



Magali MAZUY,\* France PRIOUX,\* Magali BARBIERI\*

---

## Recent Demographic Developments in France. Some Differences between the Overseas Départements and Metropolitan France

### I. Overall population trends and age structure

#### *Sixty-five million inhabitants: a decade of stable growth*

The total population of France on 1 January 2011 is estimated at 65 million, of whom 63.1 million in metropolitan France (mainland France and Corsica) (Pla and Beaumel, 2011) and 1.9 million in the overseas *départements* (*départements d'outre-mer*, DOM). Réunion accounts for the largest share of the DOM population with 44% of the total, followed by Guadeloupe and Martinique with 22% each. French Guiana is the least populated DOM, with 12%.

In 2010, the total population rose by 354,000, of whom 337,000 in metropolitan France (Pla and Beaumel, 2012). The increase was slightly larger than in 2009 due to a rise in births (+8,200) that was higher than that of deaths (+2,600), and a small gain in estimated net migration (+5,000).

The total growth rate is estimated at 5.5 per 1,000 in 2010. For metropolitan France, the increase is estimated at 5.4 per 1,000, mostly due to natural growth (4.2 per 1,000), and, more marginally, to net migration (Appendix Table A.1).<sup>(1)</sup> The growth rate has held fairly steady for the past ten years, peaking at 6 per 1,000 in 2004 and 2006. Population growth is steeper in the DOMs, at 11.2 per 1,000, notably because of higher birth rates and fertility, although fertility has fallen very rapidly in recent decades (see below). As in recent years, therefore, France registered one of the highest growth rates in Europe (Prioux et al., 2010).

---

(1) Appendix Tables A.1 to A.15, updated annually, are given at the end of the article. Their numbers do not always correspond to the order in which they are referred to in the text.

\* Institut national d'études démographiques, Paris.

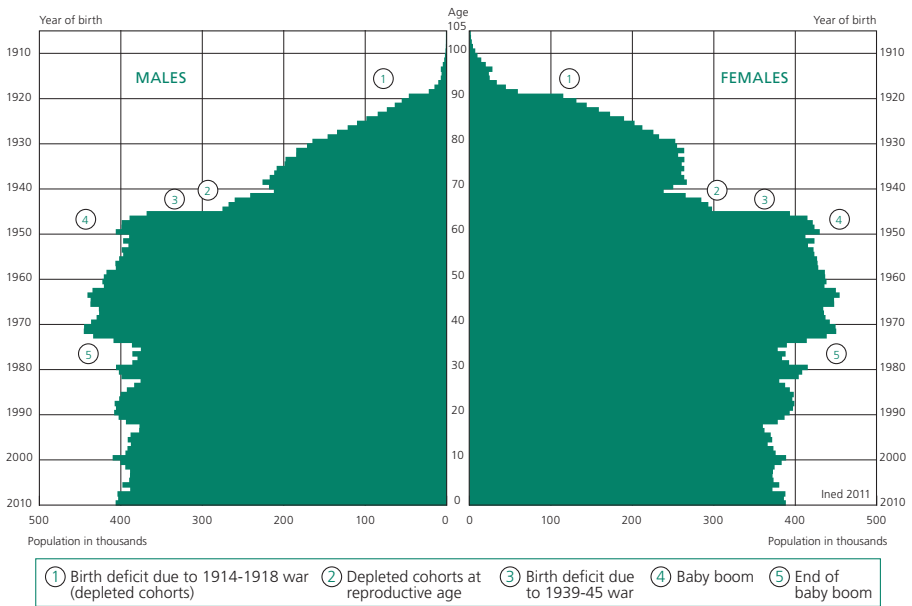
Correspondence: Magali Mazuy, Institut national d'études démographiques, 133 boulevard Davout, 75980 Paris Cedex 20, tel: +33 (0)1 56 06 22 51, magali.mazuy@ined.fr

France (metropolitan France and DOMs) ranks 21<sup>st</sup> in the world for population size, ahead of the United Kingdom and Italy (Pison, 2011). It is one of the 14 countries with a population of 50-100 million inhabitants; nine countries have 100-400 million, and India and China have 1.2 billion and 1.3 billion, respectively.

*Seventeen thousand centenarians: eight women to one man*

The French population is ageing slowly but steadily, for the most part in the oldest age groups. On 1 January 2011, 10 million people were aged over 65, of whom 6 million women. The gender imbalance among the elderly is visible in the population pyramid (Figure 1, metropolitan France), with twice as many women as men aged over 80. Dependency affects men and women differently. Because of the age gap between spouses and male excess mortality, men are more likely to be living with a partner in old age, whereas the oldest women are more likely to be widowed and living alone. The male and female roles become even more imbalanced at those ages, with women having to act as carers in most cases (Bonnet et al., 2011). France (metropolitan France and DOMs) had almost 17,000 centenarians on 1 January 2011 (slightly fewer than 2,000 men versus almost 15,000 women), many of whom still live at home. According to 2007 census data, 68% of centenarian men and 46% of centenarian women do not live in institutions, even though the vast majority who are in their own home face major difficulties in daily living (Blanpain, 2010). While

Figure 1. Population pyramid of metropolitan France on 1 January 2011



Population: Metropolitan France (provisional estimate).

