (officially recorded) participation tends to be more likely among men and declines with advancing age. In addition, a strong difference was evident in the levels of non-professional participation by older people in eastern and western Germany (cf. Table 54): while more than half of western Germans in the 55–69 age group were engaged in education or in a voluntary position, over half of eastern Germans in this age group had no involvement. The authors did not draw any conclusions about whether this was due to lack of interest or lack of structures to encourage participation. Given the context of lower participation in club activities by older eastern Germans, it seems reasonable to conclude that there was simply a shortage of opportunities for participation and engagement in many regions in eastern Germany.

The survey of volunteers did not include figures to show the extent to which educational level influenced civic engagement by older people. The authors of the survey state as follows, without reference to

	No participation		Education only		Volunteering only		Both	
	M	F	M	F	M	F	M	F
55–69 years								
Western Germany	38.9	45.5	34.4	36.1	4.8	5.4	21.9	12.9
Eastern Germany	53.8	62.5	31.6	28.1	2.7	1.4	11.9	8.1
All of Germany	41.9	49.0	33.9	34.5	4.4	4.6	19.9	11.9
70–85 years	M	F	M	F	M	F	M	F
Western Germany	60.8	71.5	24.2	17.7	5.3	4.7	9.7	6.1
Eastern Germany	69.6	79.6	18.3	14.7	4.0	3.7	8.0	2.0
All of Germany	62.5	73.1	23.1	17.1	5.0	4.5	9.4	5.3

Table 54: Non-professional participation by age and gender in western and eastern Germany (as a percentage) (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 5-2).

any particular age group: “The unemployed, individuals with a lower social and educational status and those with a migrant background are much less likely to engage in voluntary activities compared with the population on average” (BMFSFJ 2010b, pp. 5–6). This conclusion is confirmed by the figures in the German Ageing Survey, at least with regard to the influence of educational status (cf. Table 55).

In which areas are older people engaged? The survey of volunteers showed the level of engagement by older people aged 65 and over in 14 different areas of engagement. No distinction was made between the engagement of older and very old people in this case. However, a change was shown in the level of engagement in various areas since 1999. While the level of engagement increased in the areas of health, sport,

church and environmental protection, there was a decline in engagement in education and culture (see Figure 30 in the Appendix). The reasons for the changes were not discussed in detail. It can be assumed, however, that various influences were involved: besides demographic and cohort effects, recent history, such as public campaigns and political movements, also played a part in shaping preferences for particular forms of engagement.

In which institutional contexts are older people engaged? The 2009 survey of volunteers described the organisational contexts around engagement by older people (BMFSFJ 2011, p. 15). The participants in the 65–74 age group predominantly chose clubs for their engagement (41%), followed, to a lesser extent, by churches (17.8%), parties (12.7%) and ini-

Educational level	No participation		Education only		Volunteering only		Both	
	55–69	70–85	55–69	70–85	55–69	70–85	55–69	70–85
High level of education	20	35	51	41	3	5	26	19
Medium level of education	51	69	31	20	5	5	13	6
Low level of education	74	86	16	8	3	4	7	2

Table 55: Non-professional participation by educational level and age (as a percentage) (Naumann and Romeu Gordo 2010, p. 132)

tiatives or self-help groups (10.4%). Foundations or municipal institutions played a lesser role. Among the over-75s, who on the whole were considerably less engaged than younger people, involvement in clubs was a little less significant, while remaining the most important type of organisation (37.2%). On the other hand, churches (19.4%), parties (17.9%) and initiatives or self-help groups (13.4%) provided the context for engagement slightly more often for this age group.

Besides formal civic engagement, the survey of volunteers also drew conclusions on informal engagement, in the form of support at a neighbourhood level, for instance. While formal engagement fits into an organisational context and demands commitment from the participants, informal engagement takes place outside of official structures but often involves a certain amount of reciprocity.

According to the survey of volunteers, older and very old people with some level of civic engagement also tended to provide informal support for others (73%/60%), while those not formally engaged were also relatively less likely to be informally engaged (50%/33%) (BMFSFJ 2011, p. 16). These figures suggest that people who were not engaged were not involved in the informal rather than the formal sector, but that individuals either had or did not have a basic propensity towards engagement. A large proportion of informal assistance was provided in the context of private households. With advancing age, individuals provided less (informal) assistance in the household, but were more likely to receive assistance (see Chapter 03).

What are the reasons for older people's engagement? The survey of volunteers suggested a range of reasons for engagement, which participants ranked on a scale of 1 = "not important to me" to 5 = "extremely important to me" (BMFSFJ 2011, p. 17). Older and very old individuals rated interaction with others highest as the reason for their engagement,

for example, "Helping other people" (4.2/4.4), "Getting to know nice people" (4.0/4.1) or "Doing something for the common good" (4.1/4.1). The reason that was rated lowest was "Representing my own interests" (2.7/2.8). However, one very important reason for civic engagement by older people was: "Having fun" (4.2/4.2).

Tesch-Römer noted the relationship between voluntary engagement and well-being, and stated that engagement leads to reduced mortality, improved physical function, improved subjective health, lower levels of depression and increased satisfaction with life (Tesch-Römer 2012, p. 6). However, in this context, consideration must be given to the likelihood that a better state of well-being probably also encourages a readiness for voluntary engagement.

Further education

Further education and lifelong learning are important factors that bolster personal resources, facilitating a healthy ageing process and making social participation and engagement possible. Discussion was ongoing at the time of writing regarding the involvement of older people in further education, particularly in the context of further training at work for older employees below the age of 65, and statistics on the topic were being recorded (Statistisches Bundesamt 2011p, p. 21). However, with regard to demographic developments, the Bildungsbericht 2010 (National Report on Education 2010) noted the growing importance of further education for people aged over 65: "If, however, the proportion of people aged 64 or over in the overall population increases to 26% ..., institutionalised educational opportunities for the members of the public who are no longer in employment will be among the key conditions for social participation" (authors of Bildungsbericht 2010, p. 184).

Even today, over-65-year-olds already account for a substantial proportion of the use of further educa-

tion services. The 2010 Bildungsbericht reported that the proportion of 65- to 80-year-olds who participated in further education activities in 2007 amounted to 12% of that age group, and expected this figure to grow to 17% by 2025 (authors of Bildungsbericht 2010, p. 185). Further education in old age often took place in adult education centres (“Volkshochschulen”), less often at universities. In 2008, 812,918 people aged over 65 took an adult education course. This was 12.5% of users of adult education centres (authors of Bildungsbericht 2010, p. 331, Table H 4.5-2A). During the following years, the proportion of older people attending adult education courses grew steadily: to 13.4% (2009) and 13.8% (2010) of all course participants (dvv 2011, p. 55). These figures were much more positive than those for this age group in the German Ageing Survey on attendance at educational events: in 2008, 90.6% of 55- to 69-year-olds and 94.5% of 70- to 85-year-olds stated that they rarely, or never, attended a course or a presentation (DEAS 2008: Besuch von Bildungsveranstaltungen). Conversely, in 2007, 34% of 65- to 80-year-olds stated that they had deliberately taught themselves something for personal reasons during the year prior to the survey (Statistisches Bundesamt 2011b, p. 31).

06.4
Media usage

What media do older people use to obtain information, and what media can be used to reach this target group? Many surveys have been carried out on the media behaviour of Germans, for instance, on their internet use or preferred newspapers and publica-

tions. Data on internet use is (still) changing rapidly, in line with the speed of technological advances. For instance, access to, and availability of the internet have changed dramatically in recent years, with fast, comprehensive networks, relatively low-cost devices and the fact that almost all workplaces are equipped with computers. For this reason, analysis should only be based on the most up-to-date information in this area.

Data on media use and leisure activities during 2011 compiled by the television broadcasting company ARD (ARD Medien Basisdaten 2011), based on representative data from the Radio II 2011 media analysis, showed that the majority of older people watched television, read the newspaper and listened to the radio several times a week, with television being the most popular medium (cf. Table 56). The next section will consider television, radio, newspapers and magazines in greater detail, as well as internet use.

Television and radio

To what extent do older people use television or radio? The 2011 media analysis showed the amount of time older eastern and western Germans spent watching television during the previous three years. The average amount of time that over-65-year-olds spent watching television each day tended to be relatively high, at about five hours per day (cf. Table 57).

Several times a week	60–69 years	> 70 years
Watching television	93.5%	95.7%
Reading newspapers	88.4%	87.2%
Listening to the radio	85.9%	80.4%
Using a PC or laptop	41.5%	17.8%
Reading magazines	35.3%	38.3%

Table 56: Media use and leisure activities in 2011 by age group (ARD Medien Basisdaten 2011, own representation)

	2009		2010		2011	
Age	Western	Eastern	Western	Eastern	Western	Eastern
> 65	294	318	299	328	297	322

Table 57: Time spent watching television by over-65s in western and eastern Germany in 2009 to 2011, minutes per day (ARD Medien Basisdaten 2011, own representation)

The data from the media analysis showed that time spent in front of the television increased steadily with advancing age. This tallies with the conclusion from Blödorn that longer times spent watching television or listening to the radio in old age were due to the fact that older people often spent longer times at home, and therefore had more opportunities to use the television or radio (Blödorn 2009, p. 159). Eastern Germans of all age groups spent more time watching television than western Germans. In 2011, eastern Germans aged 65 or over spent about five hours and 20 minutes per day watching television, compared to just under five hours by their western German counterparts. Unlike television, the amount of time spent listening to the radio decreased with advancing age, although there has been some variation in the figures in recent years (cf. Table 58). In addition, the time spent listening to the radio has decreased overall and across all age groups in recent years. This trend may also be reflected more strongly among older age groups in years to come.

According to Blödorn, media behaviour is influenced by individual media experiences during a person's lifetime (Blödorn 2009, p. 161). Members of the older generation were more likely to use the services of the public broadcasters, with the regional programmes from ARD Dritte, in particular, being very popular (cf. Table 59 in the Appendix). Private television broadcasters had a low market share among the more advanced age groups, but there was clear growth among the younger cohorts (ibid.,

p. 167). The programmes preferred by older people were predominantly information-based, and people in this group were less likely than younger cohorts to watch entertainment programmes (cf. Table 60 in the Appendix).

Print media: newspapers and magazines

The Media-Analyse e.V. working group analyses the distribution of print media in Germany each year. It records data on regional and national print media in Germany in terms of their reach and with reference to different target groups and regions. It must be expressly noted that this overview is only relative, because the survey determines the distribution of the media but not the extent to which they are actually read. The data does not provide any information on whether and to what extent the target group actually reads the publication in question. Regional daily newspapers are not aggregated in the survey but are shown only as individual products. Because the individual daily papers have only a local reach, no conclusions can be drawn regarding the funda-

Age group	2009	2010	2011
60–69	205	211	207
70+	165	180	171

Table 58: Radio use by older people, by age group and over time, in minutes per day (ARD Medien Basisdaten 2011, own representation)

mental importance of daily newspapers as a medium. However, the reach of the “rtv” and “Prisma” television supplements, which are enclosed with many daily newspapers each week, do allow conclusions to be drawn regarding the general distribution of the daily papers (see Table 61 in the Appendix).

The leading press publication for men, with a reach of 46.1 or 38.8%, is ADAC-Motorwelt, which is sent out to all members of ADAC (General German Automobile Club) free of charge. Another free publication is Apotheken Umschau, which was distributed to pharmacy customers in the fourth quarter of 2011 and had a print run of about 10 million. However, the data available does not provide information on the distribution reach within the age groups being considered here⁵⁰ [see Table 62 in the Appendix].

Internet

To what extent do older people use the internet? This question is of particular interest because so much information is now preferentially distributed via the internet. The quality of life of older people can be significantly improved through access to mobile

services, communication via email and the use of digital services, such as in the areas of e-health and Ambient Assisted Living (AAL – IT solutions to support the quality of life of older people). However, this requires a willingness and ability to use the internet and the appropriate technical equipment.

The D21 e.V. initiative carries out an annual representative survey of internet use during the previous 12 months, broken down by gender, age and region. While almost everyone in the younger age groups (those aged 14–29) used the internet at the time of the survey – at 97.3% – the proportion of users decreased substantially with age (Initiative D21 e.V. and TNS Infratest GmbH 2011, pp. 10 f.). Older men aged between 60 and 69 were much more likely to be internet users than women in the same age group (66.7% vs. 48.5%). From the age of 70 onwards, the majority of men did not use the internet and did not intend to do so at any stage in the future. About a third of men and only about a sixth of women in this age group used the internet. In both age groups, however, women were increasingly accessing the internet: from 2010 to 2011, the proportion of older

Age group	Internet users*		Intending to use internet		Non-internet users	
	Men	Women	Men	Women	Men	Women
60–69 (2010)	65.8	43.1	4.2	6.2	30.0	50.6
60–69 (2011)	66.7	48.5	4.9	6.3	28.4	45.2
70+ (2010)	36.6	14.4	3.9	3.9	59.5	81.6
70+ (2011)	36.4	16.5	3.7	3.4	59.9	80.0

* Internet users = regardless of place or reason for use; intending to use internet = non-users who intend to use the internet within the next 12 months; non-internet users = non-users and those not intending to use the internet.

Table 63: Changes in internet use in 2010/11, by age and gender (as a percentage) (Initiative D21 e.V. and TNS Infratest GmbH 2011, p. 44; Initiative D21 e.V. and TNS Infratest GmbH 2010, own representation)

50 Cf. www.tkp-monitor.de/ZG/ZG15.html. Accessed on 3 April 2012.

Internet activity	Men 65+	Women 65+
Searching for information about goods/services	82%	73%
Use of travel services	77%	70%
Information on health topics	71%	78%
Reading/downloading online news	68%	51%
Using online dictionaries	63%	56%

Table 64: Internet activity for private purposes in the past three months (based on the 1st quarter of 2011) among internet users aged 65+ (Statistisches Bundesamt 2011q, p. 37, own representation)

female internet users increased by 5.4 and 2.1 percentage points, respectively.

Comparison of people aged 50+ in different regions revealed marked differences between the various German federal states. Whereas Bremen recorded the highest proportion of internet users in this age group, at 62.2%, non-internet users predominated in the eastern German states, with Saxony-Anhalt taking bottom place with only 39.0% internet users in the 50+ age group (Initiative D21 e.V. and TNS Infratest GmbH 2011, p. 48). Internet usage also differed by age group and educational level. In the 50+ age group, 79% of graduates used the internet, compared to only 23.5% of those who had completed compulsory secondary schooling but had no subsequent professional training (ibid., p. 50). Unfortunately, the study did not offer regional or education-specific data for the 70+ age group. We can presume, however, that older people with a low level of education in eastern Germany did not use the internet. This hypothesis, if confirmed, would have to be seen as a risk factor in terms of health in old age, given the steady decline in infrastructure in the “shrinking regions” of the eastern German states. According to a survey by the German Statistisches Bundesamt in the first quarter of 2011, 35% of people aged over 65 (47% of men and 26% of women) used the computer at least once in the previous three months (Statistisches Bundesamt 2011q, pp. 16 f.). 31% of people in

this age group (43% of men and 22% of women) used the internet during this period. In comparison, 99% of 16- to 24-year-olds stated that they had used the internet or a computer during the previous three months. Of the over-65-year-olds who used the computer during the three months prior to the survey, 97% did so at home and 64% every day, or almost every day. The clear majority of internet users thus consisted of regular and frequent users, with men once again more frequently reporting daily or almost daily use than women (72% vs. 54%). When asked in more detail about their internet use, 69% of male and 47% of female internet users aged over 65 reported going online daily or almost daily.

What do older people use the internet for, if they use it at all? According to the Statistisches Bundesamt, 28% of internet users aged over 65 communicated in social networks in 2011. 78% sought information about goods and services via the internet and 43% did their banking online (Statistisches Bundesamt 2011q, p. 33). Table 64 shows what sort of information older men and women sought on the internet. While men mainly looked for information about goods and services, women were especially interested in information on health topics.

Asked about their online purchasing habits, 38% of internet users aged over 65 stated that they had ordered goods or services via the internet during the previous three months (Statistisches Bundesamt et

al. 2011o, p. 350]. Specifically, men had mainly booked holiday accommodation, while women had also purchased clothing and sporting equipment in particular. In interpreting these figures, we must also take into account the quality and reach of the online portals for particular product groups, for instance the popularity of particular tourism or product portals such as Amazon. Conclusions about actual target group demand can, therefore, only be drawn to a limited extent. See also Table 65 in the Appendix.

Taken as a whole, the data shows that the group of older people, and the very old in particular, who used the internet and had access to target group-specific goods, services and information via the internet, was still relatively small compared to other age groups. This group was definitely expected to grow in future, as generations with an affinity for the internet grow older. At the time of the survey, however, very old individuals, and especially women in this group, did not have access to the internet in significant numbers. In this context it would be interesting to develop gender-specific strategies to encourage internet use among the very old.

ground of geographical or personal influences, as well as how it changed over time. The results showed that both age and gender had a significant influence on mobility behaviour.

Number, length and purpose of journeys

What journeys do older people take every day, regardless of means of transport? How long are their journeys, and what distances do they cover on average? The study recorded these basic parameters to describe mobility, broken down by age group. This made it possible to reflect changes in mobility outside the home with increasing age. The average daily travel time was relatively constant during adulthood, at 80–86 minutes a day, and started to decline only in the 74+ age group. Older people aged between 65 and 74 took on average 3.2 journeys with a (total) length of 28 kilometres and a (total) duration of 81 minutes per day. These figures declined from the age of 74: at this point, only 2.3 journeys per day were taken on average, with an average of 16 kilometres in a period of 58 minutes.

The data shows that the journeys became shorter and the relative duration of each journey became longer as the participants became older. The 65–74 age group took on average 2.9 minutes to travel one kilometre, whereas the 74+ age group needed an average of 3.6 minutes for the same distance, which was almost a third slower.

We may conclude from this that people in the age group under consideration used other, potentially slower means of transport for their journeys, travelled more slowly overall or included breaks in their journeys. The proportion of people in this age group who travelled at all on the survey date also declined from 86% to 74%, compared to the 65- to 74-year-olds. About a quarter of the over-74-year-olds had therefore not left the house at all that day.

The study evaluated the changes in mobility rates against the background of the change in the propor-

06.5 Mobility

How mobile are older people? Which means of transport do they use, and when, how often and for what purpose do they use them? The study entitled *Mobilität in Deutschland 2008* [Mobility in Germany 2008 [MiD]] (DLR and infas 2010) investigated the mobility behaviours of people living in Germany using very comprehensive surveys. This showed both mobility behaviour per se and against the back-

tion of the population represented by the age group, between 2002 and 2008 (*ibid.*, p. 171). The mobility rate of older people increased noticeably over time, for both the 65- to 74-year-olds and – even more markedly – those aged over 74. There was a marked increase in both the proportion of people who were travelling on the survey date (from 79% to 86% for the 65- to 74-year-olds and from 66% to 74% for those over 74) and the number of journeys (cf. Figure 32). While the proportion of 65- to 74-year-olds in the general population during this period grew by 20%, their journeys as a proportion of all journeys increased by 32%. The proportion of people aged over 74 in the population increased by 12% and their journeys as a proportion of all journeys increased by as much as 30%.

The growth in the mobility rate was therefore

based not just on an increase in the population group, but also on increased mobility in old age, and among the very old in particular. The study did not identify any reasons for this, but it may be attributable to fewer restrictions on mobility in old age, better mobility services and opportunities, or a greater need for mobility, for instance because access to healthcare services (still) required increased effort in terms of mobility. The study analysis, however, suggested that the “change in mobility behaviour in the older age group ... was thus substantially greater than the expectations that have been repeatedly expressed” (*ibid.*, p. 171).

What are the reasons for journeys taken by older people? Among the 65- to 74-year-olds, journeys taken for leisure reasons predominated (39%), followed by shopping (33%) and private errands (21%).

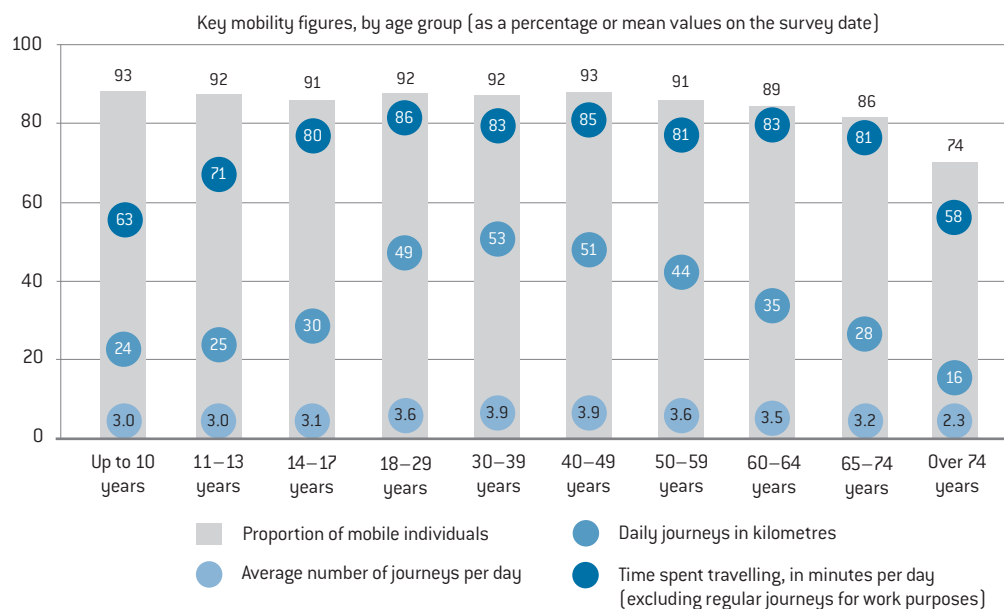


Figure 31: Journeys, length of journey, number of journeys per day, by age (MiD 2008) (DLR and infas 2010, p. 75)

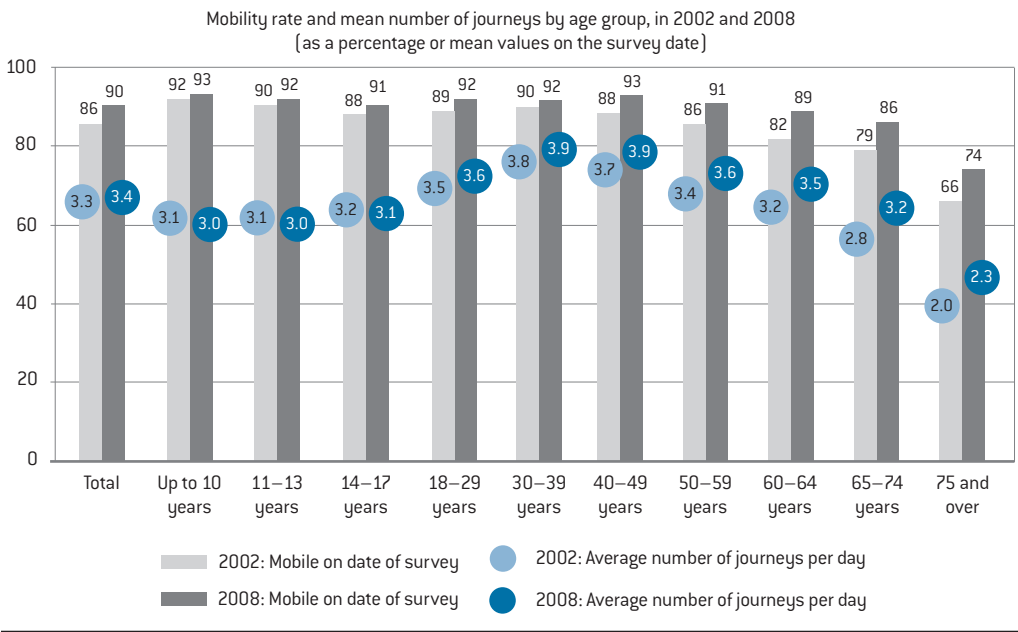


Figure 32: Mobility rate and mean number of journeys by age, in 2002 and 2008 (MiD 2008) (DLR and infas 2010, p. 171)

There was a slight increase in journeys for the latter reason among the over-74s, while leisure trips declined somewhat. Unlike younger age groups, older people rarely travelled for professional reasons, as can be expected. Among older people, there was no difference between the sexes in the breakdown of purposes for travel, in contrast to the younger age groups (see Figures 33 and 34 in the Appendix).

Means of transport

Which means of transport do older people use to reach their destinations? The MiD study distinguished between travel by public transport, motorised private transport as a driver or passenger, travel by bicycle and journeys made on foot. Mobility among 30- to 60-year-olds predominantly involved motorised private transport (DLR and infas 2010, p.

77). The use of cars declined from the age of 60, from 55% among 55- to 59-year-olds to 47% among 60- to 64-year-olds (see Figure 35). The end of travel for professional reasons and the onset of age-related health problems (such as reduced visual acuity) were often accompanied by people choosing not to travel by car. On the other hand, this trend was also a cohort effect, because the number of women drivers in the more advanced age groups was much lower (see Figure 37).

The proportion of over-65-year-olds who travelled as passengers in cars was 12%. The proportion of individuals who used a bicycle for travel fell from 10% (65-74) to 7% (over-74s). Conversely, the proportion of public transport users increased from 6% to 11%. The number of journeys taken on foot also increased: 32% of 65- to 74-year-olds and 38% of the

over-74s travelled on foot. The data did not enable any conclusions to be drawn regarding whether these changes were the result of age or of cohort effects, but it is probable that both effects influenced the data. It is therefore a matter of speculation whether motorised private transport will continue to decline to a comparable extent in future.

Motorised private transport

For many people, getting their driving licence is a defining event in their mobility history (DLR and infas 2010, p. 70). Being able to travel long distances and visiting distant regions in a comfortable way constitutes a major extension of individual, autonomous mobility. In this context, giving up one's driving licence in old age is a drastic decision.

While it was mainly men (and not women) in earlier cohorts who had a driving licence and their own

car⁵¹, the number of female licence holders has continued to rise in subsequent generations. Figure 36 in the Appendix shows the changes in the possession of driving licences by men and women between 2002 and 2008. The chart shows that the proportion of both older men and older women who held a driving licence in 2008 was much higher than in 2002.

Although there was a higher number of older car drivers among road users, this did not significantly worsen accident rates. As already shown in Chapter 04, car accidents were caused much less frequently by driving errors made by older people than is the case in other age groups. Figure 37 also shows how the proportion of male drivers differed from that of female drivers in the older age groups. The proportion of female car drivers was roughly equal to that of female passengers. Conversely, the proportion of older male car passengers remained consistently low.

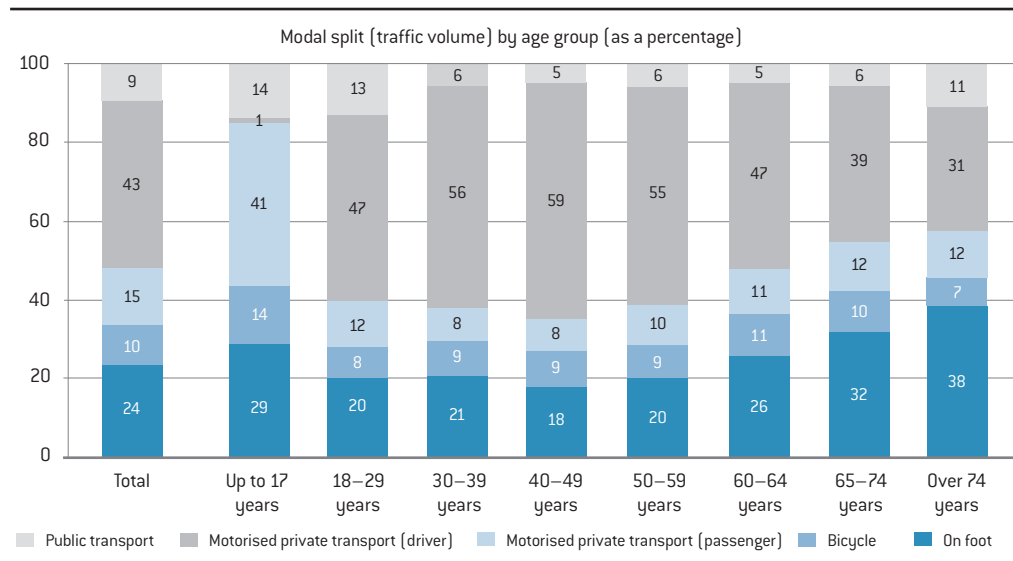


Figure 35: Traffic volume by means of transport, by age (Mid 2008) (DLR and infas 2010, p. 77)

⁵¹ In 2002, only 47% of women aged 75+ (i.e. those born in 1928 or earlier) held a driving licence (DLR and infas 2010, p. 70).

Local public transport

By far the largest proportion of older people travelled by car or on foot. At 6%, the proportion of 65- to 74-year-olds who used public transport was about as low as in the next-younger age group (40–64 years).

The proportion rose only from the age of 75 (to 11%), almost matching the figure for those aged under 30. The proportion of women using public transport among both the 65- to 74-year-olds and the over-74s was about twice as high as for men in the same age groups (see Figure 38).

Unfortunately, the study did not provide information about the effect that discounted tickets for the elderly or other regional offers for older people had on the use of buses and trains. It is also unclear what proportion of older people only started using public

transport in old age (for example, after surrendering their driving licences). It is possible that the increase in the use of public transport was not an effect of age, but rather a cohort effect that could be attributed to a lower rate of driving licence ownership.

Cycling and walking

More journeys were taken on foot with increasing age. Women aged over 74 in particular took almost half of their journeys on foot. It cannot be determined from the data available whether this trend was attributable to the decreasing availability of other means of transport, for example, having fewer opportunities to travel as a car passenger following their (male) partner's death or to travel by car after surrendering their driving licence.

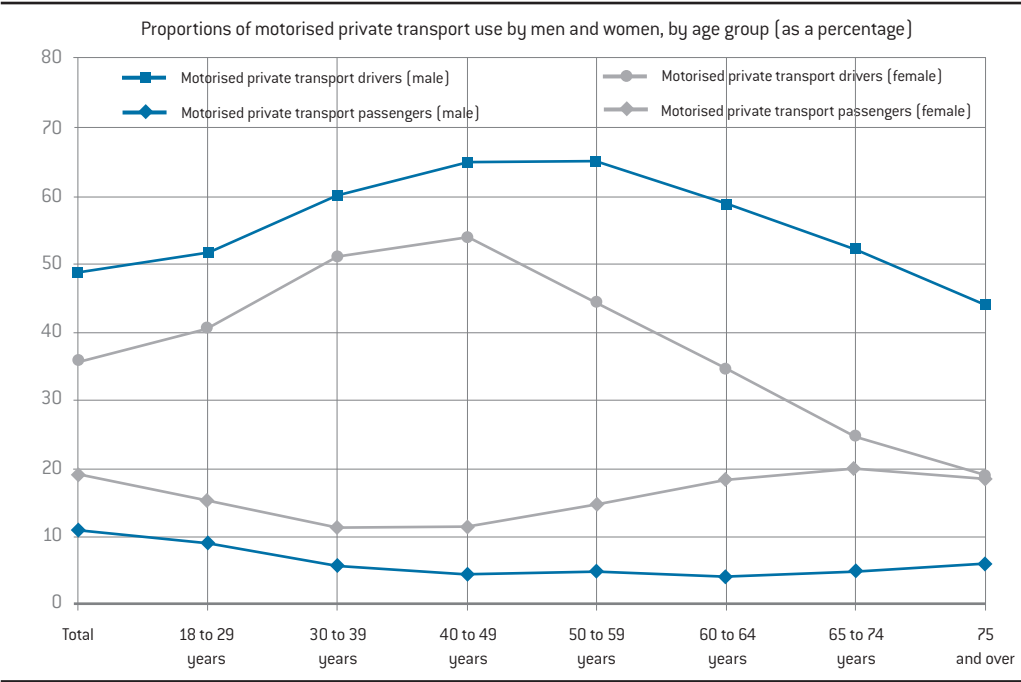
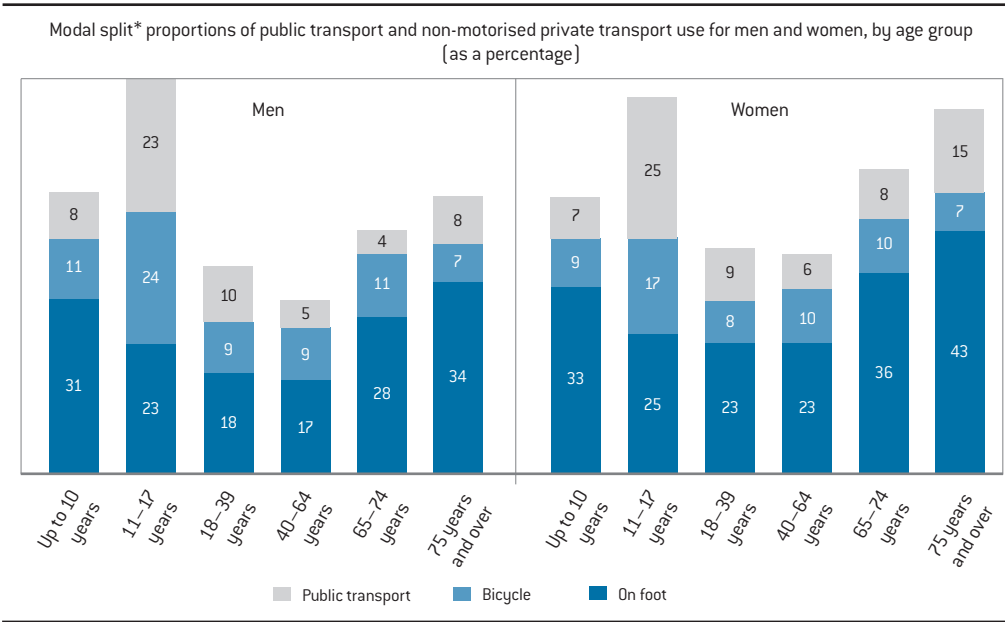


Figure 37: Proportions of motorised private transport use by gender and age in 2008 (MiD 2008) (DLR and infas 2010, p. 94)



* Modal split describes the distribution of traffic volumes among different means of transport.

Figure 38: Proportions of public transport and non-motorised private transport use by gender and age in 2008 [DLR and infas 2010, p. 104]

As expected, while the proportion of journeys taken on foot increased, the proportion of bicycle journeys declined with increasing age. Nevertheless, 7% of the over-74s still travelled by bicycle. Only a small number of older people used a cycle helmet for protection: 81% of 65- to 74-year-olds and 87% of over-74s stated that they never wore a cycle helmet (see Figure 39 in the Appendix).

» 06.6

Conclusion

How do older people structure their leisure time? How do they assess their quality of life, how do they obtain information and how mobile are they? This chapter presents and discusses these different aspects to provide as comprehensive a view as possible of the day-to-day life of people aged from 65 to 80. In summary, we saw from various studies that many older people actively structured their retirement and played an engaged role in society. People in this cohort were more mobile and had more egalitarian attitudes than older people in previous generations, at least in terms of their concepts of men's and women's roles. Cultural activities and further education (still) did not play an essential role in this age group.

It was clear that the way older people's day-to-day lives were structured and their assessment of their quality of life depended on their individual life situations and the resources available to them. Older people living in eastern Germany were less likely to actively structure their day-to-day lives. They were less frequently engaged in voluntary activities, were less often members of a club and spent more time watching television. At the same time, they rated their quality of life more negatively than older people in western Germany. These results indicated that there could be, at least in part, a lack of service structures and opportunities for an active life in old age in the former East German federal states. Analysis of the services available and also of social participation and satisfaction on the part of older people, broken down more finely by region, could enable clearer conclusions to be drawn here.

Besides their place of residence, whether the participants were male or female was a further and more striking factor influencing active life in old age. Women aged between 65 and 80 were less likely to be members of a club or engaged in voluntary activity. They also used the internet less frequently and often did not have a driving licence; however, they made up a greater proportion of churchgoers. These results are likely to change with the next generation, which is already experiencing a different understanding of roles which, to a certain extent, have already become part of their lives. However, there is a need to discuss access to health promotion services and day-to-day support for the group of very old women who are conservative, not very active and difficult to reach, and often live in poverty and solitude.

Older people have enjoyed greater mobility in recent years. The difference between the sexes in terms of their preferred choice of transport in old age was clear, as was the reduced independent mobility of older women in this context. Public transport and travel on foot gained in importance in older age, while journeys by motorised private transport decreased. In view of the growing number of older road users, therefore, greater efforts must be undertaken to make public roads and means of transport more inclusive and accessible. In addition, work must also be done to support and promote the establishment of local services for older people that are both close to older people's homes and in line with existing socio-environmental structures. At the time of writing, however, there were no scientifically supported criteria in this context regarding choice of location and distance from place of residence.

07

» Living situation

An individual's living situation and environment are factors that have a defining influence on their quality of life and health, especially in old age. Section 07.1 describes where this age group lives, broken down by urban and rural areas, federal states and eastern and western Germany. Section 07.2 presents home ownership figures, living costs and availability of living space for 65- to 80-year-olds, broken down by regional and other aspects. Section 07.3 deals with the supply of and demand for "low-barrier" and age-appropriate housing for older people. It also looks at the living environment and how this was rated by older people, as well as moving house and migration within Germany.

» 07.1 Regional distribution of the age group: where do older people live?

As part of its regional research, the Bundesinstitut für Bau-, Stadt- und Raumforschung (Federal Institute for Research on Building, Urban Affairs and Spatial Development [BBSR]) regularly reports on the regional distribution of Germany's older residents. A distinction is drawn between the age groups "65 to under 75" and "75 and over" (the BBSR statistics describe this latter group as "the very old") (INKAR 2011). Differentiation by region ranges from national down to district level.

In 2009, over-65-year-olds represented about a fifth of Germany's total population, at 20.7%. 65- to-

Geographical unit	Residents aged 65–74, proportion of total population (as a percentage)	Residents aged 75 and over, proportion of total population (as a percentage)
All of Germany	11.8	8.9
Eastern Germany	13.4	9.2
Western Germany	11.4	8.8
Saxony-Anhalt	14.2	10.0
Saxony	14.1	10.6
Brandenburg	13.7	8.8
Thuringia	13.5	9.5
Mecklenburg-Western Pomerania	13.2	8.9
Schleswig-Holstein	12.8	8.8
Saarland	12.3	9.9
Bremen	12.1	9.4
Lower Saxony	11.8	9.0
Berlin	11.8	7.3
North Rhine-Westphalia	11.4	9.0
Rhineland-Palatinate	11.3	9.3
Hesse	11.3	8.8
Bavaria	11.0	8.6
Baden-Württemberg	10.9	8.5
Hamburg	10.8	8.1

Table 66: Proportion of residents aged 65–74 or 75+, by region, as a percentage of the total population of each region in 2009 (INKAR 2011, own representation)

74-year-olds accounted for 11.8% of the population as a whole, while 8.9% of Germans were aged over 74. Compared to the total population of each federal state, the highest proportions of residents aged between 65 and 74 were found in Saxony (14.1%) and Saxony-Anhalt (14.2%), both of which are federal states in eastern Germany. The lowest proportions of older people were found in Hamburg (10.8%) and

Baden-Württemberg (10.9%). Saxony and Saxony-Anhalt also accounted for the highest proportion of people aged over 74, at 10.6% and 10.0%, respectively. The smallest proportion of older people aged over 74 in relative terms was in Berlin (7.3%) and Hamburg (8.1%).⁵²

The BBSR also recorded the proportion of women in the age groups under consideration. Overall, there

⁵² These figures must be considered in the context of internal migration for work and educational purposes. All eastern German federal states had, to some extent, a high negative balance in these areas, while Hamburg and Berlin enjoyed inward migration rates in double figures. This implies that the large proportion of older people in the eastern German states was principally the result of younger people moving away.

were more women than men in the older age groups. Nationwide, 57.4% of the over-65s were female and 42.6% male. This proportion shifted further in favour of women as the ages increased. The 74+ age group in Germany comprised 63.4% women and only 36.6% men. The breakdown by federal state was as follows: the largest proportion of women in the 65–74 age group was in Mecklenburg-Western Pomerania [54.2%], while the figures in Schleswig-Holstein were almost in balance, with 51.9% women. Conversely, the proportion of women among the over-74s was highest in Saxony-Anhalt at 66.0% and lowest in Hesse, at 62.1% of that age group.

The BBSR research covered the regional distribution of residents broken down by age and type of settlement area. A distinction was made here between densely populated metropolitan areas (e.g. the Ruhr district), metropolitan areas with a prominent centre (e.g. the Greater Berlin area) and urbanised and rural areas of differing density (cf. Figure 44 in the Appendix). The “urbanised areas of higher density in the east” (e.g. the Chemnitz region) had the relatively highest proportion of older people aged 65–74 and 75+, at 14.0% and 10.2% respectively. Conversely, the “urbanised areas of relatively high density in the west” and “metropolitan areas in the east”

had the lowest relative counts of individuals in these age groups, at 11.1% [65–74] and 8.3% [75+], respectively (examples include the Kiel, Brunswick, Münster and Freiburg areas).

Based on the BBSR forecast, the proportion of over-64s in the population of Germany as a whole was expected to grow substantially by 2025. Nationwide growth in this age group was expected to take it from 20.7% in 2009 to 24.5% in 2025. According to these calculations, the over-64s would account for 29.3% of the population in eastern Germany and 23.4% of the population in western Germany by 2025. It was assumed that there would be significant regional variation in the growth in this age group. Strong numeric growth was forecast for the 65+ age group as a proportion of the entire population in the eastern German states – 8.9% in Thuringia, for instance. In contrast, the proportion of older people in Hamburg was expected to grow by only 0.5%, from 19.0% of the entire population at the time of the research, to 19.5%. Based on this forecast, Hamburg would maintain a relatively young population, while in the eastern federal states, older people will make up approximately a third of the population.

Geographical unit	Residents aged 65–74, proportion of total regional population (as a percentage)	Residents aged 74+, proportion of total regional population (as a percentage)
Urbanised areas, eastern Germany	14.0	10.2
Rural areas, eastern Germany	13.8	9.7
Metropolitan areas, eastern Germany	12.7	8.3
Metropolitan areas, western Germany	11.5	8.7
Rural areas, western Germany	11.5	9.2
Urbanised areas, western Germany	11.1	8.9

Table 67: Proportion of residents aged 65–74 or 75+, by type of settlement area, as a percentage of the total population of each region in 2009 [INKAR 2011, own representation]

Geographical unit	Proportion of residents aged 65 and over in 2009 (as a percentage)	Forecast proportion of residents aged 65 and over in 2025 (as a percentage)
All of Germany	20.7	24.5
Eastern Germany	22.6	29.3
Western Germany	20.2	23.4
Saxony-Anhalt	24.2	32.3
Saxony	22.1	32.2
Brandenburg	23.0	31.9
Thuringia	24.6	31.1
Mecklenburg-Western Pomerania	22.5	30.0
Schleswig-Holstein	22.2	27.0
Saarland	21.6	24.9
Bremen	20.8	24.6
Lower Saxony	20.7	24.3
Berlin	20.4	23.6
North Rhine-Westphalia	19.6	23.1
Rhineland-Palatinate	21.5	22.9
Hesse	20.0	22.9
Bavaria	19.5	22.5
Baden-Württemberg	19.1	22.4
Hamburg	19.0	19.5

Table 68: Proportion of population aged over 64, by German federal state, and forecast for 2025 (INKAR 2011, own representation)

07.2 Ownership, living costs and availability of living space

How many older people own the house in which they live? In 2009, the German Statistisches Bundesamt reported an ownership rate among older households (head of the household aged over 65) of 52.8% in western Germany and 29.7% in eastern Germany (Statistisches Bundesamt et al. 2011a, p. 207). According to the Bundesministerium für

Verkehr, Bau und Stadtentwicklung (Federal Ministry of Transport, Building and Urban Development [BMVBS]), the proportion of owner-occupiers was much higher throughout Germany in the 65–80 age group than for those aged over 80, only 36.4% of whom still lived in their own house or apartment. Conversely, the proportion of older households renting from a housing company rose from 22.9% (65–79 years) to 32.0% (80+) (BMVBS 2011, pp. 28–29). The study did not show whether the changes could be explained by individuals moving house in old age or through “cohort-specific residential histories”.

Based on the 2006 SOEP, Beetz et al. drew up a distribution of ownership rates broken down by region (Beetz et al. 2009, p. 47). This made it clear that own-

ership rates among older people differed not just by age but also, and quite substantially, by federal state. Of households with heads aged from 65 to 74, 68.4% lived in their own dwelling in southern Germany (Bavaria, Baden-Württemberg), compared to only 20.9% in the city states (Hamburg, Berlin and Bremen), where 75.7% of households lived in rented accommodation. In the eastern federal states, the proportion of households that were owner-occupied was somewhere between these values: 47.2% of households in Mecklenburg-Western Pomerania, Brandenburg and Saxony-Anhalt and 40.9% of households in Saxony and Thuringia were owner-occupied.⁵³

66.1% of households in Schleswig-Holstein and Lower Saxony whose heads were aged over 75 were owner-occupied. Conversely, in the city states, 84.2% of these households were rented and 15.8% owner-occupied. In the eastern German states, too, households with heads aged over 75 were less likely to live in their own homes, at 24.5% (in the southern states) and 32.9% (north-eastern states).

How large are the dwellings in which older people live? According to the 2006 SOEP (presented in BMVBS 2011, p. 31), 3.3% of elderly households (aged 60+) lived in an apartment less than 40 m² in size. About a quarter of households lived in an apartment of between 60 and 79 m², 17.3% in an apartment of between 80 and 99 m², and 36% lived in an area of more than 100 m². Older people living in their own dwelling tended to have large apartments: over 60% of owner-occupiers lived in an area of over 100 m². The average size of the living area available to each member of the household differed between eastern and western Germany. In 2009, over-65s in western Germany had 69 m² each, and those in eastern Germany 50 m² (Statistisches Bundesamt et al. 290, p. 210).

How great is the burden on older people due to residential costs? According to the Statistisches Bundesamt, the rental cost burden amounted to 32.2% of net household income for western German households and 25.1% of net household income for eastern German households (ibid., p. 212). Here, too, Beetz et al. drew on data from the SOEP 2006 to provide more detailed differentiation (Beetz et al. 2009, p. 48). Whereas the average residential cost burden for rental apartments as a nationwide average in 2006 was 27.4% of net household income for the 65–74 age group and 25.7% for the over-75s, for home owners this figure was only 8.5% (65–74) or 5.5% (75+) of net household income. The difference in the burdens on net household income due to residential costs was even more striking when compared on a regional basis. For example, residential costs for rental apartments in the northern federal states (Schleswig-Holstein, Lower Saxony) represented a burden of 30.4% of net household income (aged 65–74) and 33.8% in the city states (75+). In comparison, owner-occupied households in Bavaria and Baden-Württemberg spent only 6.7% (65–74) and 4.6% (75+) of their income on living costs.

These differences can be explained by the fact that the burden of living costs for owner-occupied dwellings decreases substantially as the owners grow older: in general, loans have been paid off and there are often no new investments being made. Meanwhile, the burden of living costs for those in rental apartments does not change substantially, or changes negatively. This is because rental costs are steadily adjusted in accordance with market movements (and therefore generally rise), while household income tends to decline when individuals reach the age of retirement.

53 The balance of the households (taking the total to 100%) lived in sub-let accommodation.

Grouping of German federal states	Rental apartment			Owner-occupied dwelling		
	Total	65–74	75+	Total	65–74	75+
City states (Berlin, Hamburg, Bremen)	27.7	27.5	33.8	18.7	10.6	5.6
North (Schleswig-Holstein, Lower Saxony)	27.7	30.4	29.6	14.3	7.9	5.1
North Rhine-Westphalia	27.0	26.6	26.1	16.1	12.6	7.6
Central (Hesse, Rhineland-Palatinate, Saarland)	27.3	28.0	21.1	13.2	7.1	4.9
South (Baden-Württemberg, Bavaria)	27.1	31.1	27.1	13.0	6.7	4.6
North-East (Mecklenburg-Western Pomerania, Brandenburg, Saxony-Anhalt)	27.5	25.6	23.0	14.6	9.4	6.7
South-East (Thuringia, Saxony)	24.3	20.4	19.4	14.0	8.3	4.7
<i>Total</i>	27.0	27.4	25.7	14.2	8.5	5.5

Table 69: Average residential cost burden as a percentage of net household income – by form of ownership, region and age of head of household in 2006 (SOEP 2006, based on Beetz et al. 2009, p. 48, own representation)

07.3 Forms of housing in old age and age-appropriate housing

The vast majority of older people would like to live out their later years in their own, familiar home. According to 2008 figures from the Bundesverband Freier Immobilien- und Wohnungsunternehmen e.V. (Federal Association of Independent Real Estate and Housing Companies [BFW]), to which the BMVBS study “Wohnen im Alter” (Housing for the Elderly) refers, the reality matched that desire at the time. About 93% of people aged 65 and over lived in a “normal dwelling”, and approximately 7% lived in special types of dwelling, such as assisted living facilities, retirement communities or nursing homes (BFW 2008, as per BMVBS 2011, p. 27). The majority of people in need of care also remained in their own home: according to the nursing care statistics from

2009, 69% of all people in need of care (i.e. 1.62 million people) were looked after in their own homes (Statistisches Bundesamt 2011r). Age-appropriate housing is therefore especially important, both to encourage quality of life for people in need of care and to ease the load on those providing care.

Does the available housing meet the needs of older people? How many older people already live in age-appropriate housing? This is a difficult question to answer, because there is no legal or generally accepted definition of the expression that describes or establishes the requirements of age-appropriate housing with binding force (BMVBS 2011, p. 25). The BMVBS study *Wohnen im Alter* therefore takes the following definition as its basis: “An age-appropriate dwelling comprises not just a largely low-barrier or barrier-free dwelling, but also a low-barrier or barrier-free environment, the local availability of important infrastructure facilities and social and care support services” (ibid., p. 25). This definition, which goes beyond the dwelling itself, is based on the acknowledgement that independent living in old age depends not just on a minimum of barriers in the dwelling

itself, but also on the quality of the living environment.⁵⁴

The minimum requirements for age-appropriate living in this context are described as follows: 1) the accessibility of the building or apartment (no more than three steps or technical assistance provided, e.g. a lift, stair lift or ramp); 2) no steps inside the dwelling, or technical assistance provided to surmount them; 3) "sufficient" door widths and space to move in the bathroom/toilet area; and 4) showers flush with the floor (*ibid.*, p. 25). The study thus largely follows the DIN standards on barrier-free construction (DIN 18040). The underlying principle is that: "users must be given the opportunity to be largely non-dependent on third-party assistance."

Although it may be assumed that special housing forms are largely low-barrier, there is still the question of the extent to which the "normal residential market" makes available age-appropriate or low-barrier housing. The few available sources suggest that the number of dwellings in Germany that meet these requirements is small. According to information from the Bundesverband Freier Immobilien- und Wohnungsunternehmen e.V. (Federal Association of Independent Real Estate and Housing Companies [BFW]), the market segment for low-barrier housing or dwellings "adapted to the needs of senior citizens" in 2007 accounted for about 1% of the German housing market.⁵⁵ It was thus substantially below the market share represented by this segment in other European countries, especially the Netherlands and

the United Kingdom (BFW 2007, p. 8).⁵⁶ According to an assessment by the BFW, demographic change would result in a need for approximately 800,000 more age-appropriate dwellings in Germany by 2020 (*ibid.*, p. 15). In its 2009 study, *Wohnen im Alter*, the expert committee of the Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung e.V. (German Association for Housing, Urban and Spatial Development) identified the proportion of elderly households⁵⁷ living in age-appropriate housing at 5%. It quantified the investment required to adapt the residential portfolio to the growing need for age-appropriate housing nationwide for subsequent years at €39 billion (DV 2009, p. 13).

The representative survey in the BMVBS study *Wohnen im Alter* asked the participating elderly households about the extent to which their dwellings could be described as "low-barrier" (BMVBS 2011, pp. 35 f.). About a third of the participants stated they had three or more steps to their front door (31.7%) or apartment (35.6%), and 27.4% said they had steps inside their dwellings. Only a small proportion of the participants were able to overcome their steps with technical aids such as a lift, ramps or a stair lift inside (3.6%) or outside (9.1%) their dwellings. As expected, owner-occupiers (who often lived in a private home) were more likely to report having steps or stairs inside their dwelling, while in rental properties the steps and stairs were mainly outside the apartment but inside the building.

Given these figures, the study asked how willing

54 The study does not provide indicators for the evaluation of living environments as "age-appropriate". At the time of writing, the 1998 version of DIN 18024-1, "Barrier-free Built Environment – Part 1: Streets, Squares, Paths, Public Transport, Recreation Areas And Playgrounds" continued to apply. A review of this DIN standard began in 2010 under the proposed title "DIN 18070 Barrier-free construction – public transport and open space".

55 However, the BFW figures are based mainly on surveys of BFW members and are therefore only of limited informational value.

56 It must be noted that this market segment relates mainly to dwellings that are expressly offered on the market as being "barrier-free", "age-appropriate" or "adapted to the needs of senior citizens".

57 Households whose main income earner is aged 65+.

the elderly households would be to modify their own dwelling to make it age-appropriate (BMVBS 2011, pp. 57 f.). Only 16.9% of elderly householders aged between 65 and 79 said they would be prepared to have their dwelling converted in this way. A fifth (20.0%) of owner-occupiers were prepared for their dwellings to be converted, compared to only 8.7% of rental households renting from a private owner and 10.0% of rental households renting from a housing company. The study did not state whether the reasons for this high level of reluctance were associated with the costs of conversion and the inconvenience associated with the construction work, or if the participants simply saw no reason for having the conversion carried out.

07.4 Living environment

With increasing age, the spheres of activity of older people diminish, their day-to-day journeys become shorter and they visit fewer places (see also Chapter 06.5, Figure 32). Independent living in their own dwelling is thus only an option for older people – especially if they suffer from restricted mobility or health problems – if the living environment offers enough in the way of infrastructure, if there is access to a local supply of the goods needed for daily living and to medical services, and there are mobility support services available. A person's living environment provides the spacial place of reference where a sense of neighbourliness is experienced, neighbourly assistance is provided and social contacts are forged. It is also where the most direct form of social participation takes place.

How do older people rate their living environment? The BMVBS study *Wohnen im Alter* asked elderly householders about the quality of their living environment, with particular reference to the accessibility of various services (BMVBS 2011, pp. 51–52). About a quarter of the participants (24.9%) stated that there were no readily accessible grocery shops in the neighbourhood. 16% of the participants stated that they had no doctors or pharmacies close by.

In this context, local public transport plays a particularly important role. However, one in five elderly households (19.5%) reported that the nearest bus or railway station was “not easily accessible”.

The study went on to correlate the responses against the participants' housing situations. Here it could be seen that comparably more owner-occupiers reported that public transport stops were not easily accessible to them (25.6%), and nor were doctors and pharmacies (19.8%). Those in rented accommodation were less likely to report unsatisfactory access to public transport (13.8%) or a lack of doctors and pharmacies in the neighbourhood (12.6%). These figures suggest that primarily rural areas and areas where there were detached houses tended to be insufficiently catered for or connected to the public transport networks. The questions in the 2008 German Ageing Survey on the same subject also showed that the eastern federal states were affected much more by inadequate infrastructure than those in the western part of the country (Mahne et al. 2010, pp. 146 f.). However, comparing the results over time – drawing on the responses from 1996, 2002 and 2008 – showed that services were improving in almost all segments, for both eastern and western Germany.