Source: INSEE.

the number of centenarians is currently rising at a moderate pace each year, it is expected to surge by 2050, when the baby-boom cohorts enter this age group.

### *Ageing less pronounced but faster in the DOMs*

In terms of population ageing, France occupies an intermediate position relative to other European countries. Nearly 17% of its population was aged 65 or above on 1 January 2011 (Appendix Table A.2, metropolitan France), a figure slightly above the European average of 15.7%. By 2040, the proportion is projected to be nearly identical in all European countries, with retired persons accounting for one-quarter of the total population (Avdeev et al., 2011).

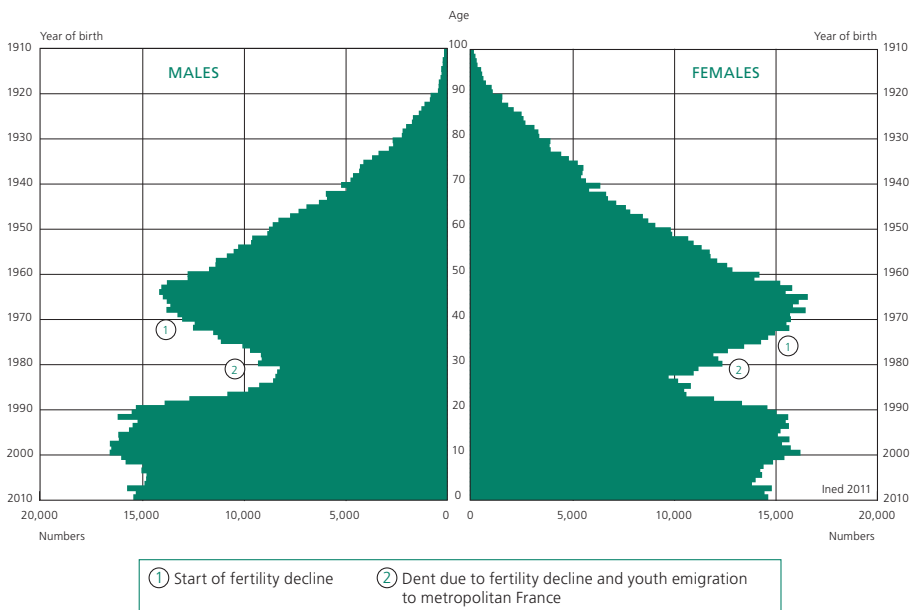
**Table 1. Population of the French overseas *départements* on 1 January 1999 and 2009 and distribution by age groups**

<i>Département</i>	Total population on 1 January	Distribution by age on 1 January				
		Below 15	Below 20	20-59	60+	75+
<b>1999</b>						
Guadeloupe	385,609	24.7	32.7	53.4	13.9	4.5
Martinique	380,863	23.3	30.6	53.4	15.9	5.1
French Guiana	155,760	35.6	44.4	49.9	5.6	1.5
Réunion	703,820	28.8	37.7	52.8	9.5	2.5
Overseas <i>départements</i>	1,626,052	27.2	35.5	52.8	11.7	3.5
<b>2009</b>						
Guadeloupe	403,257	22.4	30.2	51.7	18.1	6.0
Martinique	398,733	20.0	27.7	52.5	19.8	6.8
French Guiana	225,751	35.1	44.4	49.4	6.2	1.6
Réunion	821,168	25.6	34.4	53.7	11.9	3.2
Overseas <i>départements</i>	1,848,909	24.8	33.3	52.5	14.3	4.4
<i>Population</i> : French overseas <i>départements</i> (provisional estimate for 2009).						
<i>Source</i> : Beaumel and Pla (2011a).						

The DOM population is younger than that of metropolitan France. One-third of the population is aged under 20 versus only one-quarter in metropolitan France (Table 1). There is also a wide gap in median ages. One-half of the DOM population is under 35, compared with a median age of nearly 40 in metropolitan France. However, the swift and steep decline in fertility, especially in Guadeloupe, Martinique and Réunion, will lead to rapid population ageing in the years ahead, further accentuated by migration. The DOM population displays a characteristic age structure: the young population is still quite large, but the population pyramid narrows sharply around age 30 (Figure 2), reflecting the fact that a massive proportion of the young adult population resides in metropolitan France. Mobility towards metropolitan France differs by sex and

social category. Young men emigrate in greater numbers than young women, and the highly educated more so than the less educated, with many young adults going to metropolitan France to complete their education. Roughly one-third of the native DOM population aged 20-34 lives in metropolitan France. More than one-third of the most highly educated population resides there, and the same pattern is observed among persons in employment. The young men and women who stay in the DOMs are far more frequently low-educated and unemployed (Temporal et al., 2011). However, part of the migration flow is temporary, as nearly 40% of DOM residents are “returned DOM native-borns” (*ibid.*).