In the 2008 German Ageing Survey, 18.1% of 55- to 69-year-olds and 18.7% of 70- to 85-year-olds in the former West German federal states and 30.3% and 33.8% respectively in the former East German federal states answered “completely disagree” or “tend to

disagree” in response to this statement regarding their living environment: There are sufficient shopping opportunities available (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 6-1). A third of participants in the former East German federal states – and thus substantially more than in the former West German federal states in relative terms – therefore considered the shopping opportunities in their living environment to be unsatisfactory.

Older people in eastern and western Germany rated their proximity to local public transport in similar terms. 22.5% (55–69 years) and 21.9% (70–85 years) of participants in the former West German states and 25.1% and 24.6% of participants in these age groups in the former East German federal states selected “disagree” or “tend to disagree” in response to the statement: My residential area has good connections to local public transport (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 6-3). It may be concluded from this that about a fifth to a quarter of individuals in these age groups had to rely on their own vehicle, bicycle, a taxi or being driven by someone else to maintain their mobility. These figures are of particular interest with regard to the mobility of older women, who were much less likely than men to have their own driving licence and therefore needed to rely more on being driven by someone else (see also Chapter 06.5, Figure 36).

The German Ageing Survey also sought information on access to medical care in the participants’ residential environment. Once again, this revealed a substantial difference between western and eastern Germany. While 13.4% of western Germans aged 55–69 and 16.2% of those aged 70–85 “completely” disagreed or “tended to” disagree that they had adequate access to doctors or pharmacies in their neighbourhoods, the comparable figures in eastern Germany were 33.6% and 35.7% of participants in these age groups (Motel-Klingebiel, Wurm and Tesch-

Römer 2010, Appendix of Tables A 6-4). One in three older people in eastern Germany, therefore, reported having inadequate access to medical services in their residential environment.

Another question in the German Ageing Survey to assess living environment related to the participants’ subjective feeling of safety after dark. This aspect is of major significance to quality of life and living environment in old age and can be a key influencing factor in structuring time and activity patterns. In other words, people who feel very unsafe after dark tend to stay home once night falls. This sense of being unsafe increases with age, which may be due to age-related impairment in vision, hearing and mobility or the individual’s confidence in their own mobility. On average, 23.3% of participants aged 55–69 and 41.6% of those aged 70–85 felt unsafe after dark (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 6-7).

Here, too, there were very clear regional differences that suggested different patterns of use, infrastructure and levels of maintenance of public areas in eastern and western Germany. 21.1% (55–69) and 38.5% (70–85) of western Germans and 31.5% (55–69) and 54.4% (70–85) of eastern Germans stated that they did not feel safe after dark. Those most strongly affected were eastern German women aged between 70 and 85, two-thirds of whom (65.7%) felt unsafe after dark.

Lastly, the German Ageing Survey asked about noise levels in the participants’ living environments. The statement “My residential area is negatively affected by noise” met with agreement from 19.4% and 21.7% of participants in western Germany and 21.9% and 19.2% in the eastern German states (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 6-9).

These figures show that, as well as being affected by noise levels, older people in eastern Germany

faced much less favourable conditions in their living environment compared to those in western Germany, in terms of services, public facilities and their subjective perception of safety in their living environment. There is no data on the relationship between these negative factors in people's living environments and individual health circumstances. It must be assumed, however, that noise, a reduced sense of safety and inadequate infrastructure have a relevant negative effect on subjective health and well-being.

07.5 Migration and willingness to move house

Growing old in one's own, familiar environment is of paramount importance to most older people. It is often preferred even when the familiar environment has begun to make life more difficult, rather than making it easier. It is correspondingly rare, therefore, for individuals in the age group under consideration to move house.

In the *Wohnen im Alter* study, participating elderly households were asked about how willing they would be to move house (BMVBS 2011, pp. 56 f.). A quarter (26.1%) of participating households in which the head of the household was aged over 65 were prepared to move house; 70.1% were not prepared to move, and 3.8% made no clear statement in this regard. Of those aged 65 to 79, 29.6% were prepared to move, but this percentage was much lower among the over-80s, at 14.7%. It is probable that, if needed or desired, any relocation will have already taken place by the time the individuals reached old age, or

was otherwise perceived as being no longer necessary or too much effort.

Broken down by ownership status, about a third of those who rent would be prepared to move house, compared to only about a fifth of older owner-occupiers. These figures can be explained by the different burden represented by living costs on households living in rented accommodation or in their own properties (cf. Table 69, p. 113). In addition, leaving one's own home usually involves significant emotional upheaval; there is also a greater cost and effort associated with moving (i.e. having to sell or re-let). Considering the barriers described above, particularly those relating to owner-occupied properties, the results showed a need for action, either to make greater efforts to promote the reduction of barriers in owner-occupied properties, or to make relocating easier. It must be noted in this regard that, as already discussed (BMVBS 2011, p. 57), 76.6% (about three-quarters) of owner-occupiers were not prepared to have their apartment or house converted to make it more age-appropriate.

Where do older people move to, if they move? As part of its regional research, the BBSR regularly reports on aspects such as net internal migration within Germany broken down by region and age. "Internal migration" here refers to the balance of movements to and from the various regions, which it looks at on a number of different scales. In 2009, Schleswig-Holstein and Brandenburg, in particular, recorded an inflow of "older migrant retirees" aged over 65, while Hamburg and Bremen experienced an outflow of people in the same age group. Breaking the figures down by planning regions ("Raumordnungsregionen" – local regions below the federal state level defined by the Federal Office for Building and Regional Planning) shows that the regions close to the metropolises of Berlin and

Regions		Doctors
Planning regions (“Raumordnungsregionen”) with the highest density of doctors	Bremen	242
	Berlin	240
	Munich	231
Density of doctors in areas of migration	Havelland-Fläming	142
	Oldenburg	159
	Schleswig-Holstein East	211
Planning regions with the lowest density of doctors		
	Altmark	126
	Uckermark-Barnim	125
	Outlying areas south of Hamburg	123

Table 71: Number of doctors per 100,000 residents in 2009 (INKAR 2011, own representation)

Hamburg experienced an inflow⁵⁸ (see Table 70 in the Appendix).

It is interesting that the preferred regions for relocations in old age do not have a particularly high availability of medical services or places in nursing homes for people in need of care. The BBSR also calculated the number of doctors and places in nursing homes based on the overall population in the various regions. The results showed that the destination regions have very different densities of doctors. Havelland-Fläming, the preferred destination for relocation, had a substantially lower doctor density than the city states. As expected, the latter offered the best access to doctors, while the outlying areas around Hamburg and the rural regions of Brandenburg had a much lower doctor density.

There was also a substantial difference between federal states in terms of places in nursing homes. While Schleswig-Holstein East had 173 places in nursing homes available per 10,000 people in 2009, the figure for Munich was only 68. A remarkable

aspect is that, unlike the situation for medical care, there was no systematic difference in the availability of places in nursing homes between eastern and western Germany, nor was there any observable difference between city states and rural areas. The overall picture in the “migration regions” was very uneven in this regard. As a destination for migration, Schleswig-Holstein East had the highest proportion of places in nursing homes in Germany. Conversely, Oldenburg and Havelland-Fläming, which were also migration destinations, had a much lower density of nursing homes.

58 Compared to “labour migrants”, with regional movements in both directions in the two-digit percentage range, the figures for older people were much lower on the whole (cf. INKAR 2011).

Regions		Places in nursing homes
Planning regions ("Raumordnungsregionen") with the highest density of nursing homes	Schleswig-Holstein East	173
	Hildesheim	160
	Göttingen	157
Density of nursing homes in areas of migration	Havelland-Fläming	92
	Oldenburg	101
	Schleswig-Holstein East	173
Planning regions with the lowest density of nursing homes	Rhine-Main	76
	Neckar-Alb	74
	Munich	68

Table 72: Number of nursing home places per 100,000 residents in 2009 (INKAR 2011, own representation)

07.6 Conclusion

This chapter describes how and where older people in Germany lived at the time of the various studies discussed. As people grow older, the focus of their lives is increasingly directed towards their own dwelling and suburb. Reduced mobility often limits their range of activity to their immediate living environment. This area must enable them to meet their day-to-day needs and maintain their social contacts. The vast majority of older people maintain their independent and familiar day-to-day (living) situation in their home environment for as long as they can. Living conditions, therefore, have a major influence on the ability to maintain a healthy and independent life in old age. Important factors here include environmental conditions that are conducive or detrimental to health, and structures for the provision of services or to facilitate participation.

This chapter shows that there were clear regional differences in the distribution of older people. There was a greater proportion of older and very old individuals in the eastern federal states, whereas the population in the city states, in particular, was younger on average. The population of older people was expected to grow in all federal states in the coming years, although this growth tended to be less in the city states than in the non-city states, especially those in the eastern part of the country. This was expected to exacerbate the demographic difference between the individual federal states.

Most older people in the non-city states in western Germany lived in their own apartment or house, whereas older people in the city states lived for the most part in a rented apartment. Only relatively few older people lived in any special form of housing or facility for senior citizens. Most apartments were not low-barrier or barrier-free. Even so, most older people were not prepared to move or to have alterations made to their living space. There is a definite need for both action and education in this regard, to minimise potential risks to health, such as falls.

Living conditions, living environments and infrastructure were rated more poorly by older people in the eastern federal states than in western states: there were fewer services available and older women in particular felt less safe after dark. Older eastern Germans lived in smaller apartments and were less likely to own their own home, but rental costs were less of a burden for them than for their western German counterparts.

The insufficient provision of age-appropriate living space for older people documented here, as well as the regional differences in infrastructure and living environment, indicate a clear need for future action.

» Conclusion

This report enables readers to gain an overview of the large and heterogeneous age group of 65- to 80-year-olds. The vast majority of older people surveyed in various studies enjoyed social and material security and relatively long-term good health. However, it was clear that a proportion of older people had to cope with growing old in unsafe, unhealthy and sometimes lonely situations. These vulnerable and socially disadvantaged groups among 65- to 80-year-olds are of particular interest in terms of health promotion.

The age group had a female majority and, when compared to succeeding generations, it was less multi-ethnic. While older people with a migrant background comprised almost a tenth of this age group, most of these individuals were (late) repatriates, who identified themselves as German.

Most people in this age group were retired and lived from pension plans, state pensions, assets and savings. However, a not inconsiderable proportion of

elderly people suffered from poverty or was deemed to be at risk of poverty, with risk factors being a low level of education, discontinuous employment history and a migrant background. Older people in eastern Germany largely had adequate pensions due to their long employment histories. However, unlike older people in western Germany, they were unable to accumulate assets to help them deal with difficult material circumstances. People aged 65 to 80 mostly enjoyed good social integration, and family played a central role in their lives. Most of them were married and had children and often grandchildren, with whom they maintained good, regular contact. However, this phase of life is also a time of widowhood: a large proportion of people in this age group had experienced the death of their male or, less frequently, female partner. Extrafamilial networks were less strong in this age group than in younger generations, so the death of a partner may be accompanied by the risk of solitude and retreat.

Health and disease were important topics for people aged from 65 to under 80. Although the subjective health of individuals in this age group was evaluated as being worse than in the younger cohorts, half of those surveyed considered their health to be good or very good. Compared to previous generations, people in this generation of 65- to 80-year-olds were healthier, had less disease and a higher future life expectancy. However, multi-morbidity, chronic diseases and physical limitations in daily activities were increasing. Diseases of the cardiovascular and musculoskeletal systems were the most common conditions in this age group. People with lower socioeconomic status were more likely to be affected by various diseases, such as cardiovascular disease, diabetes and stroke. Mental illnesses (which were not always recognised and treated) affected almost a quarter of people in this age group.

Compared to earlier generations of this age group, health awareness had increased. For example, physical exercise had increased over the previous decade in people up to the age of 75. There was good participation in screening tests by people aged from 65 to under 70, but this declined somewhat in old age.

The use of addictive substances such as alcohol and tobacco decreased with age, but was still high among some people. Up-to-date information on the use of addictive substances (such as alcohol, illegal drugs and medications) was not available for the over-65 age group at the time of writing. However, there was indication of an increase in the use of addictive substances among older people, although there is a definite lack of research in this area. Similarly, there was no up-to-date and representative data on the health status and health behaviour of older people with a migrant background.

The need for care and assistance was another important issue for people aged between 65 and 80, both in terms of giving and receiving care. The vast majority of people in need of care lived in private

households and were cared for by family members, often their partner. The older the person in need of care, the more frequently outpatient care services were also involved in their care. About two-thirds of carers felt burdened, representing a risk to their own health.

On entering retirement, older people have more free time, which they can structure to suit themselves. This represents both a freedom and a challenge, and how people manage this situation depends on their economic and social resources, mobility and health. While television consumption was very high in this age group, many older people actively structured their retirement, participating as members of clubs and playing an engaged role in society. This age group was more mobile than in earlier generations and, at least in terms of their concepts of men's and women's roles, had more egalitarian attitudes than older people in previous generations.

However, in contrast to younger cohorts, gender played a significant role in how people shaped their daily lives: significantly fewer women than men had a driving license or a car, were engaged in volunteering or used a computer or the internet. Although women in subsequent cohorts were visibly catching up, civic engagement and independent motor vehicle and internet use were low in the group of 65- to 80-year-olds, and especially among those aged over 74.

The vast majority of older people maintained their independent day-to-day living situation in a familiar environment for as long as possible – often in their own home. However, most apartments were not low-barrier or barrier-free. In spite of this, there was little willingness among older people to move or have alterations made to their living space. Both living conditions and the living environment have a major influence on the ability to maintain a healthy and independent life in old age. Important factors here include environmental conditions that are conducive

or detrimental to health, and structures for the provision of services or to facilitate participation. There are regional differences in these factors, especially between eastern and western Germany. The regional distribution of older people also varied greatly throughout Germany. There was a greater proportion of older and very old individuals in the eastern federal states, whereas the population in the city states, in particular, was younger on average. The population of older people was expected to grow in all federal states in the coming years, although this growth expectation was lower in the city states than in the (eastern) non-city states. This was expected to exacerbate the demographic difference between the individual federal states.

In the preceding chapters, this report has provided a broad overview of the life situations of people in Germany aged between 65 and 80. The range of personal and societal resources and the issues faced by this age group have been discussed. It has become clear that the data available on some aspects is still unsatisfactory and it is thus not possible to draw scientifically sound conclusions on all of the topics covered. However, the overall result is a diverse and multi-faceted picture of older people that can inform a wide variety of different approaches to health promotion and preventive health care.

09

» Appendix

» 09.1 Tables

Year of birth	Aged from ... to under ...	Total	Men	Women
1944	65–66	901.5	437.5	464.0
1943	66–67	912.6	442.6	470.0
1942	67–68	884.6	426.6	458.0
1941	68–69	1065.7	509.7	556.1
1940	69–70	1116.1	529.0	587.1
1939	70–71	1095.8	510.4	575.4
1938	71–72	1003.8	468.4	535.4
1937	72–73	925.3	427.4	498.0
1936	73–74	886.4	403.5	482.9
1935	74–75	838.6	377.5	461.1
1934	75–76	763.3	338.7	424.6
1933	76–77	599.9	261.8	338.1
1932	77–78	581.0	248.6	332.5
1931	78–79	574.0	240.4	333.6
1930	79–80	582.5	238.1	344.4

» Table 2: Distribution of the age group of 65- to 80-year-olds by cohort as of 31 December 2009, in thousands (Statistisches Bundesamt 2011c, p. 44)

	65–74 years	75–84 years
(Late) repatriates (German) total; of these, from ...	340,000	233,000
Poland	55,000	34,000
Romania	36,000	25,000
Kazakhstan	30,000	21,000
Russian Federation	41,000	30,000
Country of origin not recorded	178,000	123,000

Table 4: Older (late) repatriates, for selected major countries of origin (in absolute figures) (Statistisches Bundesamt 2011a, pp. 68–69, own compilation, differences due to rounding)

Age group	Gender	In paid employment	Not in paid employment
60–69	Men	13.2	86.8
60–69	Women	9.3	90.7
60–69	<i>Total</i>	11.4	88.6
70–85	Men	6.4	93.6
70–85	Women	4.2	95.8
70–85	<i>Total</i>	5.2	94.8

Table 10: Employment of pensioners, 2008 (as a percentage) (DEAS 2008: Erwerbstätigkeit von Rentnern)

Level of work-related stress/burden	Quite	Very
Physically burdened	17.6	7.2
Burdened by environmental conditions	6.9	2.7
Burdened by stress	25.5	14.2
Burdened by new requirements	14.0	9.3

Table 11: Work-related burden and stress, 60- to 85-year-old people in employment (as a percentage) (DEAS 2008: Arbeitsbelastungen im Beruf)

			Amount of debt in form of loans, in euros		
Region	Age	Gender	0	< 5,000	> 5,000
Germany	55–69	Men	80.9	7.5	11.7
Germany	55–69	Women	89.3	5.2	5.5
Germany	55–69	Total	85.1	6.3	8.5
Germany	70–85	Men	92.8	3.4	3.9
Germany	70–85	Women	95.2	2.3	2.5
Germany	70–85	Total	94.2	2.7	3.1
Western	55–69	Men	81.4	6.3	12.3
Western	55–69	Women	89.7	5.4	4.9
Western	70–85	Men	92.8	3.0	4.2
Western	70–85	Women	95.6	2.1	2.3
Eastern	55–69	Men	78.4	12.3	9.3
Eastern	55–69	Women	87.5	4.6	7.9
Eastern	70–85	Men	92.6	4.8	2.6
Eastern	70–85	Women	93.5	3.3	3.3

Table 16: Debt in the form of loans, 2008 (as a percentage) (DEAS 2008: Schulden aus Krediten)

			Evaluation of standard of living				
Region	Age	Gender	Very good	Good	Average	Poor	Very poor
Germany	55–69	Men	10.6	53.1	30.5	4.9	0.9
Germany	55–69	Women	11.4	50.9	32.0	4.2	1.6
Germany	55–69	Total	11.0	52.0	31.3	4.5	1.2
Germany	70–85	Men	9.7	58.0	28.5	3.1	0.8
Germany	70–85	Women	8.4	51.8	33.9	4.3	1.7
Germany	70–85	Total	8.9	54.4	31.6	3.8	1.3
Western	55–69	Men	11.5	55.3	28.4	4.1	0.7
Western	55–69	Women	12.2	52.9	30.5	3.1	1.3
Western	70–85	Men	10.6	58.1	26.9	3.5	0.9
Western	70–85	Women	9.7	51.8	32.5	4.0	2.1
Eastern	55–69	Men	6.5	44.1	39.7	8.1	1.6
Eastern	55–69	Women	7.8	42.7	38.2	8.6	2.8
Eastern	70–85	Men	5.4	57.3	35.8	1.4	0.0
Eastern	70–85	Women	3.0	51.5	39.5	5.7	0.3

Table 18: Evaluation of standard of living, 2008 (as a percentage) (DEAS 2008: Bewertung des Lebensstandards)

Age	Gender	No partner	Living as a married couple	In another form of partnership
55–69	Men	13.2	79.8	7.0
55–69	Women	21.3	71.2	7.6
55–69	Total	17.3	75.4	7.3
70–85	Men	16.9	77.0	6.2
70–85	Women	49.0	46.9	4.1
70–85	Total	35.4	59.7	5.0

Table 19: Life with a partner, 2008 [as a percentage] (DEAS 2008: Leben in Partnerschaft)

Gender	65–70	70–75	75–80
Total	554,440	980,205	1,021,364
Male	118,969	198,892	199,337
Female	435,471	781,313	822,027
Sex ratio (women per 1,000 men)	3,660	3,928	4,124

Table 21: Germany's population by demographic characteristics: widowhood, in absolute figures (Mikrozensus 2010). The sex ratio indicates how many women there are in a population group (here: widowed people) per 1,000 men in the corresponding reference group.

Age	Gender	Population in all households	In households with 2 generations	In households with 3 or more generations	In one-person households
65–70	Men	129	11	*/	95
65–70	Women	539	54	12	429
70–75	Men	194	17	*/	150
70–75	Women	776	66	16	652
75–80	Men	190	13	*/	157
75–80	Women	809	67	18	697

*/ = Not detailed as numerical value unreliable

Table 24: Widowed older people in private households, living alone or by number of generations in the household. Germany, 2009, in thousands (Statistisches Bundesamt 2009: Mehrgenerationenhaushalte)

Age	Gender	Very good	Good	Average	Poor	Very poor
55–69	Men	41.6	51.4	6.2	0.6	0.2
55–69	Women	37.5	54.1	6.9	1.1	0.5
55–69	Total	39.6	52.7	6.5	0.8	0.3
70–85	Men	43.2	51.8	5.0	0.1	0.0
70–85	Women	37.6	56.8	4.6	0.7	0.3
70–85	Total	40.6	54.0	4.8	0.4	0.1

Table 26: Evaluation of partnership, 2008 (as a percentage) (DEAS 2008: Bewertung der Partnerschaft)

Region	Age	Gender	Daily	Weekly	Monthly	Less often
Germany	55–69	Men	16.3	60.0	15.1	8.5
Germany	55–69	Women	17.8	67.6	10.1	4.5
Germany	70–85	Men	12.4	65.8	14.7	7.2
Germany	70–85	Women	13.5	69.1	12.5	5.0
Western	55–69	Men	17.4	59.6	15.5	7.6
Western	55–69	Women	18.4	67.7	9.9	4.1
Western	70–85	Men	12.4	66.8	13.8	6.9
Western	70–85	Women	14.2	69.7	11.6	4.5
Eastern	55–69	Men	12.4	61.6	13.7	12.4
Eastern	55–69	Women	15.6	67.5	10.9	5.9
Eastern	70–85	Men	12.3	61.2	18.4	8.2
Eastern	70–85	Women	10.5	66.4	16.2	6.9

Table 28: Frequency of contact with adult children, 2008 (as a percentage) (DEAS 2008: Kontakthäufigkeit zu erwachsenen Kindern)

Region	Age	Gender	How often do you visit friends or invite them to visit you?				
			Several times a week	Once a week	One to three times a month	Less often	Never
Germany	55–69	Men	10.8	20.2	42.4	23.6	3.1
Germany	55–69	Women	11.0	21.0	45.1	19.9	3.1
Germany	55–69	Total	10.9	20.6	43.7	21.7	3.1
Germany	70–85	Men	7.3	16.2	42.2	27.3	7.0
Germany	70–85	Women	12.7	18.0	36.5	25.3	7.5
Germany	70–85	Total	10.4	17.2	38.9	26.2	7.3
Western	55–69	Men	11.3	20.8	43.3	21.8	2.9
Western	55–69	Women	11.5	22.8	44.5	18.5	2.7
Western	70–85	Men	7.6	16.7	42.3	26.8	6.6
Western	70–85	Women	13.6	19.1	36.8	23.8	6.7
Eastern	55–69	Men	8.9	17.5	38.3	31.3	4.0
Eastern	55–69	Women	8.6	13.6	47.4	25.8	4.7
Eastern	70–85	Men	6.3	14.0	41.6	29.5	8.6
Eastern	70–85	Women	9.0	13.4	35.1	31.8	10.7

Table 32: Visiting or being visited by friends, 2008 (as a percentage) (DEAS 2008: Besuch bei oder von Freunden)

Tumour group	Age group	Incidence rate (per 100,000)	
		Men	Women
Cancer, in total (ICD-10 C00–97 not including C44)*	65–69	1,932.52	1,178.24
	70–74	2,384.74	1,229.09
	75–79	2,763.14	1,474.87
Prostate	65–69	604.68	–
	70–74	717.05	–
	75–79	706.66	–
Breast	65–69	4.78	429.80
	70–74	5.25	319.92
	75–79	5.60	339.51
Lung	65–69	269.27	98.38
	70–74	323.98	92.37
	75–79	395.66	108.53
Colorectal	65–69	241.79	134.25
	70–74	334.58	186.52
	75–79	422.37	237.29
Uterine	65–69	–	72.74
	70–74	–	86.94
	75–79	–	83.08
Oral and pharyngeal	65–69	64.48	17.05
	70–74	54.11	14.86
	75–79	45.24	15.67
Stomach	65–69	62.33	24.91
	70–74	91.09	40.42
	75–79	124.44	61.26
Oesophageal	65–69	40.69	6.31
	70–74	39.79	8.49
	75–79	39.33	10.31

* Not including non-melanocytic skin cancer

Table 35: Estimated age-specific cancer incidence (number of cases per 100,000 population), 2009 (GEKID 2011, own representation)

12-month prevalence of depression		
	Women	Men
45–64 years		
Total	9.9	6.9
Lower educational level	10.2	9.8
Medium educational level	9.7	6.6
Higher educational level	10.2	6.4
65 and over		
Total	7.3	3.3
Lower educational level	7.7	4.8
Medium educational level	7.3	3.4
Higher educational level	5.3	2.4

Table 38: 12-month prevalence of depression (as a percentage)
(RKI 2011a, p. 77, own representation)

Gender	Age	Average height	Average weight/BMI
Male	65 to < 70	1.76 m	84.4 kg/27.4
	70 to < 75	1.74 m	83.3 kg/27.4
	Over 75	1.73 m	79.0 kg/26.5
Female	65 to < 70	1.64 m	71.2 kg/26.4
	70 to < 75	1.63 m	71.3 kg/26.8
	Over 75	1.61 m	67.4 kg/25.9

Table 42: Average height and weight by age and gender
(Mikrozensus 2011a)

Gender	Men				Women			
Age	65–69	70–74	75–79	Total	65–69	70–74	75–79	Total
All diagnoses and reasons for treatment	75,773	88,157	56,590	220,520	80,196	103,927	82,261	266,384
Cardiovascular diseases	20,230	24,756	17,242	62,228	10,265	15,434	14,172	39,871
Diseases of the musculoskeletal system and connective tissue	19,704	24,200	16,495	60,399	31,968	45,111	35,535	112,614
Neoplasms [cancer]	17,209	17,290	7,644	42,143	16,216	14,594	8,508	39,318

Table 46: Diagnostic data from preventive care and rehabilitation facilities with more than 100 beds (cases), 2010, in absolute figures (Statistisches Bundesamt 2010b, cited from www.gbe-bund.de)

Place of death	
Hospital	42–43
Residential care	15–25
Hospice	1–2
At home	25–30
Other locations	3–7

Table 47: Estimated distribution of places of death (as a percentage) (Jaspers and Schindler 2004, p. 23)

Age	Gender	People in need of care per 100,000 residents				
		People in need of care in total	Outpatient care including combination services	Residential care	Care allowance	Day care
65 to under 70	<i>Total</i>	2,657	550	637	1,471	43
	Men	2,790	537	701	1,552	48
	Women	2,534	561	578	1,395	38
70 to under 75	<i>Total</i>	4,743	1,110	1,185	2,447	82
	Men	4,673	1,017	1,127	2,528	91
	Women	4,803	1,191	1,235	2,377	74
75 to under 80	<i>Total</i>	9,899	2,606	2,663	4,630	183
	Men	8,774	2,264	2,034	4,476	181
	Women	10,741	2,862	3,133	4,746	185

Table 49: People in need of care per 100,000 residents by age, gender and type of care (Statistisches Bundesamt 2011r, Pflegestatistik 2009, www.destatis.de, own representation)

Attendance at cultural events	Men 55–69 years		Women 55–69 years		Men 70–85 years		Women 70–85 years	
	Eastern	Western	Eastern	Western	Eastern	Western	Eastern	Western
Several times a week	0.3	0.4	0.0	0.8	0.0	0.1	0.3	0.7
Once a week	0.8	1.1	0.8	1.4	0.6	1.1	0.0	1.4
One to three times a month	16.9	18.8	16.1	24.3	10.6	13.5	12.8	13.6
Less often	50.5	50.1	48.8	49.7	39.5	42.7	31.6	35.3
Never	31.5	29.6	34.4	23.7	49.3	42.6	55.4	49.1

Table 50: Attendance at cultural events by age and region (as a percentage) (DEAS 2008: Besuch kultureller Veranstaltungen, own representation)

Club/organisation	Men 55–69 years		Women 55–69 years		Men 70–85 years		Women 70–85 years	
	Eastern*	Western	Eastern	Western	Eastern	Western	Eastern	Western
Sports/social clubs	12.9	37.5	16.7	30.4	8.3	22.2	6.0	14.1
Charitable organisations	2.4	8.3	6.7	7.2	3.5	8.9	3.0	7.6
Church/religious groups	4.0	8.3	5.6	12.0	3.2	7.8	6.7	12.6
Local heritage/citizens' groups, volunteer fire service	7.3	12.7	2.5	5.2	4.6	10.6	2.0	4.7
Associations, unions, political parties	8.9	17.3	5.8	5.6	6.9	12.6	3.3	2.6
Senior-specific groups	10.8	9.1	15.0	11.7	16.3	15.7	20.4	21.3

* In the German Ageing Survey and GeroStat, “eastern Germany” includes the former territory of East Berlin, while “western Germany” includes the former territory of West Berlin.

Table 51: Membership of clubs, groups, or organisations in 2008, by age group, gender and region (as a percentage) (DEAS 2008: Mitgliedschaftsbereiche in Vereinen, Gruppen, Organisationen, own representation)

Television channels	60–69 years	70+
Public channels		
ARD Dritte (7 channels)	19.8	23.2
ARD Das Erste	19.0	22.5
ZDF	18.6	22.2
3SAT	1.3	1.3
Phoenix	1.1	0.9
ARTE	0.8	0.7
Private channels		
RTL	9.9	8.1
SAT.1	9.0	8.2
Pro Sieben	1.9	1.0
Vox	3.9	2.3
RTL II	1.8	1.0
Kabeleins	2.0	1.1

Table 59: Market shares of television channels, 2007, Mon–Sun 3 am–3 am, as a percentage, by age group (Blödorn 2009, p. 167, own representation)

Types of television programmes watched by over-65s

Information	38
Sport	9
Entertainment	16
Fiction	29
Advertising	5
Other	3

Table 60: Types of television programmes watched by people aged over 65, 2010 (as a percentage) (Reitze 2011, p. 73, own representation)

Press publication	Men	
	Age group 60–69	Age group 70+
Bild am Sonntag	24.1	22.8
Bild/Germany (including BZ)	22.2	19.8
Stern	14.9	11.5
Der Spiegel	12.9	11.5
Focus	11.0	8.9
Hörzu	9.5	13.4
rtv	26.0	29.7
Prisma	13.7	15.5
ADAC Motorwelt	46.1	38.8

Table 61: Reach of press publications among men, by age, in 2011 (as a percentage). Here: representation of the nine press publications with the greatest reach (Arbeitsgemeinschaft Media-Analyse e.V. and Media-Micro-Census GmbH 2011, own representation)

	Women	
Press publication	Age group 60–69	Age group 70+
Bild der Frau	21.1	17.2
Bild/Germany (including BZ)	15.0	12.2
Bunte	11.4	10.4
Hörzu	10.1	11.9
Bild am Sonntag	10.9	9.9
Frau im Spiegel	10.8	10.1
rtv	27.3	29.3
Prisma	15.1	17.0
ADAC Motorwelt	15.4	8.4

Table 62: Reach of press publications among women, by age, in 2011 (as a percentage). Here: representation of the nine press publications with the greatest reach (Arbeitsgemeinschaft Media-Analyse e.V. and Media-Micro-Census GmbH 2011, own representation)

Goods/services for private use	Men 65+	Women 65+
Holiday accommodation	58	48
Other holiday travel services	37	36
Medications	37	43
Books/magazines	37	37
Clothing/sports equipment	34	51

Table 65: Type of internet orders for private use in the past twelve months (based on the first quarter of 2011) in the 65+ age group (only those who ordered goods or services over the internet) (as a percentage) (Statistisches Bundesamt 2011q, p. 45, own representation)

Federal state	Internal net migration of residents aged over 65
Schleswig-Holstein	+3.0
Brandenburg	+2.8
Mecklenburg-Western Pomerania	+1.0
Lower Saxony	+0.9
Bavaria	+0.7
Rhineland-Palatinate	+0.3
Saxony	+0.2
Thuringia	−0.1
Baden-Württemberg	−0.1
Berlin	−0.4
Saarland	−0.5
Hesse	−0.8
North Rhine-Westphalia	−0.9
Saxony-Anhalt	−1.2
Bremen	−2.5
Hamburg	−4.3
Planning regions (Raumordnungsregionen)	
Havelland-Fläming	+6.1
Oldenburg	+5.2
Schleswig-Holstein East	+4.8
...	...
Bochum/Hagen	−2.5
Göttingen	−3.1
Hamburg	−4.3

Table 70: Internal net migration in federal states for the cohort aged 65 and above, per 1,000 residents in 2009 (INKAR 2011, own representation)

	Population aged from ... to ... inclusive			Low-paid/marginal employees			Rate of marginal employment		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
	Col. 4/Col. 1	Col. 5/Col. 2	Col. 6/Col. 3						
	1	2	3	4	5	6	7	8	9
65–69									
End of 2003	4,962,354	2,360,756	2,601,598	378,897	190,376	188,521	7.6 %	8.1 %	7.2 %
End of 2004	5,191,424	2,474,740	2,716,684	427,450	215,861	211,589	8.2 %	8.7 %	7.8 %
End of 2005	5,374,399	2,567,623	2,806,776	442,934	225,705	217,229	8.2 %	8.8 %	7.7 %
End of 2006	5,459,176	2,613,746	2,845,430	459,276	236,550	222,726	8.4 %	9.1 %	7.8 %
End of 2007	5,324,024	2,552,272	2,771,752	455,417	236,573	218,844	8.6 %	9.3 %	7.9 %
End of 2008	5,144,557	2,469,600	2,674,957	449,778	235,028	214,750	8.7 %	9.5 %	8.0 %
End of 2009	4,880,509	2,345,401	2,535,108	431,878	225,420	206,458	8.8 %	9.6 %	8.1 %
End of 2010	4,381,911	2,106,077	2,275,834	397,994	209,527	188,467	9.1 %	9.9 %	8.3 %
70–74									
End of 2003	3,511,483	1,570,172	1,941,311	140,399	71,902	68,497	4.0 %	4.6 %	3.5 %
End of 2004	3,611,866	1,628,184	1,983,682	156,856	81,292	75,564	4.3 %	5.0 %	3.8 %
End of 2005	3,759,730	1,706,837	2,052,893	165,166	86,185	78,981	4.4 %	5.0 %	3.8 %
End of 2006	3,971,995	1,812,346	2,159,649	180,769	95,022	85,747	4.6 %	5.2 %	4.0 %
End of 2007	4,218,662	1,933,383	2,285,279	201,644	107,435	94,209	4.8 %	5.6 %	4.1 %
End of 2008	4,522,256	2,079,806	2,442,450	225,327	121,277	104,050	5.0 %	5.8 %	4.3 %
End of 2009	4,739,924	2,187,216	2,552,708	244,870	131,539	113,331	5.2 %	6.0 %	4.4 %
End of 2010	4,915,622	2,275,092	2,640,530	262,693	141,617	121,076	5.3 %	6.2 %	4.6 %
75+									
End of 2003	6,386,158	2,056,652	4,329,506	77,227	35,173	42,054	1.2 %	1.7 %	1.0 %
End of 2004	6,564,161	2,170,011	4,394,150	84,616	40,156	44,460	1.3 %	1.9 %	1.0 %
End of 2005	6,735,945	2,281,941	4,454,004	84,712	41,066	43,646	1.3 %	1.8 %	1.0 %
End of 2006	6,868,118	2,376,489	4,491,629	87,048	42,918	44,130	1.3 %	1.8 %	1.0 %
End of 2007	6,976,058	2,459,299	4,516,759	90,379	45,632	44,747	1.3 %	1.9 %	1.0 %
End of 2008	7,062,200	2,534,254	4,527,946	92,639	47,972	44,667	1.3 %	1.9 %	1.0 %
End of 2009	7,281,309	2,667,197	4,614,112	99,829	52,488	47,341	1.4 %	2.0 %	1.0 %
End of 2010	7,546,760	2,819,903	4,726,857	108,423	57,850	50,573	1.4 %	2.1 %	1.1 %
65+									
End of 2003	14,859,995	5,987,580	8,872,415	596,523	297,451	299,072	4.0 %	5.0 %	3.4 %
End of 2004	15,367,451	6,272,935	9,094,516	668,922	337,309	331,613	4.4 %	5.4 %	3.6 %
End of 2005	15,870,074	6,556,401	9,313,673	692,812	352,956	339,856	4.4 %	5.4 %	3.6 %
End of 2006	16,299,289	6,802,581	9,496,708	727,093	374,490	352,603	4.5 %	5.5 %	3.7 %
End of 2007	16,518,744	6,944,954	9,573,790	747,440	389,640	357,800	4.5 %	5.6 %	3.7 %
End of 2008	16,729,013	7,083,660	9,645,353	767,744	404,277	363,467	4.6 %	5.7 %	3.8 %
End of 2009	16,901,742	7,199,814	9,701,928	776,577	409,447	367,130	4.6 %	5.7 %	3.8 %
End of 2010	16,844,293	7,201,072	9,643,221	769,110	408,994	360,116	4.6 %	5.7 %	3.7 %

Table 73: Low-paid/marginal employees, 2003 to 2010, in absolute figures (Schröder 2011)

Region	Age	Household size	Monthly net household income			
			Total house- holds	Under €900 % of total	Under €1,300	Under €1,700
Germany	65 – < 70	Total households	2,870	302 (10.5%)	845	1,398
Germany	65 – < 70	Single-person households	1,058	272 (25.7%)	642	832
Germany	70 – < 75	Total households	2,942	313 (10.6%)	902	1,538
Germany	70 – < 75	Single-person households	1,212	285 (23.5%)	721	964
Germany	75 – < 80	Total households	2,098	267 (12.7%)	773	1,222
Germany	75 – < 80	Single-person households	1,071	247 (23.0%)	652	864
Former West Germany	65 – < 70	Total households	2,197	216 (9.8%)	599	980
Former West Germany	65 – < 70	Single-person households	803	191 (23.7%)	448	600
Former West Germany	70 – < 75	Total households	2,245	236 (10.5%)	663	1,107
Former West Germany	70 – < 75	Single-person households	915	209 (22.8%)	513	693
Former West Germany	75 – < 80	Total households	1,626	215 (13.2%)	584	914
Former West Germany	75 – < 80	Single-person households	825	195 (23.6%)	482	640
Former East Germany	65 – < 70	Total households	674	86 (12.7%)	246	419
Former East Germany	65 – < 70	Single-person households	256	81 (31.0%)	194	233
Former East Germany	70 – < 75	Total households	697	78 (11.2%)	240	432
Former East Germany	70 – < 75	Single-person households	297	76 (25.0%)	209	271
Former East Germany	75 – < 80	Total households	472	53 (11.8%)	189	308
Former East Germany	75 – < 80	Single-person households	247	52 (21.9%)	170	225

Table 74: Net household income and household size in 2009, in thousands (Mikrozensus 2009, cited from www.gerostat.de. Own calculation of households with monthly net household income under €900 as a percentage of total households for each age group)

Gender	Total	Without migrant background	With migrant background	(Late) repatriates
Men	10.3	8.3	28.3	21.5
Women	13.8	12.5	29.0	23.6

Table 75: Percentage of people at risk of poverty in the 65+ age group by migrant background (Statistisches Bundesamt 2011a, pp. 244 ff.; based on the Mikrozensus 2010)

	Without migrant background	With migrant background
No school qualifications	23.0	42.9
Single-person households	16.5	33.7
Source of funding: pension plan	10.6	25.1

Table 76: Percentage of people at risk of poverty in the 65+ age group by migrant background and risk factors (Statistisches Bundesamt 2011a, p. 244)

Gender	Total	Up to 59 years	60–79 years	80 years and over
Male	36	52	45	24
Female	64	48	55	76
Married*	36	26	54	27
Widowed	41	3	30	64
Divorced	7	8	10	5
Single	16	63	6	4
No children	21	68	14	8
1 child	22	15	18	29
2 children	29	10	35	32
3 or more children	28	7	33	31
Living alone	34	15	36	39
2-person household	39	27	51	35
3-person household	13	26	6	14
4-or-more-person household	14	32	7	12

* Including registered life partnerships (Studie zum Pflege-Weiterentwicklungsgesetz – TNS Infratest Sozialforschung 2010)

Table 77: People in need of care in private households, structural characteristics by age (as a percentage) (BMG 2011, p. 17)

	1994			2005		
	Total	Women	Men	Total	Women	Men
Gender						
Men	21	–	–	27	–	–
Women	79	–	–	73	–	–
Age						
< 59 years	5	3	11	4	2	8
60–64 years	3	1	10	2	2	4
65–69 years	5	5	7	5	3	12
70–74 years	9	9	12	7	5	12
75–79 years	10	10	10	13	13	16
80–84 years	24	25	19	23	25	17
85–89 years	26	28	18	20	22	16
90 years and over	18	19	13	25	28	15
Average age in years	81.0	82.3	76.0	81.8	83.6	76.8
Marital status						
Married	7	4	20	15	9	30
Widowed	64	71	40	64	73	38
Divorced	8	7	11	6	5	11
Single	21	18	30	15	12	21
Nationality						
German	–	–	–	97	98	96
{Naturalised} immigrants	–	–	–	2	1	3
Non-German	–	–	–	1	1	1

Table 78: Residents in residential care – TNS Infratest-Heimerhebungen, 1994 (MuG II) and 2005 (MuG IV), socio-demographic structural characteristics (as a percentage) (Schneekloth and Törne 2009, pp. 85 f.)

09.2 Figures

	People in employment subject to social security deductions on the survey date of 30 June ...					
Age	2005	2006	2007	2008	2009	2010
65	20,560	21,399	24,609	26,125	29,462	26,640
66	14,775	16,210	17,243	19,175	19,038	21,543
67	11,673	12,457	14,512	15,688	16,329	16,124
68	10,658	10,201	11,524	13,527	14,030	14,381

Figure 2: Older people in employment subject to social security deductions, in absolute figures, over time (Bundesagentur für Arbeit, cited from Bundesregierung 2011, p. 44)

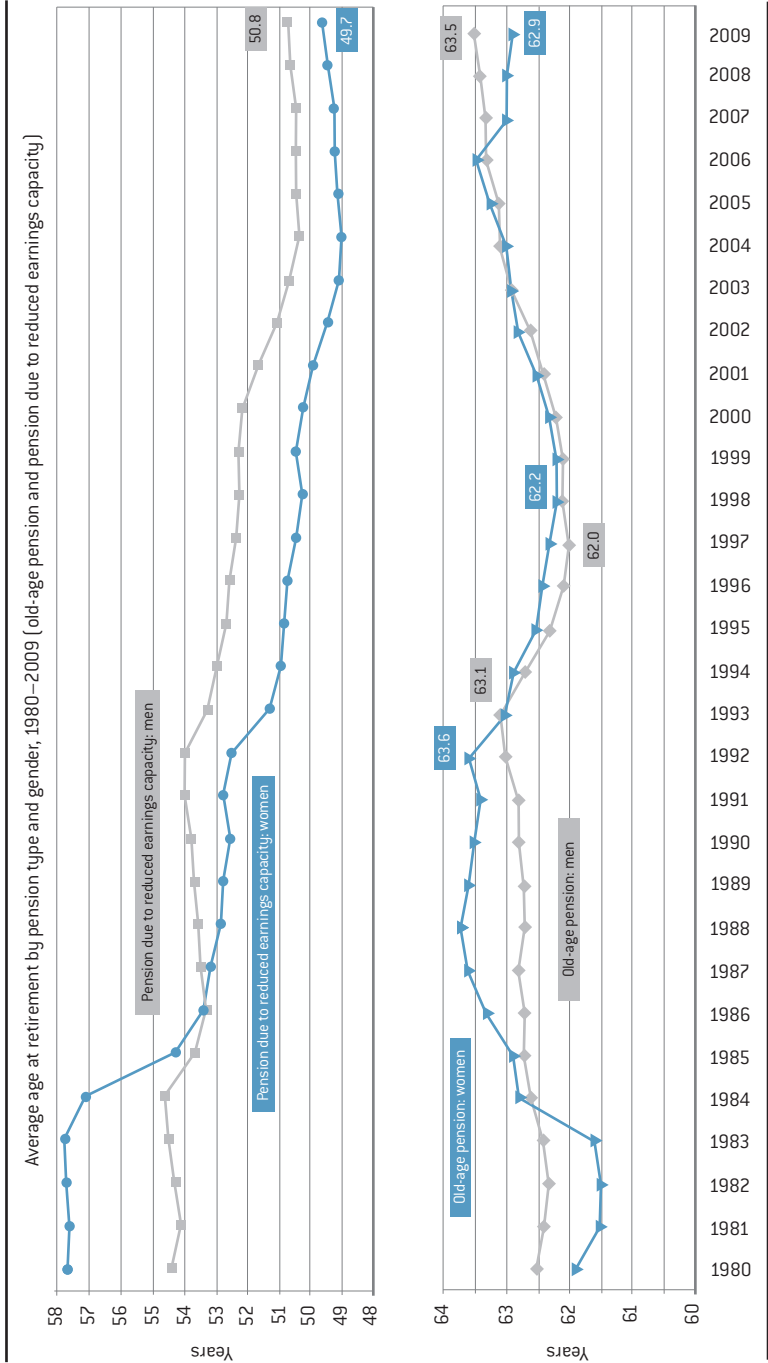


Figure 4: Age at retirement, old-age pension and pension due to reduced earnings capacity, by gender, 1980–2009* (source: Deutsche Rentenversicherung Bund [2010]; Rentenversicherung in Zahlen, Berlin, in: www.sozialpolitik-aktuell.de) Up to 1993: former West German federal states; from 1993: Germany

* "The data is taken from the statistics on retirement age from the Deutsche Rentenversicherung (German statutory pension insurance scheme). Its predictive value is limited in that the average values that are reported for the calendar years may be distorted by demographic effects. If, for example, there are a large number of people in the 65-year age group but relatively few in the 63-year age group, then the age at retirement is very likely to be influenced by people drawing the standard old-age pension at the age of 65. The average age of retirement is thus increased, without the behaviour of the people concerned having changed." (ibid.).

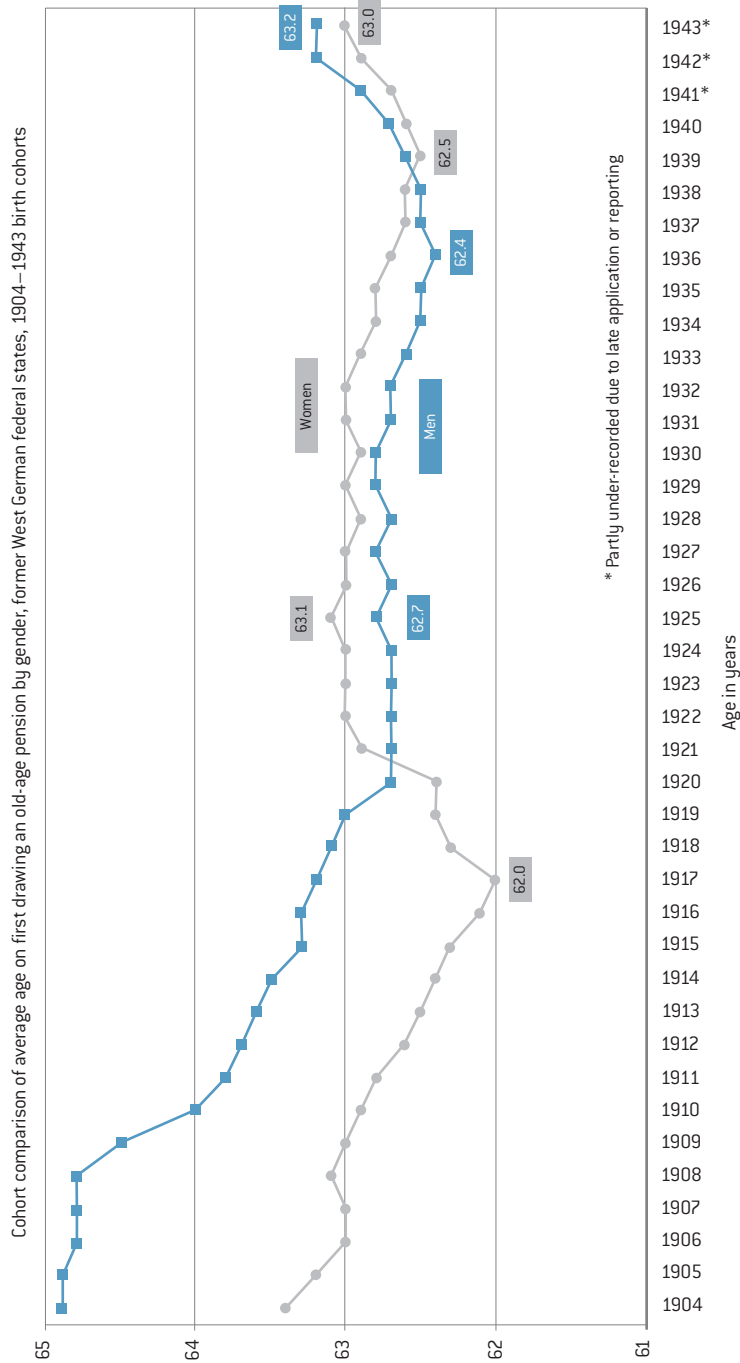


Figure 5: Cohort comparison of average age on first drawing an old-age pension by gender, 1904–1943 birth cohorts** [source: Deutsche Rentenversicherung Bund [2009]: Rentenversicherung in Zeitreihen, Berlin, in: www.sozialpolitik-aktuell.de]

** In contrast to Figure 4, "in which the average retirement age for men and women is observed by calendar year, the age on first drawing an old-age pension is broken down by cohort here. The advantage of this is that the number of people in each cohort does not distort the results. However, a disadvantage of breaking down the figures by cohort like this is the time delay, as we must always wait until the individuals in the last cohort have turned 65. The people in the youngest cohort recorded here were born in 1943 and thus turned 65 in 2008" [ibid.].

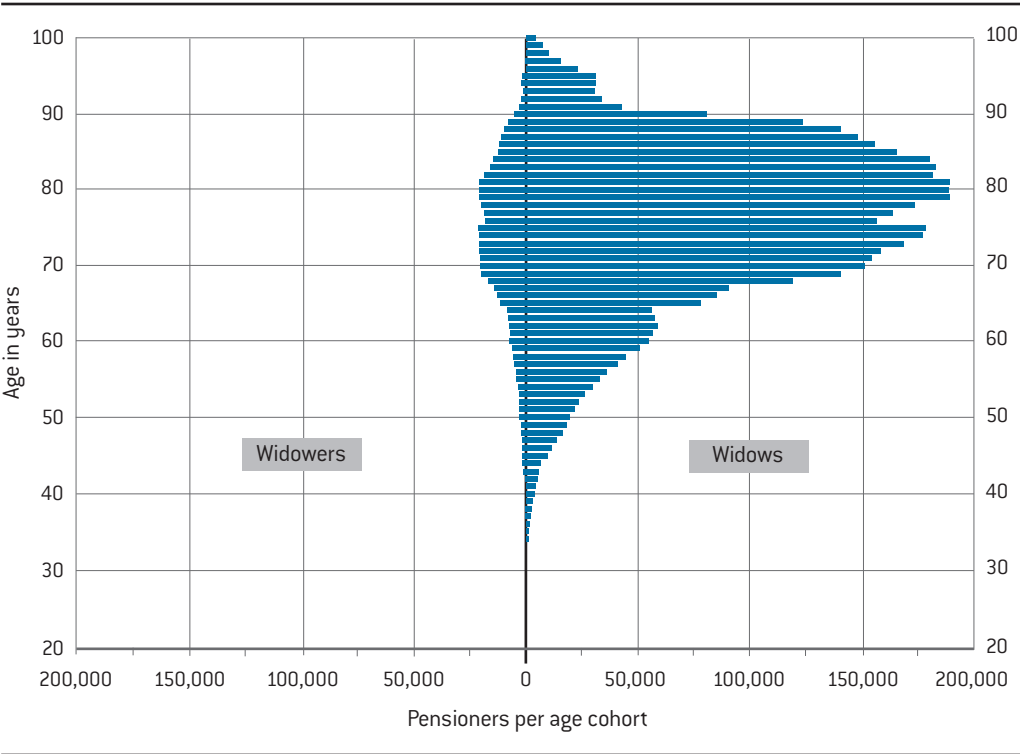


Figure 8: Age structure of the recipients of widows' and widowers' pensions* on 31 December 2009 [Deutsche Rentenversicherung Bund 2010, p. XVIII]

* Pension plans as per the German Code of Social Law (SGB), Volume VI, source: Tables 402.00 G, Col. 2 and Col. 3 / Col. 4 and Col. 5

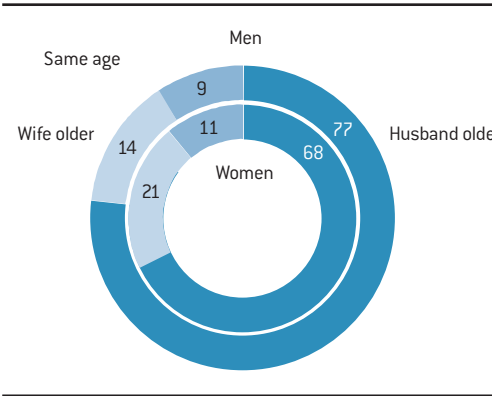


Figure 10: Age differences of spouses aged 65 and over (as a percentage) (Statistisches Bundesamt 2011b, p. 18)

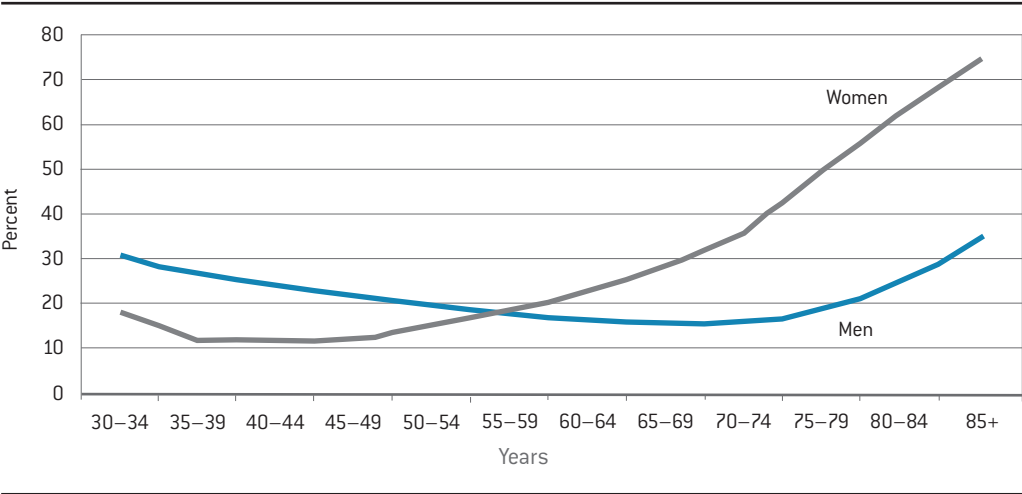


Figure 11: Proportion of people living alone, by age, 2009 (as a percentage) (Statistisches Bundesamt 2011b, p. 20)

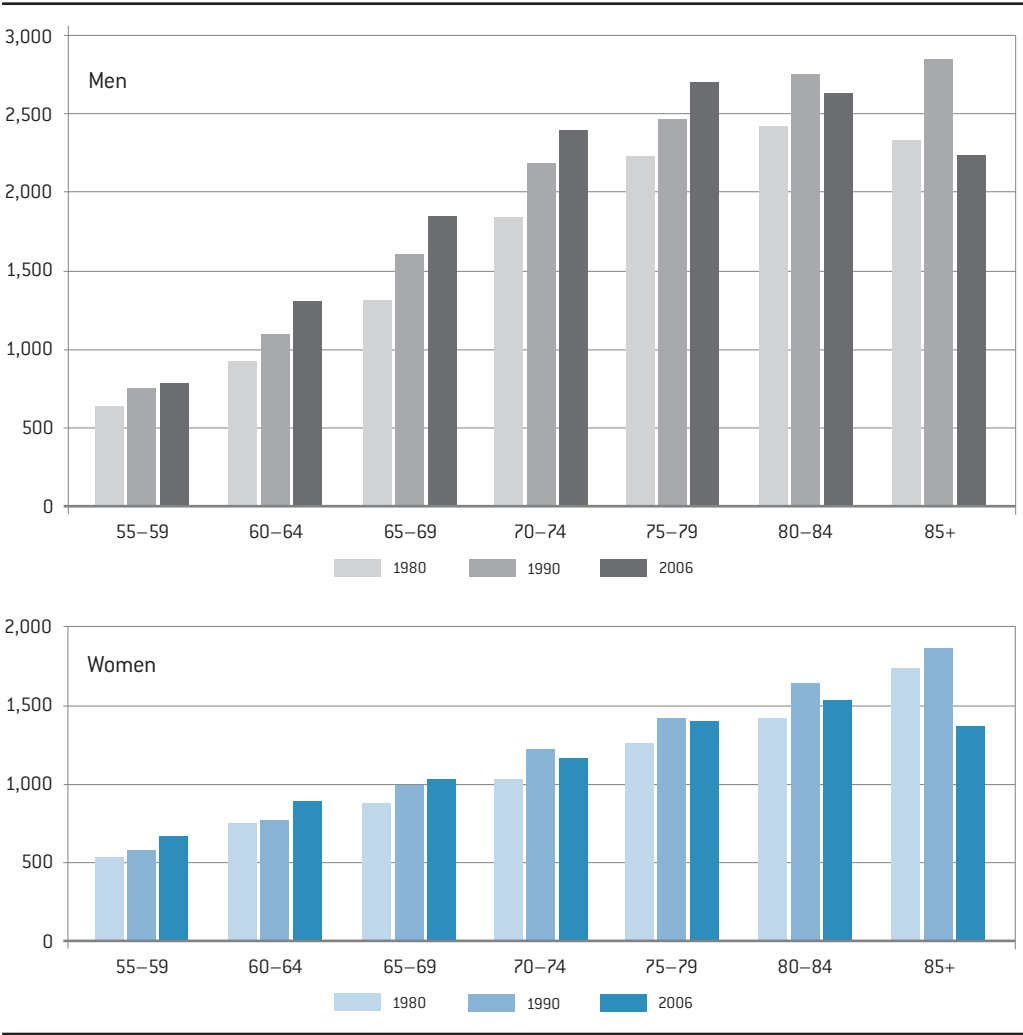


Figure 13: Age-specific cancer incidence rates in Germany by gender, 1980, 1990 and 2006, ICD-10 C00-97, without C44 (RKI 2010b, p. 21)

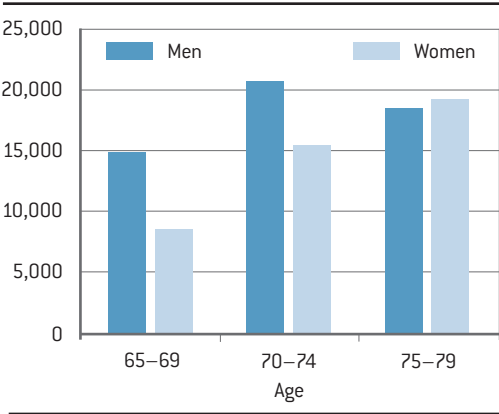


Figure 14: Number of people treated in hospital for cerebral infarction, 2010 (Statistisches Bundesamt 2011h, own representation)

	Smoker (daily or occasional)		Ex-smoker		Never smoked	
	%	[95% CI]	%	[95% CI]	%	[95% CI]
Women						
45–64 years	29.4	[27.7–31.2]	26.1	[24.5–27.8]	44.5	[42.6–46.4]
Lower educational level	34.6	[29.0–40.7]	20.7	[16.1–26.2]	44.7	[38.6–50.9]
Medium educational level	30.4	[28.4–32.5]	26.9	[24.9–29.0]	42.7	[40.5–45.0]
Higher educational level	21.0	[19.0–23.1]	29.3	[27.0–31.6]	49.8	[47.2–52.3]
65 and over	8.7	[7.3–10.3]	18.2	[16.3–20.3]	73.1	[70.7–75.4]
Lower educational level	8.9	[6.5–12.0]	16.2	[13.0–20.0]	74.9	[70.5–78.8]
Medium educational level	8.3	[6.9–10.0]	19.0	[16.7–21.4]	72.7	[70.0–75.3]
Higher educational level	9.4	[7.2–12.1]	26.6	[23.1–30.5]	64.0	[59.8–68.0]
Men						
45–64 years	34.6	[32.4–36.7]	36.4	[34.2–38.6]	29.1	[27.1–31.1]
Lower educational level	38.7	[29.0–49.3]	34.1	[24.8–44.9]	27.2	[18.8–37.7]
Medium educational level	38.1	[35.2–41.1]	36.2	[33.4–39.2]	25.6	[23.1–28.4]
Higher educational level	26.6	[24.3–29.0]	37.5	[35.0–40.0]	35.9	[33.5–38.5]
65 and over	13.7	[11.7–16.1]	49.7	[46.5–52.9]	36.6	[33.5–39.8]
Lower educational level	16.8	[9.5–27.8]	44.0	[32.6–56.1]	39.2	[28.3–51.4]
Medium educational level	14.3	[11.7–17.4]	51.7	[47.5–56.0]	34.0	[30.0–38.2]
Higher educational level	11.0	[9.1–13.2]	48.9	[45.4–52.3]	40.1	[36.8–43.6]

Figure 16: Smoking rates by gender (as a percentage)* (RKI 2011a, p. 119)

* The numbers in parentheses indicate the confidence interval (CI). This provides information on the accuracy of the percentages shown in the tables. In these tables from the Robert Koch Institute, there is 95% confidence that the true value of the percentage figure lies within the confidence interval specified (RKI 2011a, pp. 49 f.).

Funding	Diet/nutrition		Exercise		Relaxation	
	%	[95% CI]	%	[95% CI]	%	[95% CI]
18–29 years						
Self-funded	47.4	[36.4–58.7]	36.6	[30.4–43.2]	24.8	[16.8–34.9]
Partially self-funded	45.4	[34.3–56.9]	35.7	[29.8–42.0]	42.2	[30.8–54.5]
Full cost coverage	7.2	[3.4–14.6]	27.7	[22.0–34.4]	33.0	[22.9–45.1]
30–44 years						
Self-funded	51.8	[44.0–59.5]	27.3	[23.5–31.4]	25.1	[19.9–31.1]
Partially self-funded	36.8	[29.2–45.2]	45.8	[41.3–50.5]	41.1	[34.4–48.1]
Full cost coverage	11.4	[7.7–16.4]	26.9	[22.7–31.6]	33.9	[27.2–41.2]
45–64 years						
Self-funded	45.1	[39.0–51.3]	32.2	[28.7–35.9]	29.7	[24.7–35.3]
Partially self-funded	40.0	[33.9–46.3]	40.4	[36.7–44.2]	32.4	[27.2–38.1]
Full cost coverage	15.0	[11.0–20.0]	27.4	[23.9–31.1]	37.9	[32.2–43.9]
65–79 years						
Self-funded	41.7	[32.4–51.6]	33.6	[28.4–39.2]	35.1	[25.3–46.4]
Partially self-funded	51.7	[42.0–61.4]	44.8	[39.1–50.6]	39.9	[29.4–51.4]
Full cost coverage	6.6	[3.1–13.2]	21.6	[17.1–27.0]	25.0	[16.3–36.2]

Figure 18: Funding of health promotion classes* (RKI 2011a, p. 29)

* The numbers in parentheses indicate the confidence interval [CI]. This provides information on the accuracy of the percentages shown in the tables. In these tables from the Robert Koch Institute, there is 95% confidence that the true value of the percentage figure lies within the confidence interval specified (RKI 2011a, pp. 49 f.).

Aged from ... to under ...	People in need of care					Rate of people in need of care*				Population		
	Total	% change since 2007	Of which:			Of which: female	Total	Male	Female	Total	Male	Female
			Cared for at home	In residential home	Number							
	Number	%			Number		%					Number
Under 15	66,474	5.2	66,116	358	30,885	0.6	0.6	0.6	11,022,634	5,654,417	5,368,217	
15–60	256,336	1.4	222,169	34,167	124,828	0.5	0.5	0.5	49,570,287	25,130,915	24,439,372	
60–65	71,370	2.6	55,464	15,906	34,909	1.7	1.7	1.6	4,307,594	2,118,460	2,189,134	
65–70	129,687	–6.9	98,605	31,082	64,240	2.7	2.8	2.5	4,880,509	2,345,401	2,535,108	
70–75	224,803	9.9	168,615	56,187	122,603	4.7	4.7	4.8	4,739,924	2,187,216	2,552,708	
75–80	306,923	1.1	224,368	82,554	190,444	9.9	8.8	10.7	3,100,616	1,327,478	1,773,138	
80–85	460,129	4.9	313,491	146,638	327,628	19.9	15.7	22.3	2,311,895	844,367	1,467,528	
85–90	509,383	13.9	309,027	200,356	407,388	38.0	28.3	41.6	1,338,934	360,488	978,446	
90 and over	313,149	–4.5	162,906	150,243	263,558	59.1	36.8	66.7	529,864	134,864	395,000	
Total	2,338,252	4.1	1,620,762	717,490	1,566,482	2.9	1.9	3.8	81,802,257	40,103,606	41,698,651	

* The rate of people in need of care describes the percentage of people in need of care in the respective population group. Thus, for women aged 70 to under 75, the rate of people in need of care is determined as follows: $122,603 / 2,552,708 = 4.8\%$.

Figure 20: People in need of care by age, and rate of people in need of care, at the end of 2009 [Statistisches Bundesamt 2011r, Pflegestatistik 2009, www.gbe-bund.de]

Countries of origin	People in need of care with a migrant background	People in need of care without a migrant background
Age		
Under 60	29	17
60–79	42	34
80 and over	29	49
Family situation		
People living alone	21	35
Married couples	29	28
Married couples with relatives	14	6
Widowed with relatives	15	18
Other single people with relatives	10	9
Children under 16 years/parent household	11	4
Nursing care level		
Level I	54	59
Level II	31	32
Level III	15	9

Figure 22: Situation of people in need of care in private households with/without a migrant background (as a percentage) (BMG 2011, p. 60)

	Total	Up to 59 years	60–79 years	80 years and over
Male	36	52	45	24
Female	64	48	55	76
Married*	36	26	54	27
Widowed	41	3	30	64
Divorced	7	8	10	5
Single	16	63	6	4
No children	21	68	14	8
1 child	22	15	18	29
2 children	29	10	35	32
3 or more children	28	7	33	31
People living alone	34	15	36	39
2-person household	39	27	51	35
3-person household	13	26	6	14
4-or-more-person household	14	32	7	12

* Including registered life partnerships

Figure 23: Structural characteristics of people in need of care in private households by age (as a percentage) (BMG 2011, p. 12)

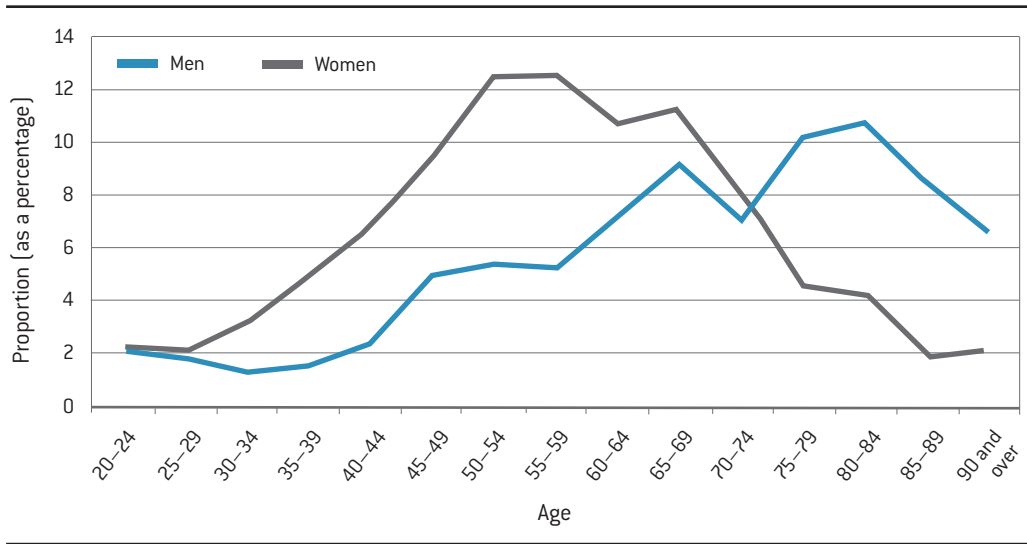


Figure 25: Carers by age and gender. Source: SOEP (2001–2006), weighted (GEK 2008, p. 69)

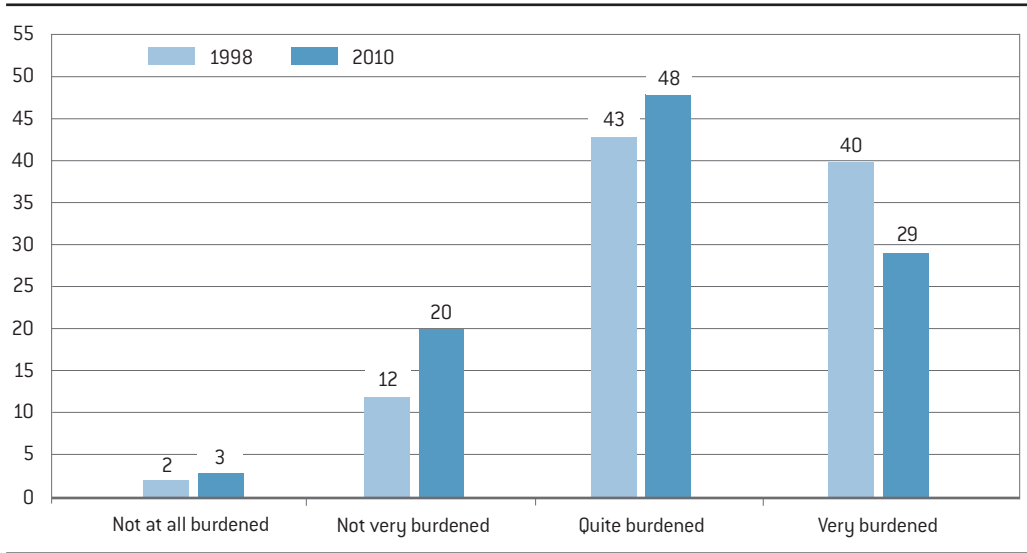


Figure 27: Burden on main carers in private households, 1998 and 2010 (where totals do not equal 100 = data not available); basis: Hauptpflegepersonen in Privathaushalten mit pflegebedürftiger Person (BMG 2011, p. 29)

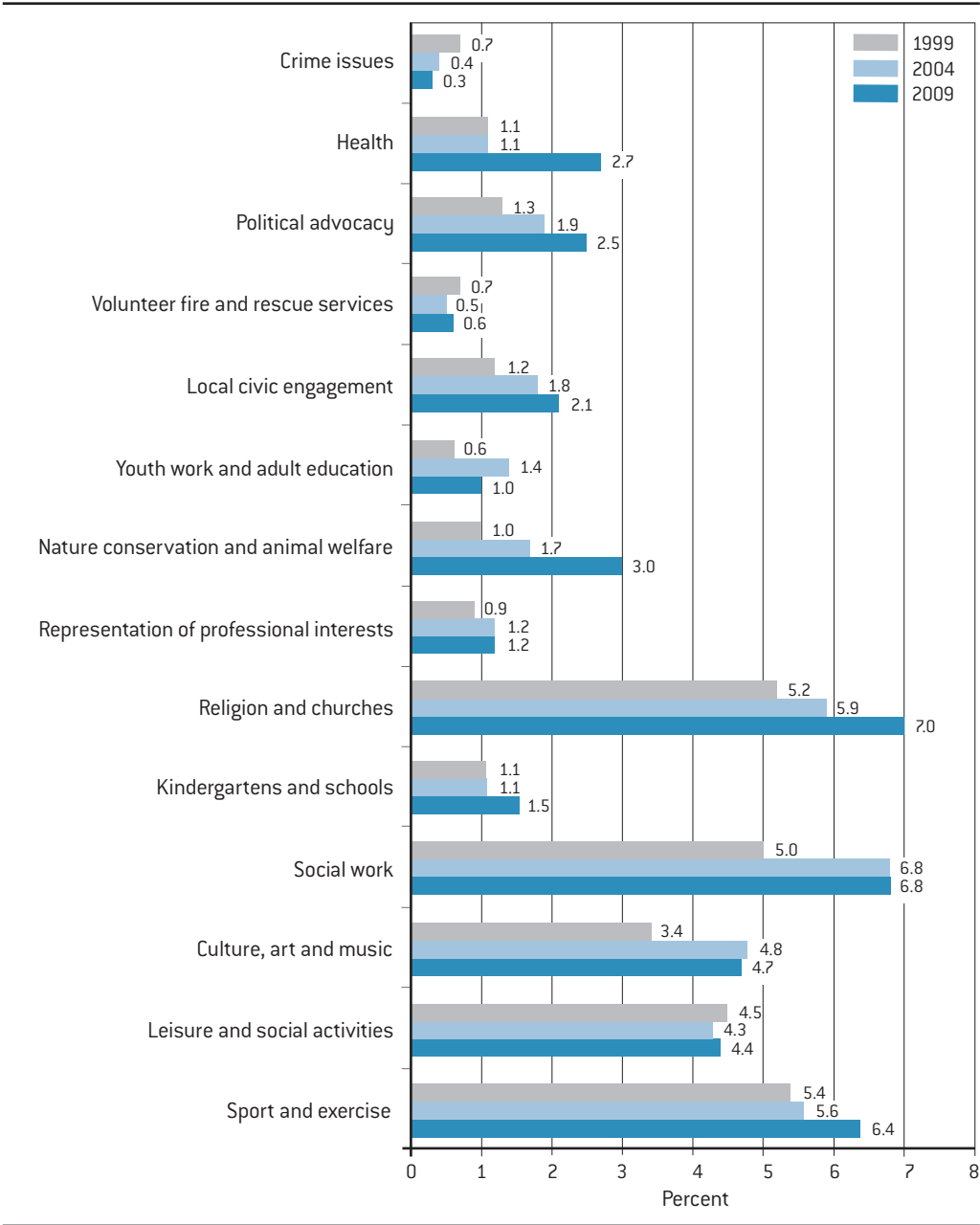


Figure 30: Areas of voluntary engagement of over 65-year-olds in 1999, 2004 and 2009, as a percentage of the age group (BMFSFJ 2010b, p. 158), multiple answers were possible

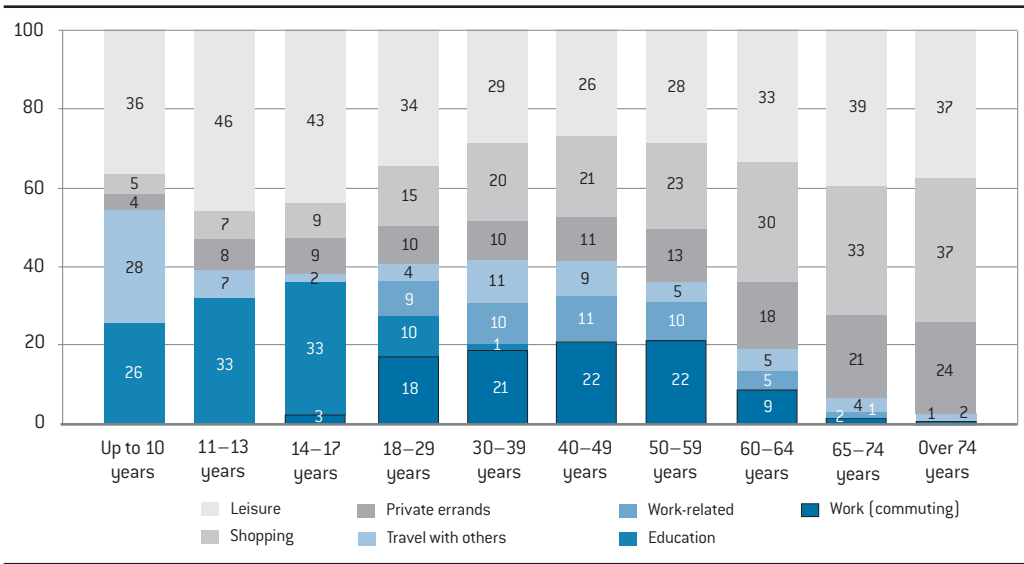


Figure 33: Reason for journeys in 2008, by age group, as a percentage (DLR and infas 2010, p. 76)

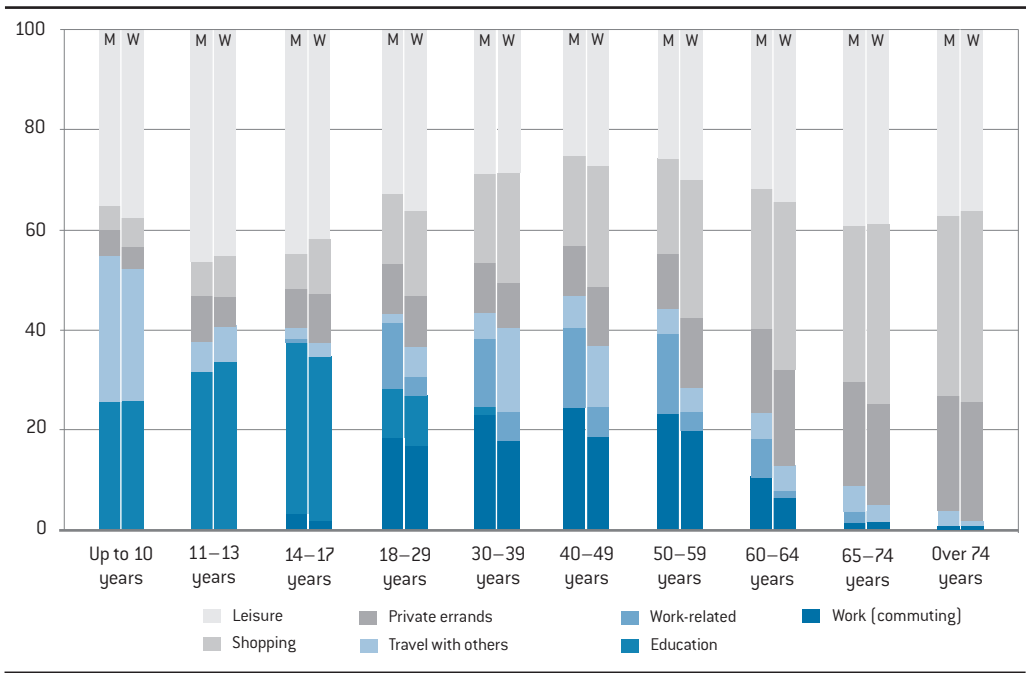


Figure 34: Reason for journeys by men and women in 2008, by age group, as a percentage (DLR and infas 2010, p. 81)

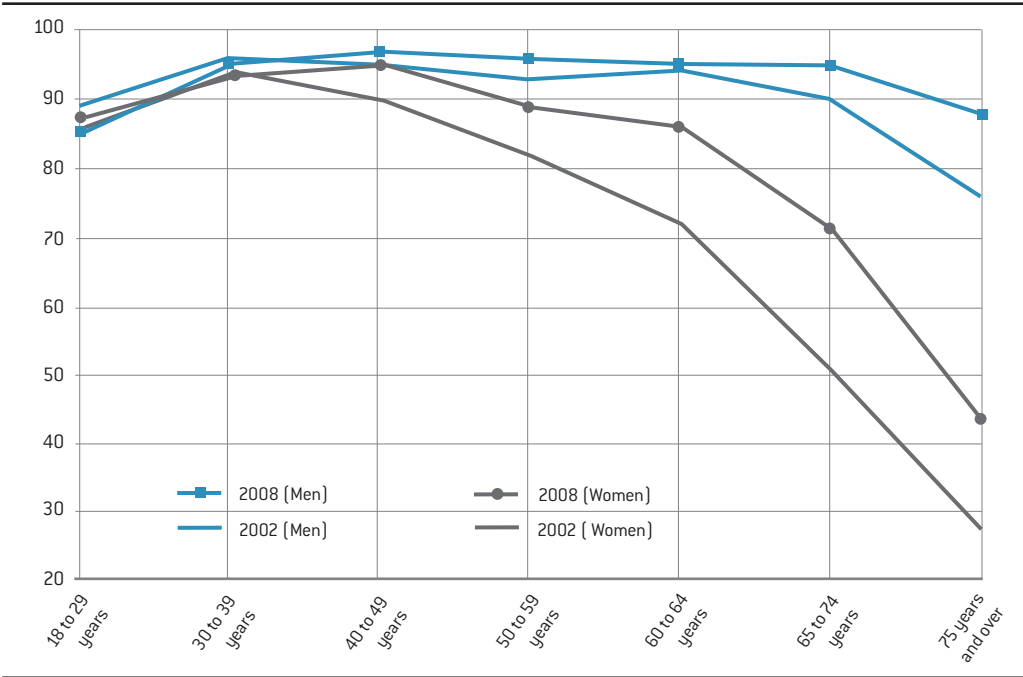


Figure 36: Car driving license ownership of men and women by age group, 2002 and 2008 (as a percentage; persons aged 18 or over) (DLR and infas 2010, p. 21)

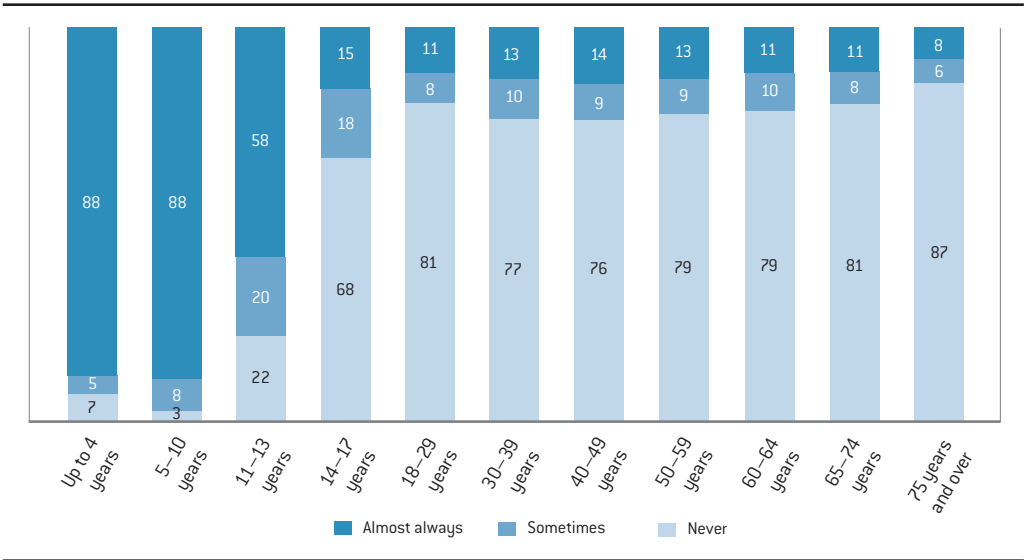


Figure 39: Frequency of wearing a bicycle helmet, by age group in 2008 (as a percentage, without interviewing adult guardian) [DLR and infas 2010, p. 107]

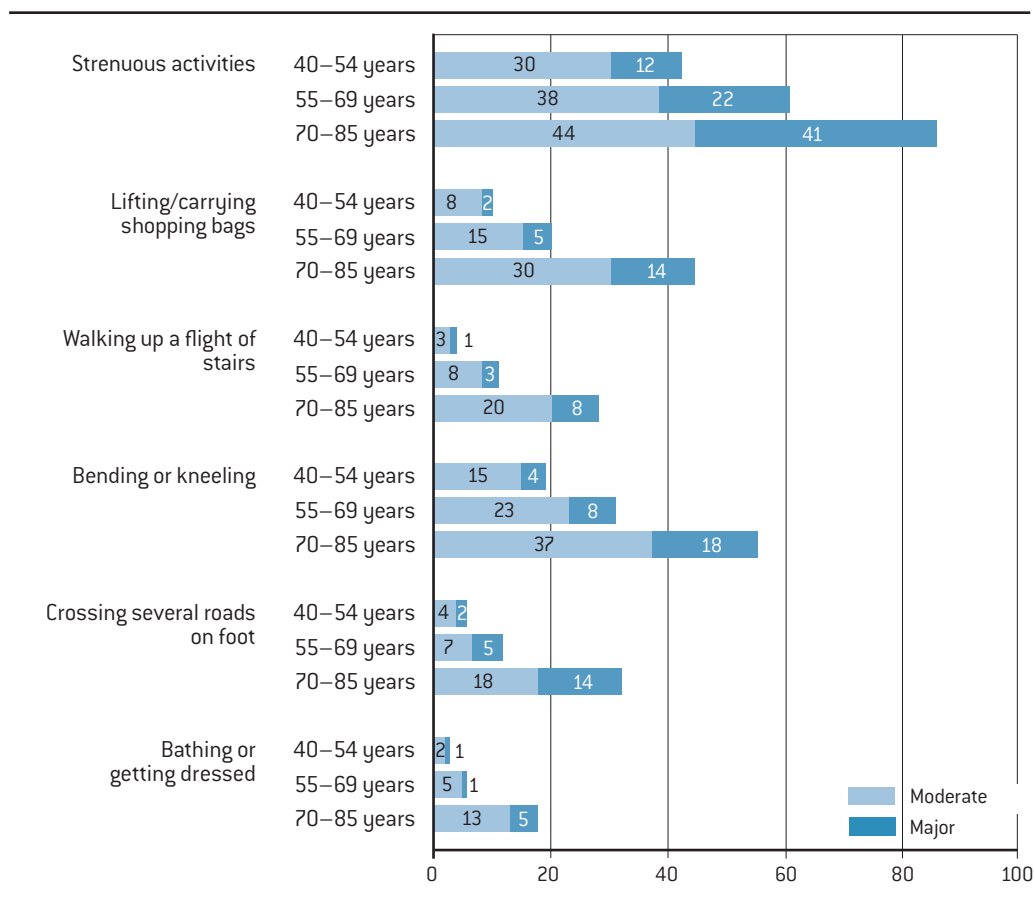


Figure 40: Mobility restrictions by age group (as a percentage), 2008 [DEAS 2008, as per Wurm, Schöllgen and Tesch-Römer 2010, p. 102]

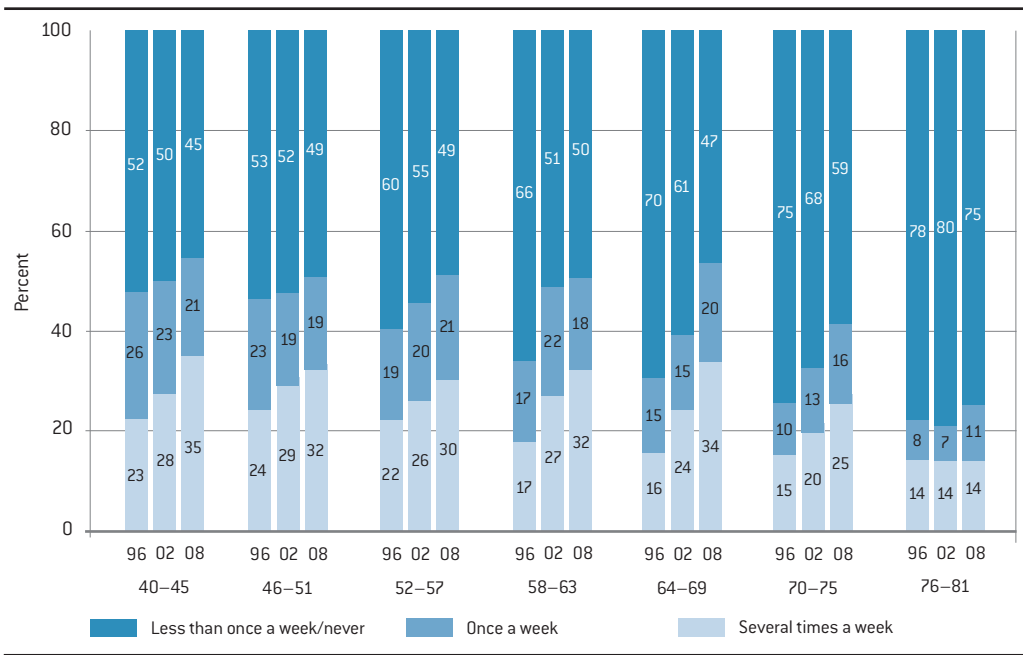


Figure 41: Cohort comparison of frequency of physical exercise by age group in 1996, 2002 and 2008 (DEAS 2008, as per Wurm, Schöllgen and Tesch-Römer 2010, p. 113)

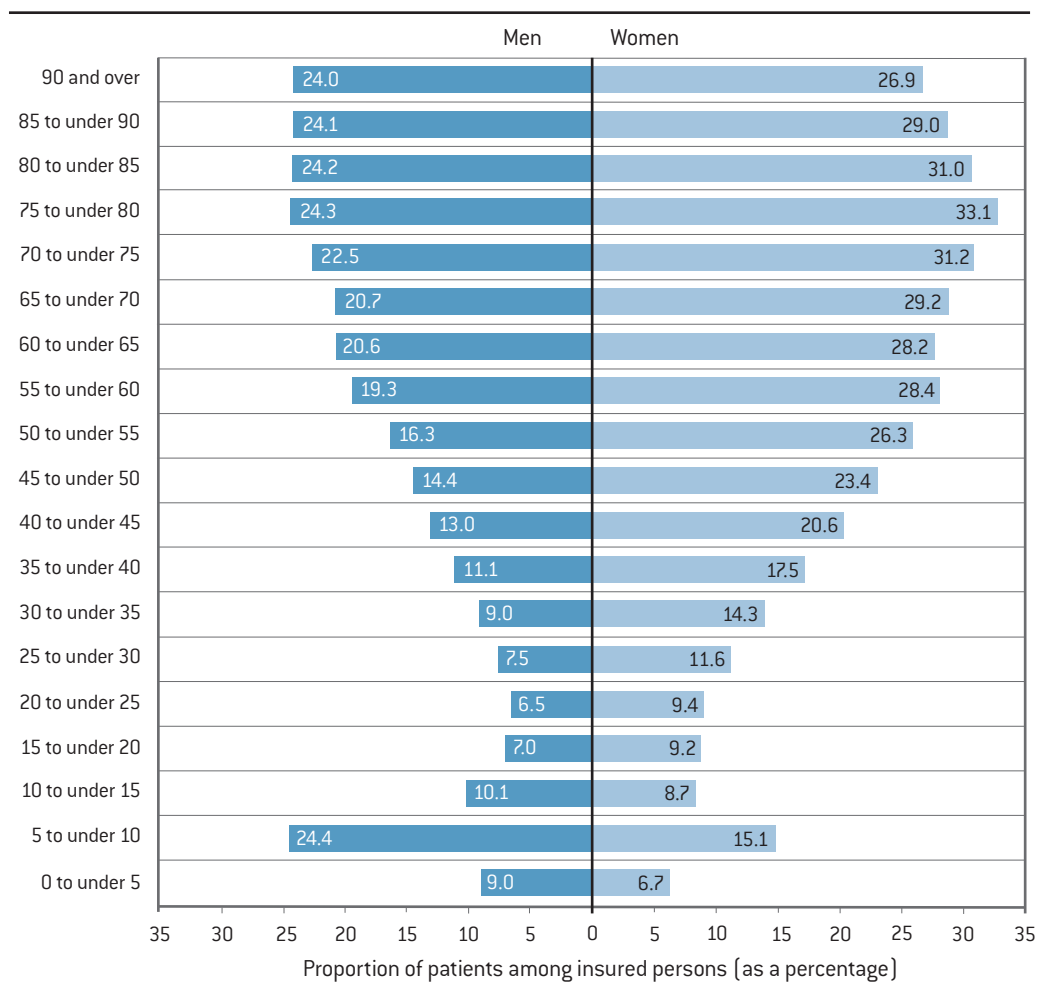


Figure 42: Patients receiving therapy, insured by AOK (2010), by age and gender [AOK-Heilmittel-Informationssystem [AOK-HIS]] (Waltersbacher 2012, p. 17)

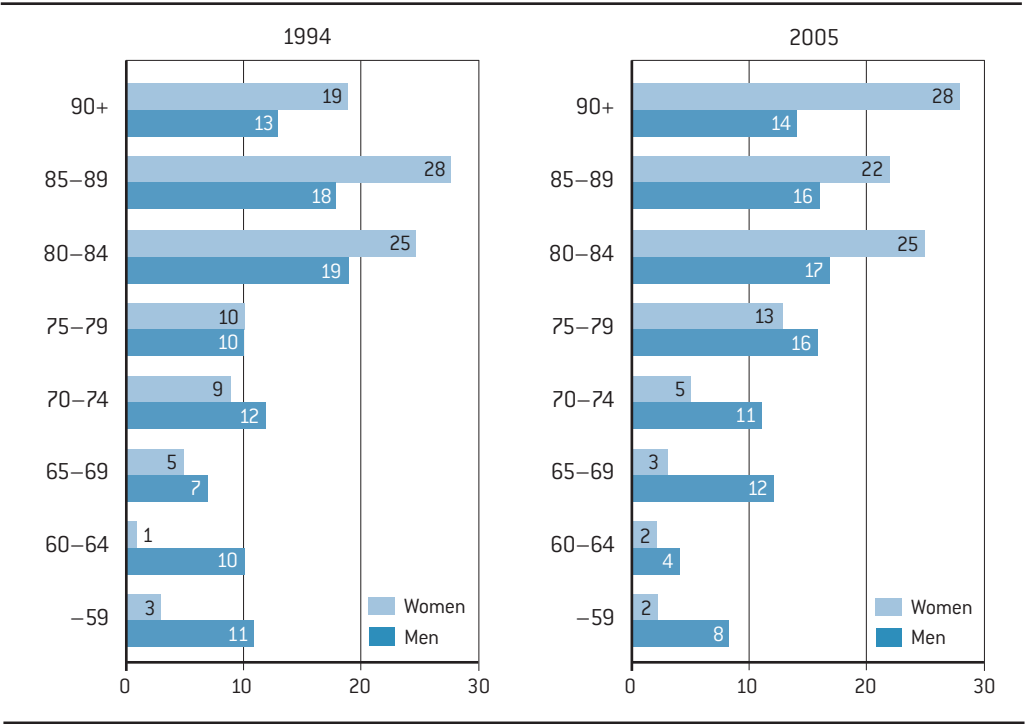


Figure 43: Residents in residential care in Germany, age composition and gender (as a percentage) (source: TNS Infratest-Heimerhebung 2005) [Schneekloth and Törne 2009, p. 84, based on the TNS Infratest-Heimerhebung 2005]

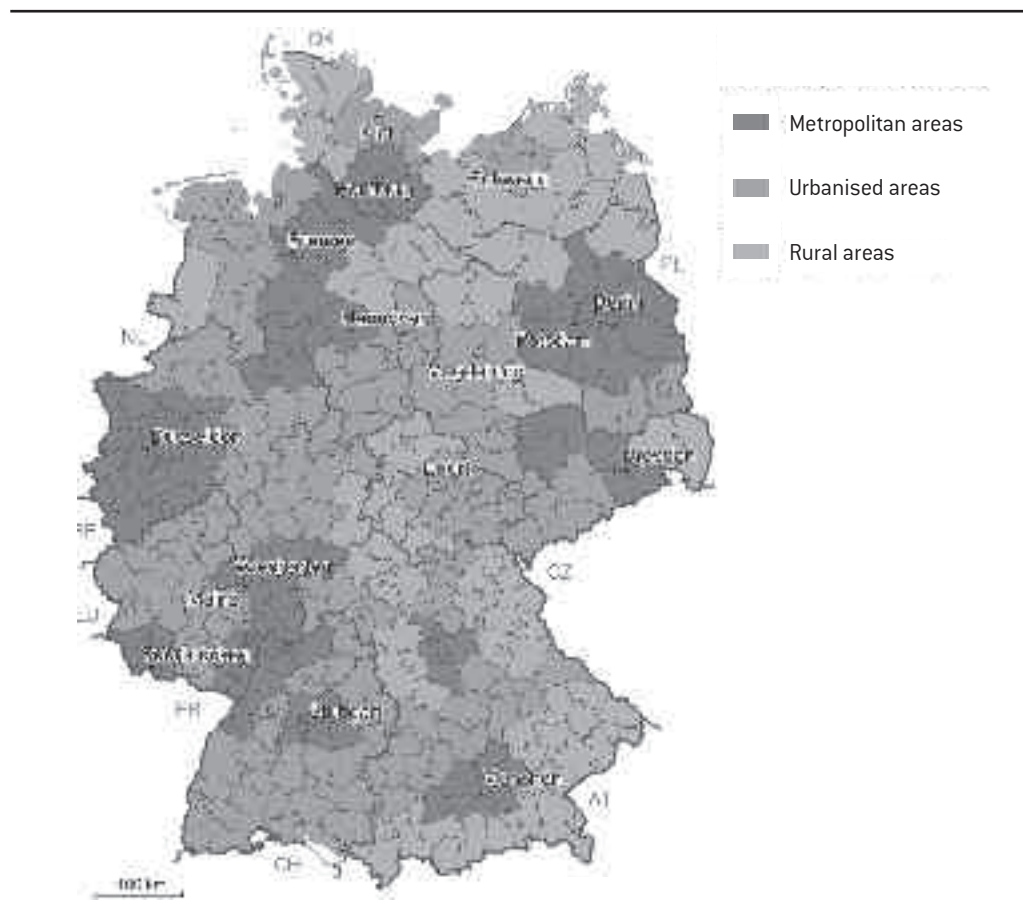


Figure 44: Region types by settlement structure (2009). Ongoing monitoring by the BBSR; geometric basis: BKG; districts: 31 December 2009 @ BBSR Bonn 2011. Download from www.bbsr.bund.de/cln_032/nn_1067208/BBSR/DE/Raumb Beobachtung/Raumabgrenzungen/SiedlungsstrukturelleGebietstypen/Regionstypen/Downloadangebote.html. Accessed on 28 May 2012.



09.3

Abbreviations

AAL: Ambient Assisted Living (AAL solutions are technological solutions to support the quality of life of older people)

ALLBUS: Allgemeine Bevölkerungsumfrage der Sozialwissenschaften = German General Social Survey

BBR: Bundesamt für Bauwesen und Raumordnung = Federal Office for Building and Regional Planning

BBSR: Bundesinstitut für Bau-, Stadt- und Raumforschung = Federal Institute for Research on Building, Urban Affairs and Spatial Development

BFW: Bundesverband Freier Immobilien- und Wohnungsunternehmen e.V. = Federal Association of Independent Real Estate and Housing Companies

BMFSFJ: Bundesministerium für Familie, Senioren, Frauen und Jugend = Federal Ministry for Family Affairs, Senior Citizens, Women and Youth

BMG: Bundesministerium für Gesundheit = Federal Ministry of Health

BMI: Body Mass Index

BMVBS: Bundesministerium für Verkehr, Bauen und Stadtentwicklung = Federal Ministry of Transport, Building and Urban Development

CASMIN: Comparative Analysis of Social Mobility in Industrial Nations

CHD: Coronary heart disease

COPD: Chronic obstructive pulmonary disease

DEAS: Deutscher Alterssurvey = German Ageing Survey

DEGS: Studie zur Gesundheit Erwachsener in Deutschland = German Health Interview and Examination Survey for Adults

DGE: Deutsche Gesellschaft für Ernährung e.V. = German Nutrition Society

DHS: Deutsche Hauptstelle für Suchtfragen e.V. = German Centre for Addiction Issues

DLR: Deutsches Zentrum für Luft- und Raumfahrt = German Aerospace Center

DV: Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung e.V. = German Association for Housing, Urban and Spatial Development

DVO: Dachverband Osteologie = Umbrella Organisation for Osteology

EARSS: European Antimicrobial Resistance Surveillance System

FAO: Food and Agriculture Organisation

FOBT: Faecal occult blood test

GEDA: Gesundheit in Deutschland aktuell = German Health Update, a telephone survey by the Robert Koch Institute

GEKID: Gesellschaft der epidemiologischen Krebsregister in Deutschland e.V. = Association of Population-based Cancer Registries in Germany

GSTel: Telefonischer Gesundheitssurvey = Telephone Health Survey

ICD: International Classification of Diseases

IFT: Institut für Therapieforchung = Institute for Therapy Research

IGeL: Individuelle Gesundheitsleistungen = individual health services not covered by statutory health insurance and thus paid for by the individual

ILO: International Labour Organisation

INKAR: Indikatoren und Karten zur Raum- und Stadtentwicklung in Deutschland = Indicators and Maps for Spatial and Urban Development in Germany

ISCED: International Standard Classification of Education

KORA: Kooperative Gesundheitsforschung in der Region Augsburg = Cooperative Health Research in the Augsburg Region

MiD: Mobilität in Deutschland = Mobility in Germany, a study by the German Aerospace Center

MONICA: Multinational monitoring of trends and determinants in cardiovascular disease

MRSA: Methicillin-resistant *Staphylococcus aureus*

OMAHA: Operationalisierung von Multimorbidität und Autonomie im höheren Alter = Berlin study on operationalising multi-morbidity and autonomy in ageing populations

RKI: Robert Koch-Institut = Robert Koch Institute

SOEP: Sozio-ökonomisches Panel = Socio-Economic Panel

STIKO: Ständige Impfkommission = Standing Vaccination Committee, at the Robert Koch Institute

WHO: World Health Organisation

» 09.4 References

- Annemans, L. et al. (2008):** Gout in the UK and in Germany: prevalence, comorbidities and management in general practice 2000–2005. *Ann. Rheum. Dis.*, 67, pp. 960–966.
- Arbeitsgemeinschaft Media-Analyse e.V., Media-Micro-Census GmbH (2011):** MA Media-Analyse 2011 – Pressemedien I. Frankfurt am Main.
- ARD Medien Basisdaten 2011.** Internet: www.ard.de/intern/medienbasisdaten/mediennutzung. Accessed on 6/3/2012.
- Autorengruppe Bildungsberichterstattung (ed.) (2010):** Bildung in Deutschland. Bielefeld.
- Bäcker, G. et al. (2010):** Rente mit 67? Zu wenig Arbeitsplätze und zu wenig gute Arbeit für ein Arbeiten bis 67. Vierter Monitoring-Bericht des Netzwerks für eine gerechte Rente. Berlin.
- Bäcker, G., Kistler, E. (2009):** Rente mit 67 – Erhöhtes Risiko von Einkommenseinbußen und Armut im Alter. Zweiter Monitoring-Bericht des Netzwerks für eine gerechte Rente. Berlin.
- Barmer GEK (ed.) (2010):** Pflegereport 2010. Autoren: Rothgang, H. et al., Zentrum für Sozialpolitik (ZeS) der Universität Bremen, St. Augustin. Download from www.barmer-gek.de/barmer/web/Portale/Presseportal/Subportal/Presseinformationen/Archiv/2010/101130-Pflegereport/PDF-Pflegereport-2010,property=Data.pdf. Accessed on 11/5/2012.
- Baykara-Krumme, H. (2007):** Gar nicht so anders: Eine vergleichende Analyse der Generationenbeziehungen bei Migranten und Einheimischen in der zweiten Lebenshälfte. WZB Discussion Paper Nr. SP IV 2007–604. Hg. vom Wissenschaftszentrum Berlin für Sozialforschung (WZB). Berlin. Download from <http://bibliothek.wzb.eu/pdf/2007/iv07-604.pdf>. Accessed on 22/2/2011.
- Beetz, S. et al. (2009):** Altern in Deutschland. Altern in Gemeinde und Region. Band 5. Deutsche Akademie der Naturforscher Leopoldina e.V., Halle.
- BFW – Bundesverband freier Immobilien- und Wohnungsunternehmen e.V. (2007):** BFW-Studie: Wohnen im Alter. BFW e.V., Berlin.
- Blödnor, S. (2009):** Medienhandeln im höheren Lebensalter. In: Schorb, B. et al. (ed.): Medien und höheres Lebensalter. VS-Verlag, Wiesbaden, S. 157–170.
- BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (ed.) (2001):** Dritter Bericht zur Lage der älteren Generation: Alter und Gesellschaft. Berlin.
- BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (ed.) (2009):** Altern im Wandel – Zentrale Ergebnisse des Deutschen Alterssurveys. Berlin.
- BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (ed.) (2010a):** Sechster Bericht zur Lage der älteren Generation in der Bundesrepublik Deutschland. Bericht der Sachverständigenkommission an das Bundesministerium für Familie, Senioren, Frauen und Jugend. Berlin.
- BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (ed.) (2010b):** Hauptbericht des Freiwilligensurvey 2009. Author: Gensicke, T. München.

- BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (ed.) (2010c):** Monitor Engagement 2, Freiwilliges Engagement in Deutschland 1999–2004–2009, Kurzbericht des 3. Freiwilligensurvey. Author: Gensicke, T. Berlin.
- BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend (ed.) (2011):** Wie und wofür engagieren sich ältere Menschen? Monitor Engagement, vol. 4. Author: Dathe, D. Berlin.
- BMG – Bundesministerium für Gesundheit (ed.) (2011):** Abschlussbericht zur Studie »Wirkungen des Pflege-Weiterentwicklungsgesetzes«, Bericht zu den Repräsentativerhebungen im Auftrag des Bundesministeriums für Gesundheit von TNS Infratest Sozialforschung. München, Berlin.
- BMG – Bundesministerium für Gesundheit (ed.) (2012):** Vorsorgeleistungen der gesetzlichen Krankenkassen. Download from http://www.bmg.bund.de/fileadmin/dateien/Downloads/G/GKV/Tabelle_Frueherkennung_Krebs_GKV_Leistungen_110331.pdf. Accessed on 20/9/2012.
- BMVBS – Bundesministerium für Verkehr, Bauen und Wohnen (ed.) (2011):** Wohnen im Alter. Forschungen, Vol. 147. Bonn.
- Brussig, M. (2010a):** Anhaltende Ungleichheiten in der Erwerbsbeteiligung Älterer: Zunahme an Teilzeitbeschäftigung. Inzwischen steigt auch die Erwerbsbeteiligung im Rentenalter. In: Altersübergangs-Report, Nr. 2010-03. Download from www.iaq.uni-due.de/auem-report/2010/2010-03/auem2010-03.pdf. Accessed on 12/1/2011.
- Brussig, M. (2010b):** Erwerbstätigkeit im Alter hängt vom Beruf ab. In: Altersübergangs-Report, Nr. 2010-05. Download from www.boeckler.de/pdf/fof/S-2008-194-3-6.pdf. Accessed on 11/5/2012.
- Brussig, M. (2010c):** Künftig mehr Zugänge in Altersrenten absehbar. Gegenwärtig kein Ausweichen in die Erwerbsminderungsrente zu beobachten. In: Altersübergangs-Report 2010-02. Download from www.iaq.uni-due.de/auem-report/2010/2010-02/auem2010-02.pdf. Accessed on 12/1/2011.
- Bundesagentur für Arbeit (2012):** Geringfügig entlohnte Beschäftigung nach Altersgruppen und Zeitreihen. Internet: www.statistik.arbeitsagentur.de/nn_31962/SiteGlobals/Forms/Rubrikensuche/Rubrikensuche_Form.html?view=processForm&resourceId=210368&input_=&pageLocale=de&topicId=31690&year_month=aktuell&year_month.GROUP=1&search=Suchen. Accessed on 8/3/2012.
- Bundesamt für Migration und Flüchtlinge (ed.) (2008):** Leben Migranten wirklich länger? Eine empirische Analyse der Mortalität von Migranten in Deutschland. Working Paper No. 16 der Forschungsgruppe für Migration und Integration. Author: Kohls, M. Nürnberg.
- Bundesregierung (2010):** Beschäftigungssituation Älterer, ihre wirtschaftliche und soziale Lage und die Rente ab 67. Antwort der Bundesregierung auf die Große Anfrage [Drucksache 17/169] der Abgeordneten Ernst, K. et al. der Fraktion DIE LINKE. 17. Wahlperiode, 23/6/2010. Deutscher Bundestag, Berlin [Drucksache 17/2271]. Download from www.dipbt.bundestag.de/dip21/btd/17/022/1702271.pdf. Accessed on 13/12/2010.
- Bundesregierung (2011):** Rente erst ab 67 – Risiken für Jung und Alt. Antwort der Bundesregierung auf die Große Anfrage [Drucksache 17/5106] der Abgeordneten Birkwald, M. W. et al. der Fraktion DIE LINKE. 17. Wahlperiode, 30/11/2011. Deutscher Bundestag, Berlin [Drucksache 17/7966]. Download from www.dipbt.bundestag.de/dip21/btd/17/079/1707966.pdf. Accessed on 11/5/2012.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA) (2011):** Die jungen Alten. Expertise zur Lebenslage von Menschen zwischen 55 und 65 Jahren. Authors: Heusinger, J., Wolter, B. Köln.
- Choi, H. K. et al. (2004):** Alcohol intake and risk of incident gout in men: a prospective study. *Lancet*, 364, pp. 1277–1281.

- Choi, H. K., Liu, S., Curhan, G. (2005):** Intake of purine-rich foods, protein, and dairy products and relationship to serum levels of uric acid. *Arthritis and Rheumatism*, 52, 1, pp. 283–289.
- Coca, V., Nink, K. (2010):** Arzneimittelverordnungen nach Alter und Geschlecht. In: Schwabe, U., Paffrath, D. (ed.): *Arzneimittelverordnungs-Report 2010*. Berlin, Heidelberg, S. 921–946.
- DEAS – Deutscher Alterssurvey 2008.** Deutsches Zentrum für Altersfragen, Berlin. Internet: www.gerostat.de. Accessed on 3/4/2012.
- Deutsche Rentenversicherung Bund (2010):** Statistik der Deutschen Rentenversicherung: Rentenbestand am 31/12/2009. Berlin.
- DGE – Deutsche Gesellschaft für Ernährung e. V. (ed.) (2009):** DGE Beratungs-Standards. Ernährung älterer Menschen. Bonn, p. 8/10.
- DGE – Deutsche Gesellschaft für Ernährung e. V. (ed.) (2011):** Stellungnahme – Vitamin D und Prävention ausgewählter chronischer Krankheiten. Bonn.
- DGE – Deutsche Gesellschaft für Ernährung, Österreichische Gesellschaft für Ernährung, Schweizerische Gesellschaft für Ernährungsforschung, Schweizerische Vereinigung für Ernährung (ed.) (2012):** Referenzwerte für die Nährstoffzufuhr. Vitamin D. 1. ed., 4th review Bonn, p. 79–96.
- DHS – Deutsche Hauptstelle für Suchtfragen e. V. (2011):** Substanzbezogene Störungen im Alter. Hamm.
- Diehm, C. (2011):** Schlaganfall bei Diabetes. In: *diabetesDE* (ed.): *Deutscher Gesundheitsbericht Diabetes 2011*. Berlin, p. 59–65.
- DLR – Deutsches Zentrum für Luft- und Raumfahrt e. V., infas – Institut für Angewandte Sozialwissenschaft GmbH (2010):** MiD 2008 – Mobilität in Deutschland 2008. Ergebnisbericht. Bonn/Berlin.
- DV – Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung e. V. (2009):** Wohnen im Alter. Bericht der Kommission des DV in Kooperation mit dem BMVBS. Berlin.
- dvv – Deutscher Volkshochschul-Verband e. V. (2011):** {[Annual Report]} 2010/2011. Bonn.
- Engstler, H., Tesch-Römer, C. (2010):** Lebensformen und Partnerschaft. In: Motel-Klingebiel, A., Wurm, S., Tesch-Römer, C. (ed.): *Altern im Wandel. Befunde des Deutschen Alterssurveys (DEAS)*. Stuttgart, p. 163–187.
- Epping, B., Hendrix, R. (2010):** Lernen von den Niederlanden – »Entscheidend gegen MRSA ist eine Antibiotikapolitik«. In: *Orthopädie und Unfallchirurgie aktuell*, vol. 148/2, p. 126–127.
- European Antimicrobial Resistance Surveillance System (EARSS) (2009):** Annual Report 2008. Bilthoven.
- Forschungsverbund Berichterstattung zur sozioökonomischen Entwicklung der Bundesrepublik Deutschland: Arbeit und Lebensweisen. (ed.) (2009):** Prozessproduzierte Daten und Sondererhebungen der gesetzlichen Rentenversicherung. Jahrgangsspezifisches Rentengeschehen. SOEB-Arbeitspapier 2009-2. Author: Mika, T. Göttingen.
- GEDA 2010,** siehe RKI – Robert Koch-Institut GEDA 2010.
- GEK – Gmünder ErsatzKasse (ed.) (2008):** Pflegereport 2008. Authors: Rothgang, H. et al., Zentrum für Sozialpolitik (ZeS) der Universität Bremen, St. Augustin. Download from www.liga-rlp.de/fileadmin/LIGA/Internet/Downloads/Dokumente/Dokumente_2008/GEK-Pflegereport-2008_-_Schwerpunkt_Medizinische_Versorgung_in_Heimen.pdf. Accessed on 11/5/2012.
- GEKID (2011):** Atlas der Krebsinzidenz und Krebsmortalität der Gesellschaft der epidemiologischen Krebsregister in Deutschland e. V. »Der interaktive Krebs-Atlas der GEKID«. Internet: www.gekid.de/Atlas/CurrentVersion/Inzidenz/atlas.html. Accessed on 14/3/2012.

- Geldmacher, H. et al. (2008):** Die Prävalenz der chronisch obstruktiven Lungenerkrankung (COPD) in Deutschland. Ergebnisse der BOLD-Studie. In: Deutsche Medizinische Wochenschrift, vol. 133, pp. 2609–2614.
- Geyer, D. (2009):** Spezifische Ansätze der Rehabilitation älterer Suchtkranker. In: Adler, G. et al.: Seelische Gesundheit und Lebensqualität im Alter. Depressionen – Demenz – Versorgung. Schriftenreihe der Deutschen Gesellschaft für Gerontopsychiatrie und -psychotherapie [DGGPP]. Stuttgart, pp. 340–353.
- Glaeske, G. (2011):** Medikamente – Psychotrope und andere Arzneimittel mit Missbrauchs- und Abhängigkeitspotential. In: Deutsche Hauptstelle für Suchtfragen e.V. (DHS): Jahrbuch Sucht 2011. Geesthacht, pp. 73–96.
- Glaesmer, H. (2012):** Die Langzeitfolgen des Zweiten Weltkrieges in der deutschen Bevölkerung. In: Ärzteblatt Sachsen-Anhalt, 23, pp. 24–58.
- Grimm, B., Lohmann, M. (2009):** Auswirkungen des demographischen Wandels auf den Tourismus und Schlussfolgerungen für die Tourismuspolitik. Eine Studie im Auftrag des Bundesministeriums für Wirtschaft und Technologie [Kurzfassung]. Kiel.
- Hader, C. et al. (2004):** Diagnostik, Therapie und Verlaufskontrolle des Diabetes Mellitus im Alter. Evidenzbasierte Leitlinien der Deutschen Diabetes-Gesellschaft (DDG) und der Deutschen Gesellschaft für Geriatrie (DGG). In: Scherbaum, W. A., Kiess W. (ed.): Diabetes und Stoffwechsel, vol. 13, pp. 31–56.
- Heidemann, C., Du, Y., Scheidt-Nave, C. (2011):** Diabetes mellitus in Deutschland. Hg. vom Robert Koch-Institut Berlin. GBE kompakt 3/2011, Jg. 2. Internet: www.rki.de/gbe-kompakt. Accessed on 6/3/2012.
- Helmholtz Zentrum München (2011):** KORA Herzinfarktregister Augsburg. Herzinfarkt-Raten je 100.000 Einwohner und Letalität in Augsburg nach Alter und Geschlecht. Internet: www.gbe-bund.de. Accessed on 20/3/2012.
- Holt, S., Schmiedl, S., Thürmann, P. A. (2010):** Potenziell inadäquate Medikation für ältere Menschen: Die PRISCUS-Liste. Dtsch. Ärzteblatt Int. 2010, 107 (31–32): 543–51. DOI:10.3238/arztebl.2010.0543.
- Icks, A. et al. (2006):** Versorgungsqualität und Ausmaß von Komplikationen an einer bevölkerungsbezogenen Stichprobe von Typ 2-Diabetespatienten. Dtsch. Med. Wochenschr., vol. 131, pp. 73–78.
- Icks, A. et al. (2009):** Differences in trends in estimated incidence of myocardial infarction in non-diabetic and diabetic people: Monitoring Trends and Determinants on Cardiovascular Diseases (MONICA)/Cooperative Health Research in the Region of Augsburg (KORA) registry. Diabetologia, 52, pp. 1836–1841.
- Icks, A. et al. (2011):** Incidence of renal replacement therapy (RRT) in the diabetic compared with the non-diabetic population in a German region, 2002–08. Nephrol Dial Transplant, 26, pp. 264–269.
- Icks, A., Kulzer, B., Razum, O. (2011):** Diabetes bei Migranten. In: diabetesDE [ed.]: Deutscher Gesundheitsbericht Diabetes 2011. Berlin, pp. 148–154.
- Initiative D21 e.V., TNS Infratest GmbH (ed.) (2010):** (N)Onliner-Atlas 2010. Eine Topographie des digitalen Grabens durch Deutschland. Download from www.initiaved21.de/wp-content/uploads/2010/06/NONLINER_2010.pdf. Accessed on 3.4.2012.
- Initiative D21 e.V., TNS Infratest GmbH (ed.) (2011):** (N)Onliner-Atlas 2011. Eine Topographie des digitalen Grabens durch Deutschland. Download from www.initiaved21.de/wp-content/uploads/2011/07/NOnliner_2011.pdf. Accessed on 3.4.2012.
- INKAR 2011 – Indikatoren und Karten zur Raum- und Stadtentwicklung (Elektronische Ressource).** Ed. from Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR). CD-ROM. Bonn.

- Jaspers, B., Schindler, T. (2004):** Gutachten zum Stand der Palliativmedizin und Hospizarbeit in Deutschland und im Vergleich zu ausgewählten Staaten. (Auftraggeber: Enquete-Kommission des Bundestages »Ethik und Recht der modernen Medizin«).
- Jonas, I. (2007):** Demenz und Migration: Vergessen in der zweiten Heimat. In: ProAlter, 2/2007, pp. 6–9.
- Kempf, K., Martin, S. (2011):** Versorgungsqualität der Menschen mit Diabetes in Deutschland – Folgeerkrankungen und Sterblichkeit. In: diabetesDE (ed.): Deutscher Gesundheitsbericht Diabetes 2011. Berlin, pp. 160–165.
- Kerner, W. et al. (2001):** Definition, Klassifikation und Diagnostik des Diabetes mellitus. Evidenzbasierte Diabetes-Leitlinie DDG. Hg. von der Deutschen Diabetes Gesellschaft e.V., Berlin.
- Kipp, J. (2009):** Zum Zusammenhang von Trauma und Angst. In: Adler et al.: Seelische Gesundheit und Lebensqualität im Alter. Depressionen – Demenz – Versorgung. Schriftenreihe der Deutschen Gesellschaft für Gerontopsychiatrie und -psychotherapie (DGGPP). Stuttgart, pp. 69–72.
- Knopf, H. et al. (2011):** Prospektive Studie zum Einfluss von Polypharmazie auf die Krankenhausaufnahme – Berliner Studie zur Operationalisierung von Multimorbidität und Autonomie im Höheren Alter (OMAHA). Kongressbeitrag Forum Medizin 21, 45. Kongress für Allgemeinmedizin und Familienmedizin, 22/9–24/9/2011. Internet: www.egms.de/static/en/meetings/fom2011/11fom109.shtml. Accessed on 29/2/2012.
- Köhne-Finster, S., Lingnau, A. (2008):** Untersuchung der Datenqualität erwerbsstatistischer Angaben im Mikrozensus. Ergebnisse des Projekts »Nachbefragung im Mikrozensus/LFS«. In: Wirtschaft und Statistik 12/2008. Statistisches Bundesamt, Wiesbaden, pp. 1067–1088.
- Körner, T., Puch, K. (2009):** Der Mikrozensus im Kontext anderer Arbeitsmarktstatistiken. Ergebnisunterschiede und ihre Hintergründe. In: Wirtschaft und Statistik 06/2009. Statistisches Bundesamt, Wiesbaden, pp. 528–552.
- Köster, I. et al. (2011):** Direct Costs of Diabetes Mellitus in Germany – CoDiM 2000–2007. Exp Clin Endocrinol Diabetes, 119, pp. 377–385.
- Kraus, L., Pabst, A. (2010):** Der Epidemiologische Suchtsurvey 2009: Ein nationaler und internationaler »Benchmark«. In: Sucht, 56 (5), pp. 313–314.
- Lawall, H. (2011):** Diabetische Fußkrankungen. In: diabetesDE (ed.): Deutscher Gesundheitsbericht Diabetes 2011, Berlin, pp. 66–76.
- Mahne, K. et al. (2010):** Das Wohnumfeld Älterer. In: Motel-Klingebiel et al.: Altern im Wandel. Befunde des Deutschen Alterssurveys (DEAS). Stuttgart, pp. 147–162.
- Mahne, K., Motel-Klingebiel, A. (2010):** Familiäre Generationenbeziehungen. In: Motel-Klingebiel, A., Wurm, S., Tesch-Römer, C. (ed.): Altern im Wandel. Befunde des Deutschen Alterssurveys (DEAS). Stuttgart, pp. 188–214.
- Max Rubner-Institut (ed.) (2008a):** Nationale Verzehrstudie II. Ergebnisbericht, Teil 1. Die bundesweite Befragung zur Ernährung. Karlsruhe.
- Max Rubner-Institut (ed.) (2008b):** Nationale Verzehrstudie II. Ergebnisbericht, Teil 2. Die bundesweite Befragung zur Ernährung. Karlsruhe.
- Medizinischer Dienst des Spitzenverbandes Bund der Krankenkassen e.V. (2011):** Präventionsbericht 2011: Primärprävention nach dem individuellen Ansatz: Erreichte Personen bei Aktivitäten zur individuellen Gesundheitsförderung unter Beteiligung der gesetzlichen Krankenkassen (2010). Internet: www.gbe-bund.de. Accessed on 10/5/2012.

- Menning, S. (2006):** Gesundheitszustand und gesundheitsrelevantes Verhalten Älterer. GeroStat-Report Altersdaten 02/2006. Deutsches Zentrum für Altersfragen, Berlin.
- Menning, S., Hoffmann, E. (2009):** Ältere Migrantinnen und Migranten. GeroStat Report 1/2009. Deutsches Zentrum für Altersfragen, Berlin.
- Mika, T. (2006):** Potenziale der Migrationsforschung mit dem Rentenbestand und dem Rentenzugang. DRV-Schriften, vol. 55/2006.
- Mika, T. (2007):** Aussiedler und Spätaussiedler im Rentenbestand – Konsequenzen der Reformen der Alterssicherung für »Fremdrentner«. Vortrag auf der Herbsttagung 2007 des AK »Migration – Integration – Migration« der Deutschen Gesellschaft für Demographie »Zuwanderung und Integration von Spätaussiedlern«. Download from www.dgd-online.de/fileadmin/ak_migration/2007/AK0714.pdf. Accessed on 9/5/2012.
- Mikrozensus 2009.** Internet: www.gerostat.de. Accessed on 3/4/2012.
- Mikrozensus 2010.** Internet: www.gerostat.de. Accessed on 3/4/2012.
- Mikrozensus 2011a:** Fragen zur Gesundheit (2009): Durchschnittliche Körpermaße der Bevölkerung (Größe in m, Gewicht in kg). Gliederungsmerkmale: Jahre, Deutschland, Alter, Geschlecht. Internet: www.gbe-bund.de. Accessed on 16/2/2012.
- Mikrozensus 2011b:** Fragen zur Gesundheit (2009): Verteilung der Bevölkerung auf Body-Mass-Index-Gruppen. Gliederungsmerkmale: Jahre, Deutschland, Alter, Geschlecht, Body-Mass-Index (2009). Internet: www.gbe-bund.de. Accessed on 16/2/2012.
- Motel-Klingebiel, A., Simonson, J., Romeu Gordo, L. (2010):** Materielle Sicherung. In: Motel-Klingebiel, A., Wurm, S., Tesch-Römer, C. (ed.): Altern im Wandel. Befunde des Deutschen Alterssurveys. Stuttgart, pp. 61–89.
- Motel-Klingebiel, A., Wurm, S., Tesch-Römer, C. (ed.) (2010):** Altern im Wandel. Befunde des Deutschen Alterssurveys (DEAS). Stuttgart.
- Naumann, D., Romeu Gordo, L. (2010):** Gesellschaftliche Partizipation: Erwerbstätigkeit, Ehrenamt und Bildung. In: Motel-Klingebiel, A., Wurm, S., Tesch-Römer, C. (ed.): Altern im Wandel. Befunde des Deutschen Alterssurveys (DEAS). Stuttgart, pp. 118–141.
- Noll, H.-H., Weick, S. (2012):** Altersarmut: Tendenz steigend. Analysen zu Lebensstandard und Armut im Alter. In: Informationsdienst Soziale Indikatoren, ISI 47, January 2012, GESIS, S. 1–6.
- NRZ – Nationales Referenzzentrum für Surveillance von nosokomialen Infektionen (2011a):** MRSA-KISS Referenzdaten 2010. Internet: www.nrz-hygiene.de. Accessed on 20/3/2012.
- NRZ – Nationales Referenzzentrum für Surveillance von nosokomialen Infektionen (2011b):** MRSA-KISS-REHA Referenzdaten 2010. Internet: www.nrz-hygiene.de. Accessed on 20/3/2012.
- Nöthen, M., Böhm, K. (2009):** Krankheitskosten in Deutschland. Welchen Preis hat die Gesundheit im Alter? In: Böhm, K., Tesch-Römer, C., Ziese, T. (ed.): Beiträge zur Gesundheitsberichterstattung des Bundes: Gesundheit und Krankheit im Alter. Robert Koch-Institut, Berlin, pp. 228–246.
- Özcan, V., Seifert, W. (2004):** Gutachten für den 5. Altenbericht der Bundesregierung im Auftrag des Deutschen Zentrums für Altersfragen zur Lebenslage älterer Migrantinnen und Migranten in Deutschland. Download from www.bmfsfj.de/bmfsfj/generator/RedaktionBMFSFJ/Abteilung3/Pdf-Anlagen/oezcan-lebenslage-aelterer-migrantinnen-migranten,property=pdf,bereich=bmfsfj,sprache=de,rwb=true.pdf. Accessed on 9/3/2012.
- Pflegestatistik der Statistischen Ämter des Bundes und der Länder.** Internet: www.gbe-bund.de. Accessed on 9/5/2012.

- Rapp, K., Becker, C. [2009]:** Sturzprophylaxe. Vorsicht Stufe. In: Gesundheit und Gesellschaft 12, vol. 6/09, pp. 24–27.
- Reitze, H. (ed.) [2011]:** Media Perspektiven. Basisdaten. Daten zur Mediensituation in Deutschland 2011. Frankfurt am Main.
- RKI – Robert Koch-Institut Berlin [o. J.]:** GBE kompakt 2 [6]. Internet: www.rki.de/gbe-kompakt. Accessed on 1/9/2011.
- RKI – Robert Koch-Institut (ed.) [2005a]:** Altersdemenz. Gesundheitsberichterstattung des Bundes, vol. 28. Berlin.
- RKI – Robert Koch-Institut (ed.) [2005b]:** Armut, soziale Ungleichheit und Gesundheit. Expertise des Robert Koch-Instituts zum 2. Armuts- und Reichtumsbericht der Bundesregierung.
- RKI – Robert Koch-Institut (ed.) [2006]:** Koronare Herzkrankheit und akuter Myokardinfarkt. Gesundheitsberichterstattung des Bundes, Heft 33. Berlin.
- RKI – Robert Koch-Institut (ed.) [2007]:** Gesundheit in Deutschland. Gesundheitsberichterstattung des Bundes. Berlin.
- RKI – Robert Koch-Institut (ed.) [2008]:** Migration und Gesundheit. Schwerpunktbericht der Gesundheitsberichterstattung des Bundes. Berlin.
- RKI – Robert Koch-Institut (ed.) [2009a]:** Ärztlich diagnostizierte koronare Herzerkrankungen. Internet: www.gbe-bund.de. Accessed on 17/4/2012.
- RKI – Robert Koch-Institut (ed.) [2009b]:** Gesundheit und Krankheit im Alter. Beiträge zur Gesundheitsberichterstattung des Bundes. Berlin.
- RKI – Robert Koch-Institut (ed.) [2009c]:** Gesundheit in Deutschland aktuell 2009 – Telefonischer Gesundheitssurvey (GEDA). In: gbe-bund.de. Verhältnis des Körpergewichts zur Körpergröße (Body-Mass-Index) [Anteil der Befragten in Prozent]. Gliederungsmerkmale: Jahre, Region, Alter, Geschlecht, Bildung]. Accessed on 20/2/2012.
- RKI – Robert Koch-Institut (ed.) [2009d]:** Epidemiologisches Bulletin. Aktuelle Daten und Informationen zu Infektionskrankheiten und Public Health. Vol. 46, Berlin.
- RKI – Robert Koch-Institut – GEDA 2010 (Gesundheit in Deutschland aktuell).** Internet: www.rki.de/DE/Content/Gesundheitsmonitoring/PublicUseFiles/publicusefiles_node.html. Accessed on 15/10/2012.
- RKI – Robert Koch-Institut [2010a]:** Lebenszeitprävalenz von Krankheiten der Augen. Telefonischer Gesundheitssurvey (GSTel03) [2003]. Internet: www.gbe-bund.de. Accessed on 27/3/2012.
- RKI – Robert Koch-Institut (ed.) [2010b]:** Krebs in Deutschland 2005/2006. Häufigkeiten und Trends. Berlin.
- RKI – Robert Koch-Institut (ed.) [2010c]:** Armut und Gesundheit. GBE-Kompakt 05/2010, Berlin.
- RKI – Robert Koch-Institut [2010d]:** Meldepflichtige Infektionskrankheiten 2010: Meldepflichtige Krankheiten absolut und je 100.000 Einwohner. Internet: www.gbe-bund.de. Accessed on 23/3/2012.
- RKI – Robert Koch-Institut (ed.) [2010e]:** Depressive Erkrankungen. Gesundheitsberichterstattung des Bundes, vol. 51. Berlin.
- RKI – Robert Koch-Institut (ed.) [2010f]:** Inanspruchnahme der Grippe-Impfung in der vergangenen Wintersaison [Anteil der Befragten in Prozent]. Internet: www.gbe-bund.de. Accessed on 13/3/2012.
- RKI – Robert Koch-Institut (ed.) [2011a]:** Beiträge zur Gesundheitsberichterstattung des Bundes. Daten und Fakten: Ergebnisse der Studie »Gesundheit in Deutschland aktuell 2009«. Robert Koch-Institut, Berlin.

- RKI – Robert Koch-Institut (ed.) (2011b):** Epidemiologisches Bulletin. Aktuelle Daten und Informationen zu Infektionskrankheiten und Public Health, 18/2011. Berlin.
- RKI – Robert Koch-Institut (ed.) (2011c):** Epidemiologisches Bulletin. Aktuelle Daten und Informationen zu Infektionskrankheiten und Public Health. MRSA, 26/2011. Berlin.
- RKI – Robert Koch-Institut (ed.) (2011d):** Sterblichkeit, Todesursachen und regionale Unterschiede. Gesundheitsberichterstattung des Bundes, vol. 52. Berlin.
- RKI – Robert Koch-Institut Berlin (ed.) (2011e):** Psychische Gesundheit und gesunde Lebensweise. Authors: Busch, M., Hapke, U., Mensink, G. B. M. GBE kompakt 2 [7]. Internet: www.rki.de/gbe-kompakt. Accessed on 7/11/2011.
- RKI – Robert Koch-Institut (ed.) (2011f):** Obst- und Gemüsekonsum heute. GBE kompakt, 6/2011, 2. Jg.
- RKI – Robert Koch-Institut (ed.) (2012):** Beiträge zur Gesundheitsberichterstattung des Bundes. Krebs in Deutschland 2007/2008. Eine gemeinsame Veröffentlichung des Robert Koch-Instituts und der Gesellschaft der epidemiologischen Krebsregister in Deutschland e.V., 8. edition. Berlin.
- Rosenbrock, R., Michel, C. (2007):** Primäre Prävention – Bausteine für eine systematische Gesundheitssicherung. Berlin.
- Rupprecht, R. (2009):** Wer stürzt wo, wann und warum? Ergebnisse einer Repräsentativerhebung im Großraum Nürnberg–Fürth–Erlangen. In: Friedrich-Alexander-Universität Erlangen-Nürnberg (ed.): Abstractband – Stürze im Alter. Nürnberg, 2009.
- Schäffgen, K. (1998):** Die Verdopplung der Ungleichheit. Sozialstruktur und Geschlechterverhältnisse in der Bundesrepublik und in der DDR. Dissertation an der Humboldt Universität zu Berlin. Berlin. Internet: www.edoc.hu-berlin.de/dissertationen/phil/schaeffgen-katrin/html. Accessed on 8/3/2012.
- Schneekloth, U., Törne, I. v. (2009):** Entwicklungstrends in der stationären Versorgung – Ergebnisse der Infratest-Repräsentativerhebung. In: Schneekloth, U., Wahl, H.-W.: Pflegebedarf und Versorgungssituation bei älteren Menschen in Heimen. Stuttgart, pp. 43–158.
- Schneekloth, U. (2006):** Entwicklungstrends beim Hilfe- und Pflegebedarf in Privathaushalten – Ergebnisse der Infratest-Repräsentativerhebung. In: Schneekloth, U., Wahl, H.-W. (ed.): Selbständigkeit und Hilfebedarf bei älteren Menschen in Privathaushalten. Pflegearrangements, Demenz, Versorgungsangebote. Stuttgart, pp. 57–102.
- Schneekloth, U., Wahl, H.-W. (ed.) (2006):** Selbständigkeit und Hilfebedarf bei älteren Menschen in Privathaushalten. Pflegearrangements, Demenz, Versorgungsangebote. Stuttgart.
- Schneekloth, U., Wahl, H.-W. (ed.) (2009):** Pflegebedarf und Versorgungssituationen bei älteren Menschen in Heimen. Demenz, Angehörige und Freiwillige, Beispiele für Good Practice. Stuttgart.
- Schröder, P. (2010):** BIAJ-Kurzmitteilung Grundsicherung im Alter und Arbeitslosengeld II im Alter von 55 bis unter 65 Jahren. Ein kurzer geschlechtsspezifischer Ländervergleich (Ende 2009). Download from www.ak-sozialpolitik.de/dokumente/2010/2010-10-22%20BIAJ.pdf. Accessed on 5/3/2012.
- Schröder, P. (2011):** BIAJ-Kurzmitteilung. Geringfügig entlohnte Beschäftigte im Alter von 65 Jahren und älter (Ende 2003 bis Ende 2010). Download from www.ak-sozialpolitik.de/dokumente/2011/2011-09-21%20BIAJ.pdf. Accessed on 5/3/2012.
- Schütz, B., Wurm, S. (2009):** Wie wichtig ist Prävention? In: Böhm, K., Tesch-Römer, C., Ziese, T. (ed.): Gesundheit und Krankheit im Alter. Berlin, pp. 160–166.

- Seizmair, N. (2011):** Bedingungen von Therapiemotivation bei Menschen im höheren Lebensalter am Beispiel professioneller Strategien gegen Inkontinenz. Bern.
- Sozialpolitik aktuell in Deutschland (2010a):** Alter beim Erstbezug von Altersrente im Kohortenvergleich, Geburtsjahrgänge 1904–1943. Internet: www.sozialpolitik-aktuell.de. Accessed on 22/2/2011.
- Sozialpolitik aktuell in Deutschland (2010b):** Alter bei Rentenbeginn, Erwerbsminderungs- und Altersrenten, 1980–2009. Internet: www.sozialpolitik-aktuell.de. Accessed on 22/2/2011.
- Sozialpolitik aktuell in Deutschland (2010c):** Durchschnittliche Rentenhöhe nach Rentenart und Geschlecht, alte und neue Bundesländer 2009. Internet: www.sozialpolitik-aktuell.de. Accessed on 22/2/2011.
- Statistische Ämter des Bundes und der Länder (2012):** Pflege im Rahmen der Pflegeversicherung. Kreisvergleich. Download from www.statistikportal.de/statistik-portal/pflegestatistik_kreisvergleich.pdf. Accessed on 11.5.2012.
- Statistisches Bundesamt (2009).** Internet: www.gerostat.de. Accessed on 3/4/2012.
- Statistisches Bundesamt (destatis) (2010a):** Bevölkerung und Erwerbstätigkeit: Bevölkerung mit Migrationshintergrund. Ergebnisse des Mikrozensus 2009. Fachserie 1, Reihe 2.2. Wiesbaden.
- Statistisches Bundesamt (2010b):** Diagnosedaten der Patienten und Patientinnen in Vorsorge- oder Rehabilitationseinrichtungen mit mehr als 100 Betten (Fälle, Pflagetage, durchschnittliche Verweildauer). Internet: www.gbe-bund.de. Accessed on 16/4/2012.
- Statistisches Bundesamt (destatis) (2011a):** Bevölkerung und Erwerbstätigkeit. Bevölkerung mit Migrationshintergrund. Ergebnisse des Mikrozensus 2010. Fachserie 1, Reihe 2.2, Migration in Deutschland 2010. Wiesbaden.
- Statistisches Bundesamt (destatis) (2011b):** Ältere Menschen in Deutschland und der EU. Wiesbaden.
- Statistisches Bundesamt (destatis) (2011c):** Statistisches Jahrbuch 2011. Für die Bundesrepublik Deutschland mit internationalen Übersichten. Wiesbaden.
- Statistisches Bundesamt (2011d):** Bevölkerung und Erwerbstätigkeit. Haushalte und Familien. Ergebnisse des Mikrozensus 2010. Fachserie 1, Reihe 3. Wiesbaden.
- Statistisches Bundesamt (2011e):** Empfänger von Grundsicherung im Alter und bei Erwerbsminderung. Internet: www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2011/10/PD11_393_221.html. Accessed on 16/5/2012.
- Statistisches Bundesamt (2011f):** Bevölkerung und Erwerbstätigkeit. Haushalte und Familien. Ergebnisse des Mikrozensus 2010. Wiesbaden.
- Statistisches Bundesamt (2011g):** Krankenhausstatistik. Diagnosedaten der Krankenhäuser nach Wohnsitz ab 2000. Diagnosedaten der Krankenhäuser ab 2000 (Fälle/Sterbefälle, Fälle je 100.000 Einwohner [altersstandardisiert], Berechnungs- und Belegungstage, durchschnittliche Verweildauer). Gliederungsmerkmale: Jahre, Wohnsitz, Alter, Geschlecht, Verweildauer, ICD10, Art der Standardisierung (2010). Internet: www.gbe-bund.de. Accessed on 7/5/2012.
- Statistisches Bundesamt (2011h):** Krankenhausstatistik: Diagnosedaten der Patienten und Patientinnen in Krankenhäusern (einschließlich Sterbe- und Stundenfälle) 2010. Internet: www.destatis.de. Accessed on 19/3/2012.
- Statistisches Bundesamt (2011i) (destatis):** Verkehrsunfälle. Unfälle von Senioren im Straßenverkehr 2010. Download from www.dvr.de/download/US_Seniorenunfaelle_2010.pdf. Accessed on 28/3/2012.

- Statistisches Bundesamt (2011j):** Verkehrsunfälle, Verunglückte, u. a. nach Alter und Geschlecht. Verletzte und Getötete bei Straßenverkehrsunfällen (Anzahl je 100.000 Einwohnern) (2010). Gliederungsmerkmale: Jahre, Region, Alter, Geschlecht, Art des Personenschadens. Internet: www.gbe-bund.de. Accessed on 28/3/2012.
- Statistisches Bundesamt (2011k):** Statistik der natürlichen Bevölkerungsbewegung. Durchschnittliche fernere Lebenserwartung im Alter von ... Jahren je Person (2008/2010). Internet: www.gbe-bund.de. Accessed on 8/3/2012.
- Statistisches Bundesamt (2011l):** Todesursachenstatistik 2010. Sterbefälle, Sterbeziffern (je 100.000 Einwohner, altersstandardisiert) (ab 1998). Internet: www.gbe-bund.de. Accessed on 27/2/2012.
- Statistisches Bundesamt (2011m):** Krankheitskosten in Millionen Euro für Deutschland. Internet: www.gbe-bund.de. Accessed on 8/3/2012.
- Statistisches Bundesamt (2011n):** Wirtschaftsrechnungen. Laufende Wirtschaftsrechnungen. Einnahmen und Ausgaben privater Haushalte. Fachserie 15, Reihe 1. Wiesbaden.
- Statistisches Bundesamt (destatis), Wissenschaftszentrum Berlin (WZB), Zentrales Datenmanagement (2011o):** Datenreport 2011. Ein Sozialbericht für die Bundesrepublik Deutschland. Bonn.
- Statistisches Bundesamt (destatis) (2011p):** Weiterbildung. Wiesbaden.
- Statistisches Bundesamt (destatis) (2011q):** Wirtschaftsrechnungen. Private Haushalte in der Informationsgesellschaft – Nutzung von Informations- und Kommunikationstechnologien. Fachserie 15, Reihe 4. Wiesbaden.
- Statistisches Bundesamt (2011r):** Pflegestatistik 2009, Deutschlandergebnisse, Autor: Pfaff, H. Download from www.destatis.de/DE/Publikationen/Thematisch/Soziales/Pflege/PflegeDeutschlandergebnisse5224001099004.pdf?_blob=publicationFile. Accessed on 11/5/2012.
- Statistisches Bundesamt (2011s):** Todesursachenstatistik 2010: Sterbefälle für die 10/20/50/100 häufigsten Todesursachen (ab 1998). Internet: www.gbe-bund.de. Accessed on 14/3/2012.
- Statistisches Bundesamt (2011t):** Gesundheit. Grunddaten der Vorsorge- oder Rehabilitationseinrichtungen 2010. Fachserie 12, Reihe 6.1.2. Wiesbaden.
- Statistisches Bundesamt (2011u):** Krankheitskosten je Einwohner in Euro. Internet: www.gbe-bund.de. Accessed on 8/3/2012.
- Statistisches Bundesamt (2011v):** Krankenhäuser. Aus dem Krankenhaus entlassene vollstationäre Patienten (einschließlich Sterbe- und Stundenfälle) 2001–2010 F10.0 – Psychische und Verhaltensstörungen durch Alkohol: Akute Intoxikation (akuter Rausch). Internet: www.destatis.de. Accessed on 14/9/2012.
- Statistisches Bundesamt (destatis), Gesellschaft Sozialwissenschaftlicher Infrastruktureinrichtungen (GESIS-ZUMA), Wissenschaftszentrum Berlin für Sozialforschung (WZB) (ed.) (2008):** Datenreport 2008. Ein Sozialbericht für die Bundesrepublik Deutschland. Authors: Habich, R., Noll, H.-H. Bonn.
- Stein, B. v. d. (2009):** Traumatisierung in frühen Lebensphasen und Angst im Alter. In: Adler, G. et al.: Seelische Gesundheit und Lebensqualität im Alter. Depressionen – Demenz – Versorgung. Schriftenreihe der Deutschen Gesellschaft für Gerontopsychiatrie und -psychotherapie (DGGPP). Stuttgart, pp. 73–77.
- Tausche, A. et al. (2009):** Gicht – aktuelle Aspekte in Diagnostik und Therapie. Deutsches Ärzteblatt, vol. 106/34–35, pp. 549–555.

- Tesch-Römer, C. (2012):** Aktives Altern und Lebensqualität im Alter. In: Informationsdienst Altersfragen, vol. 1/39, pp. 3–9.
- Tesch-Römer, C. et al. (2010):** Subjektives Wohlbefinden. In: Motel-Klingebiel, A., Wurm, S., Tesch-Römer, C. (ed.) (2010): Altern im Wandel. Befunde des Deutschen Alterssurveys (DEAS). Stuttgart, pp. 263–283.
- Tesch-Römer, C., Wurm, S. (2009):** Wer sind die Alten? Theoretische Positionen zum Alter und Altern. In: Böhm, K., Tesch-Römer, C., Ziese, T. (ed.): Beiträge zur Gesundheitsberichterstattung des Bundes: Gesundheit und Krankheit im Alter. Robert Koch-Institut, Berlin, pp. 7–20.
- van den Bussche, H. et al. (2011):** Which chronic diseases and disease combinations are specific to multimorbidity in the elderly? Results of a claims data based cross sectional study in Germany. BMC Public Health, 11, pp. 1–9.
- Vaskovics, L. A. et al. (2000):** Älterwerden als Single. ifb-Forschungsbericht Nr. 4-2000. Staatsinstitut für Familienforschung an der Universität Bamberg (ifb). Bamberg. Download from www.ifb.bayern.de/imperia/md/content/stmas/ifb/forschungsberichte/fb_04.pdf. Accessed on 8/3/2012.
- Waltersbacher, A. (2012):** Heilmittelbericht 2011. Hg. vom Wissenschaftlichen Institut der AOK (WiIdO).
- Weindl, A. (2011):** »Parkinson Plus«/Demenz mit Lewy-Körperchen, Chorea Huntington und andere Demenzen bei Basalganglienerkrankungen. In: Förstl, H. (ed.): Demenzen in Theorie und Praxis. 3rd edition., pp. 113–144.
- Wurm, S., Schöllgen, I., Tesch-Römer, C. (2010):** Gesundheit. In: Motel-Klingebiel, A., Wurm, S., Tesch-Römer, C. (ed.) (2010): Altern im Wandel. Befunde des Deutschen Alterssurveys (DEAS). Stuttgart, pp. 90–117.
- Zentralinstitut für die Kassenärztliche Versorgung (2010):** Teilnahme an gesetzlichen Früherkennungsuntersuchungen und an Beratungen zur Prävention des Darmkrebses. Köln. Internet: www.zi-berlin.de. Accessed on 14.2.2012.
- Ziegler, U., Doblhammer, G. (2009):** Prävalenz und Inzidenz von Demenz in Deutschland. Eine Studie auf Basis von Daten der gesetzlichen Krankenversicherung von 2002. In: Gesundheitswesen, vol. 71, pp. 281–290.

» 09.5 List of tables

Table 1:	Distribution of the age group of 65- to 79-year-olds in absolute figures as of 31 December 2009, in thousands (Statistisches Bundesamt 2011c, p. 44)	10
Table 2:	Distribution of the age group of 65- to 80-year-olds by cohort as of 31 December 2009, in thousands (Statistisches Bundesamt 2011c, p. 44)	120
Table 3:	Older people with a migrant background, for selected major countries of origin (in absolute figures) (Statistisches Bundesamt 2011a, pp. 64–65, 72–73, 80–81, own compilation, differences due to rounding)	13
Table 4:	Older (late) repatriates, for selected major countries of origin (in absolute figures) (Statistisches Bundesamt 2011a, pp. 68–69, own compilation, differences due to rounding)	121
Table 5:	Population in 2009 by age, gender and school qualifications, in thousands (Statistisches Bundesamt, 2011c, p. 132, own representation)	14
Table 6:	Men and women over 65 with/without a migrant background, with a university degree/without professional qualifications (as a percentage) (Menning and Hoffmann 2009, p. 26, based on data from the Statistisches Bundesamt 2007)	14
Table 7:	Proportion of different types of income in gross household income (as a percentage) (Noll and Weick 2012, p. 3; data based on: Einkommens- und Verbraucherstichprobe 2008)	15
Table 8:	Economic activity status by gender and age group, 2009, in thousands or as a percentage (Mikrozensus 2009: Erwerbsstatus der Bevölkerung, own calculation of employed quotient)	18
Table 9:	Employed persons aged 65 and over – marginal employment and supplementary employment, 2009, in thousands (Mikrozensus 2009: Erwerbstätige nach geringfügiger Beschäftigung und Nebenerwerbstätigkeiten)	20
Table 10:	Employment of pensioners, 2008 (as a percentage) (DEAS 2008: Erwerbstätigkeit von Rentnern)	121
Table 11:	Work-related burdens and stress, 60- to 85-year-old people in employment (as a percentage) (DEAS 2008: Arbeitsbelastungen im Beruf)	121
Table 12:	Reasons for employment following retirement, 2008 (as a percentage) (DEAS 2008: Gründe für Erwerbstätigkeit im Ruhestand)	20
Table 13:	Economic activity status before drawing old-age pension (as a percentage) (DEAS 2008: Erwerbsstatus vor Bezug der Altersrente)	22
Table 14:	Number of pensioners in absolute figures. Average pension payment in euros, as of 1 July 2009, throughout Germany (Deutsche Rentenversicherung Bund 2010, p. 148)	24
Table 15:	Distribution and amount of financial assets, 2008 (as a percentage) (DEAS 2008: Verbreitung und Höhe des Geldvermögens)	26
Table 16:	Debt in the form of loans, 2008 (as a percentage) (DEAS 2008: Schulden aus Krediten)	122

Table 17: Distribution of poverty (less than 60% of median societal income, i.e. less than €772) and wealth (more than 20% of the arithmetic mean, i.e. €2,922 or above) as a percentage (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 3-3, A 3-4, data based on SOEP, own representation)	30
Table 18: Evaluation of standard of living, 2008 (as a percentage) (DEAS 2008: Bewertung des Lebensstandards)	122
Table 19: Life with a partner, 2008 (as a percentage) (DEAS 2008: Leben in Partnerschaft)	123
Table 20: Population on 31 December 2009 by age and marital status (as a percentage) (Statistisches Bundesamt 2011c, p. 43)	35
Table 21: Germany's population by demographic characteristics: widowhood, in absolute figures (Mikrozensus 2010). The sex ratio indicates how many women there are in a population group (here: widowed people) per 1,000 men in the corresponding reference group.	123
Table 22: Household size by age of the main income earner, in thousands (Statistisches Bundesamt 2011f, p. 26)	35
Table 23: Evaluation of life without a partner (by partnerless individuals), 2008 (as a percentage) (DEAS 2008: Bewertung der Lebenssituation ohne Partner)	36
Table 24: Widowed older people in private households, living alone or by number of generations in the household. Germany, 2009, in thousands (Statistisches Bundesamt 2009: Mehrgenerationenhaushalte)	123
Table 25: Evaluation of relationship with family, 2008 (as a percentage) (DEAS 2008: Bewertung der Beziehung zur Familie)	37
Table 26: Evaluation of partnership, 2008 (as a percentage) (DEAS 2008: Bewertung der Partnerschaft)	124
Table 27: Number of living children, 2008 (as a percentage) (DEAS 2008: Anzahl lebender Kinder)	37
Table 28: Frequency of contact with adult children, 2008 (as a percentage) (DEAS 2008: Kontakthäufigkeit zu erwachsenen Kindern)	124
Table 29: Distance to nearest adult child, 2008 (as a percentage) (DEAS 2008: Wohnortentfernung zum nächsten erwachsenen Kind)	38
Table 30: Help given and received in the household, 2008 (as a percentage) (DEAS 2008: Geleistete und empfangene Hilfe im Haushalt)	40
Table 31: Size of personal network, 2008 (as a percentage) (DEAS 2008: Größe des persönlichen Netzwerks)	41
Table 32: Visiting or being visited by friends, 2008 (as a percentage) (DEAS 2008: Besuch bei oder von Freunden)	125
Table 33: Perceived loneliness, 2008 (as a percentage) (DEAS 2008: Empfundene Einsamkeit)	42
Table 34: Assessment of subjective health status, 65- to under-80-year-olds, by gender and educational level, 2010 (as a percentage) (primary source: RKI, GEDA 2010, own calculations)	45
Table 35: Estimated age-specific cancer incidence (number of cases per 100,000 population), 2009 (GEKID 2011, own representation)	126

Table 36: Cancer incidence and mortality risk in Germany by age and gender, ICD-10 C00–97 without C44, based on data from 2008 (RKI 2012, p. 22, own representation)	52
Table 37: Assessment of being restricted due to psychological stress (as a percentage) (RKI 2011a, p. 80, own representation)	57
Table 38: 12-month prevalence of depression (as a percentage) (RKI 2011a, p. 77, own representation)	127
Table 39: Dementia prevalence by age, gender and region (as a percentage) (Ziegler and Doblhammer 2009, own representation)	60
Table 40: Average future life expectancy in years (2008/2010) (Statistisches Bundesamt 2011k, cited from www.gbe-bund.de)	60
Table 41: Most common causes of death: total deaths in absolute figures (rounded) (Statistisches Bundesamt 2011l, cited from www.gbe-bund.de)	62
Table 42: Average height and weight by age and gender (Mikrozensus 2011a)	127
Table 43: Population distribution by body mass index, 2009 (as a percentage) (Mikrozensus 2011b: Fragen zur Gesundheit 2009, cited from www.gbe-bund.de)	64
Table 44: Alcohol consumption of men and women aged 65 and over (as a percentage) (RKI 2011a, p. 122, own representation)	66
Table 45: Participation in screening tests: had a checkup in 2009–2010 (two-year interval, taking participation in the previous year into account) (as a percentage) (Zentralinstitut für die Kassenärztliche Versorgung 2010, own representation)	68
Table 46: Diagnostic data from preventive care and rehabilitation facilities with more than 100 beds (cases), 2010, in absolute figures (Statistisches Bundesamt 2010b, cited from www.gbe-bund.de)	128
Table 47: Estimated distribution of places of death (as a percentage) (Jaspers and Schindler 2004, p. 23)	128
Table 48: People in need of care per 100,000 residents by age, gender and level of care (Statistisches Bundesamt 2011r, Pflegestatistik 2009, www.destatis.de)	78
Table 49: People in need of care per 100,000 residents by age, gender and type of care (Statistisches Bundesamt 2011r, Pflegestatistik 2009 www.destatis.de , own representation)	129
Table 50: Attendance at cultural events by age and region (as a percentage) (DEAS 2008: Besuch kultureller Veranstaltungen, own representation)	129
Table 51: Membership of clubs, groups, or organisations in 2008, by age group, gender and region (as a percentage) (DEAS 2008: Mitgliedschaftsbereiche in Vereinen, Gruppen, Organisationen, own representation)	130
Table 52: Rate of engagement by age and over time (BMFSFJ 2011, p. 8, own representation)	88
Table 53: Voluntary engagement by age and gender (BMFSFJ 2010b, pp. 159/169)	89
Table 54: Non-professional participation by age and gender in western and eastern Germany (as a percentage) (Motel-Klingebiel, Wurm and Tesch-Römer 2010, Appendix of Tables A 5-2).	90
Table 55: Non-professional participation by educational level and age (as a percentage) (Naumann and Romeu Gordo 2010, p. 137)	90
Table 56: Media use and leisure activities in 2011 by age group (ARD Medien Basisdaten 2011, own representation)	92

Table 57: Time spent watching television by over-65s in western and eastern Germany in 2009 to 2011, minutes per day (ARD Medien Basisdaten 2011, own representation)	93
Table 58: Radio use by older people, by age group and over time, in minutes per day (ARD Medien Basisdaten 2011, own representation)	93
Table 59: Market shares of television channels, 2007, Mon–Sun 3 am–3 am, as a percentage, by age group (Blödorn 2009, p. 167, own representation)	130
Table 60: Types of television programmes watched by people aged over 65, 2010 (as a percentage) (Reitze 2011, p. 73, own representation)	131
Table 61: Reach of press publications among men, by age, in 2011 (as a percentage). Here: representation of the nine press publications with the greatest reach (Arbeitsgemeinschaft Media-Analyse e.V. and Media-Micro-Census GmbH 2011, own representation)	131
Table 62: Reach of press publications among women, by age, in 2011 (as a percentage). Here: representation of the nine press publications with the greatest reach (Arbeitsgemeinschaft Media-Analyse e.V. and Media-Micro-Census GmbH 2011, own representation)	132
Table 63: Changes in internet use in 2010/11, by age and gender (as a percentage) (Initiative D21 e.V. and TNS Infratest GmbH 2011, p. 44; Initiative D21 e.V. and TNS Infratest GmbH 2010, own representation)	94
Table 64: Internet activity for private purposes in the past three months (based on the 1st quarter of 2011) among internet users aged 65+ (Statistisches Bundesamt 2011q, p. 37, own representation)	95
Table 65: Type of internet orders for private use in the past twelve months (based on the first quarter of 2011) in the 65+ age group (only those who ordered goods or services over the internet) (as a percentage) (Statistisches Bundesamt 2011q, p. 45, own representation)	132
Table 66: Proportion of residents aged 65–74 or 75+, by region, as a percentage of the total population of each region in 2009 (INKAR 2011, own representation)	105
Table 67: Proportion of residents aged 65–74 or 75+, by type of settlement area, as a percentage of the total population of each region in 2009 (INKAR 2011, own representation)	106
Table 68: Proportion of population aged over 64, by German federal state, and forecast for 2025 (INKAR 2011, own representation)	107
Table 69: Average residential cost burden as a percentage of net household income – by form of ownership, region and age of head of household in 2006 (SOEP 2006, based on Beetz et al. 2009, p. 48, own representation)	109
Table 70: Internal net migration in federal states for the cohort aged 65 and above, per 1,000 residents in 2009 (INKAR 2011, own representation)	133
Table 71: Number of doctors per 100,000 residents in 2009 (INKAR 2011, own representation)	114
Table 72: Number of nursing home places per 100,000 residents in 2009 (INKAR 2011, own representation)	115
Table 73: Low-paid/marginal employees, 2003 to 2010, in absolute figures (Schröder 2011)	134
Table 74: Net household income and household size in 2009, in thousands (Mikrozensus 2009, cited from www.gerostat.de. Own calculation of households with monthly net household income under €900 as a percentage of total households for each age group)	135

Table 75: Percentage of people at risk of poverty in the 65+ age group by migrant background [Statistisches Bundesamt 2011a, pp. 244 ff.; based on the Mikrozensus 2010]	135
Table 76: Percentage of people at risk of poverty in the 65+ age group by migrant background and risk factors [Statistisches Bundesamt 2011a, p. 244]	136
Table 77: People in need of care in private households, structural characteristics by age (as a percentage) [BMG 2011, p. 17]	136
Table 78: Residents in residential care – TNS Infratest-Heimerhebungen, 1994 (MuG II) and 2005 (MuG IV), socio-demographic structural characteristics (as a percentage) [Schneekloth and Törne 2009, pp. 85 f.]	137

» 09.6 List of figures

Figure 1:	Employment rate by age of persons who are/are not drawing a pension, 2007 [Brussig 2010a, p. 8, based on the Mikrozensus 2007]	16
Figure 2:	Older people in employment subject to social security deductions, in absolute figures, over time [Bundesagentur für Arbeit, cited from Bundesregierung 2011, p. 44]	138
Figure 3:	Number of hours worked regularly per week for employed persons of retirement age (60–69 years) [Brussig 2010a, p. 12, based on the Mikrozensus 2007]	19
Figure 4:	Age at retirement, pension due to reduced earnings capacity and old-age pension, by gender, over time 1980–2009 [source: Deutsche Rentenversicherung Bund [2010]: Rentenversicherung in Zahlen, Berlin, in: www.sozialpolitik-aktuell.de] Up to 1993: former West German federal states; from 1993: Germany	139
Figure 5:	Cohort comparison of average age on first drawing an old-age pension by gender, 1904–1943 birth cohorts [source: Deutsche Rentenversicherung Bund [2009]: Rentenversicherung in Zeitreihen, Berlin, in: www.sozialpolitik-aktuell.de]	140
Figure 6:	Status before drawing a pension, individuals first drawing an old-age pension in 2009 (as a percentage) [Bäcker et al. 2010, p. 33]	21
Figure 7:	Average pension levels by pension type and gender (2009), former East and West German federal states; gross pension in euros at year-end [source: Deutsche Rentenversicherung [2010]: Rentenversicherung in Zahlen, Berlin, in: www.sozialpolitik-aktuell.de]	23
Figure 8:	Age structure of the recipients of widows' and widowers' pensions on 31 December 2009 [Deutsche Rentenversicherung Bund 2010, p. XVIII]	141
Figure 9:	Monthly income in euros for older people aged from 65 years [Bäcker and Kistler, 2009, 2nd report, p. 19]	28
Figure 10:	Age differences of spouses aged 65 and over (as a percentage) [Statistisches Bundesamt 2011b, p. 18]	142
Figure 11:	Proportion of people living alone, by age, 2009 (as a percentage) [Statistisches Bundesamt 2011b, p. 20]	142
Figure 12:	Number of conditions reported in 1996, 2002 and 2008 [BMFSFJ 2009, p. 22]	47
Figure 13:	Age-specific cancer incidence rates in Germany by gender, 1980, 1990 and 2006, ICD-10 C00–97, without C44 [RKI 2010b, p. 21]	143
Figure 14:	Number of people treated in hospital for cerebral infarction, 2010 [Statistisches Bundesamt 2011h, own representation]	144
Figure 15:	Proportion of people who have ever been clinically or therapeutically diagnosed with depression in the population aged from 18 years [RKI 2010e, p. 20]	58
Figure 16:	Smoking rates by gender (as a percentage) [RKI 2011a, p. 119]	145

Figure 17: Participation in behavioural health promotion activities in the past twelve months by gender, educational level and age (as a percentage) [RKI 2011a, p. 26]	71
Figure 18: Funding of health promotion classes [RKI 2011a, p. 29]	146
Figure 19: Diagnostic data from preventive care and rehabilitation facilities with more than 100 beds (cases) [Statistisches Bundesamt 2010b, cited from www.gbe-bund.de , own representation]	73
Figure 20: People in need of care by age, and rate of people in need of care, at the end of 2009 [Statistisches Bundesamt 2011r, Pflegestatistik 2009, www.gbe-bund.de]	147
Figure 21: Structural characteristics of residents of residential nursing facilities; where totals do not equal 100 = data not available [BMG 2011, p. 121]	79
Figure 22: Situation of people in need of care in private households with/without a migrant background (as a percentage) [BMG 2011, p. 60]	148
Figure 23: Structural characteristics of people in need of care in private households by age (as a percentage) [BMG 2011, p. 17]	148
Figure 24: Relationship of the primary carer to the person in need of care in 1998 and 2010 (as a percentage), basis: Hauptpflegepersonen Pflegebedürftiger in Privathaushalten [BMG 2011, p. 27]	80
Figure 25: Carers by age and gender. Source: SOEP (2001–2006), weighted [GEK 2008, p. 69]	149
Figure 26: Amount of time spent by main carer on provision of care in private households in 1998 and 2010 (hours per week); basis: Hauptpflegepersonen in Privathaushalten mit pflegebedürftiger Person [BMG 2011, p. 29]	81
Figure 27: Burden on main carers in private households, 1998 and 2010 (where totals do not equal 100 = data not available); basis: Hauptpflegepersonen in Privathaushalten mit pflegebedürftiger Person [BMG 2011, p. 29]	149
Figure 28: Employment status of main carers in 1998 and 2010 (as a percentage); basis: Hauptpflegepersonen in Privathaushalten mit pflegebedürftiger Person [BMG 2011, p. 31]	82
Figure 29: Public and private expenditure for people in need of care [Barmer GEK 2010, p. 90]	83
Figure 30: Areas of voluntary engagement of over 65-year-olds in 1999, 2004 and 2009, as a percentage of the age group [BMFSFJ 2010b, p. 158], multiple answers were possible	150
Figure 31: Journeys, length of journey, number of journeys per day, by age [MiD 2008] [DLR and infas 2010, p. 75]	97
Figure 32: Mobility rate and mean number of journeys by age, in 2002 and 2008 [MiD 2008] [DLR and infas 2010, p. 171]	98
Figure 33: Reason for journeys in 2008, by age group, as a percentage [DLR and infas 2010, p. 76]	151
Figure 34: Reason for journeys by men and women in 2008, by age group, as a percentage [DLR and infas 2010, p. 81]	152
Figure 35: Traffic volume by means of transport, by age [MiD 2008] [DLR and infas 2010, p. 77]	99
Figure 36: Car driving license ownership of men and women by age group, 2002 and 2008 (as a percentage; persons aged 18 or over) [DLR and infas 2010, p. 71]	153
Figure 37: Proportions of motorised private transport use by gender and age in 2008 [MiD 2008] [DLR and infas 2010, p. 94]	100

Figure 38: Proportions of public transport and non-motorised private transport use by gender and age in 2008 (DLR and infas 2010, p. 104)	101
Figure 39: Frequency of wearing a bicycle helmet, by age group in 2008 (as a percentage, without interviewing adult guardian) (DLR and infas 2010, p. 107)	154
Figure 40: Mobility restrictions by age group (as a percentage), 2008 (DEAS 2008, as per Wurm, Schöllgen and Tesch-Römer 2010, p. 102)	155
Figure 41: Cohort comparison of frequency of physical exercise by age group in 1996, 2002 and 2008 (DEAS 2008, as per Wurm, Schöllgen and Tesch-Römer 2010, p. 113)	156
Figure 42: Patients receiving therapy, insured by AOK (2010), by age and gender (AOK-Heilmittel-Informationen-System [AOK-HIS]) (Waltersbacher 2012, p. 17)	157
Figure 43: Residents in residential care in Germany, age composition and gender (as a percentage) (source: TNS Infratest-Heimerhebung 2005) (Schneekloth and Törne 2009, p. 84, based on the TNS Infratest-Heimerhebung 2005)	158
Figure 44: Region types by settlement structure (2009). Ongoing monitoring by the BBSR; geometric basis: BKG; districts: 31 December 2009. © BBSR Bonn 2011. Download from www.bbsr.bund.de/cln_032/nn_1067208/BBSR/DE/Raumbeobachtung/Raumabgrenzungen/ Sied-lungsstrukturelleGebietstypen/Regionstypen/Downloadangebote.html . Accessed on 28 May 2012.	159

The logo for BZgA (Bundeszentrale für gesundheitliche Aufklärung) features the letters 'BZgA' in a bold, white, sans-serif font, set against a dark grey rectangular background.

**Bundeszentrale
für
gesundheitliche
Aufklärung**

This expert report provides an overview of the situation of men and women in Germany aged from 65 to 80. It builds on the report entitled “The Young Old – An Expert Report on the Situation of People Between 55 and 65 Years of Age”, which is Volume 16 of the “Research and Practice of Health Promotion” series of specialist booklets by the Federal Centre for Health Education 2011. Commissioned by the Federal Centre for Health Education (BZgA), this report was prepared by the Institut für Gerontologische Forschung e.V. (Institute for Gerontological Research) and comprises the targeted analysis of national, publicly available data and current information on a variety of topics, in order to obtain an overview of the various lifestyles and situations of people aged between 65 and 80. It includes details on the socio-economic situation, social relationships, health situation and health behaviour of older people. It also explores the areas of leisure, civic engagement and volunteering, the living situations of older people and the topic of long-term care.