Figure 2. Population pyramid of the overseas départements on 1 January 2011



Population: French overseas départements (provisional estimate).  
 Source: INSEE, authors' calculations.

While the DOM age structure is still relatively young, the decline in fertility and the departure of young adults to metropolitan France, combined with return migration of older adults, means that the ageing process is well under way. The age structures have been evolving rapidly since the 1950s (Rallu and Diagne, 2005; Sandron, 2007), with only that of French Guiana being less affected by the shortage of young adults (Breton et al., 2009). Under the medium-term projections produced by INSEE (French National Institute of Statistics and Economic Studies) the share of the population aged 60 and over in 2040 will reach 40% in Guadeloupe and Martinique, compared with a more modest 31% in metropolitan France (Léon, 2010). The situation in French Guiana is different because its age structure is younger (Rallu, 2009)

due to high fertility and immigration. According to the INSEE projections, the share of the population aged 60 and over will barely exceed 12% in 2040.

## II. Migration: the data have become uncertain

Until 2008, INED published its own estimates of migration flows based on an analysis of the database on residence permits (*Application de gestion des dossiers des ressortissants étrangers en France [AGDREF]*, Ministry of Immigration), applying a definition consistent with international recommendations. The European Regulation of July 2007 defines long-term immigration as “the action by which a person establishes his or her usual residence in the territory of a Member State for a period that is, or is expected to be, of at least 12 months, having previously been usually resident in another Member State or a third country” (Thierry, 2008). Under this definition, 156,056 foreigners from outside the European Union (including minors) entered France in 2008, along with an estimated 55,000 EU citizens.<sup>(2)</sup>

Compliance with this definition of immigration in France is hampered by an administrative reform of the categories of residence permits. Since 1 June 2009, some categories of non-EU citizens can reside legally for more than three months in France with a long-term visa, equivalent to a residence permit, issued in their country of origin. This arrangement exempts them from having to apply to the French authorities for a residence permit for their first year in France, or for their entire stay if it is shorter than twelve months. Consequently, the method for preparing statistics on foreign immigration used by INED since 1994 can no longer be applied in its original form, as we would need to know beforehand how these long-term visas are recorded in the residence-permit database, notably to ensure that they reflect actual entries of persons into France. Moreover, when the visas are later converted into residence permits, we cannot be certain that holders will effectively be classified as foreigners renewing their authorizations to reside in France and not as new entrants. The Ministry of Immigration currently publishes a total that corresponds to the numbers of initial permits issued and nearly 60,000 visas. This aggregate does not meet the EU definition of long-term immigration, i.e. a stay of at least one year. The total number of authorizations, irrespective of their period of validity, rose by 5% in 2009 (Comité interministériel de contrôle de l’immigration, 2011, Table I-2-7, p. 42). However, the Ministry describes this as a provisional figure that will need to be verified, given that the counts by the French Office for the Protection of Refugees and Stateless Persons (OFPRA) and the French Office for Immigration and Integration (OFII), which counts the numbers of new immigrants presenting for obligatory medical

(2) Appendix Table A.3 shows the statistics on migration flows to 2008.

examinations, indicate a decline in immigration flows in 2009, estimated at 4% by OFII. But the exhaustiveness of statistics based on medical examinations remains to be proven.

Under the new census system, data gathered in annual surveys also provide a partial measure of migration flows, which may supplement administrative data. By collecting retrospective information on the year of entry of foreign-born persons, those who are still in France after a stay exceeding twelve months can be counted, and temporary migrants excluded. Information is also obtained on immigrants' countries of origin. However, the estimate cannot include persons born in France (metropolitan France or DOMs) who have come to settle in France for the first time or are returning to live in France and who only gave their place of residence five years earlier, since persons who entered France within the past five years and have since left cannot be counted. In the 2011 census survey, the question on residence five years earlier was replaced by a question on residence one year earlier. This change will allow a more accurate measurement of all immigration flows. There are currently no available statistics to measure the flows of persons leaving France, however.

### III. Fertility

#### *Fertility slightly higher and less delayed in the DOMs*

The number of recorded births rose again in 2010 to reach a total of 832,800, of which over 800,000 in metropolitan France (Beaume and Pla, 2011b). This was the largest number in thirty years (more than 800,000 births were recorded in 1980, and more than 805,000 in 1981).

Fertility also increased. The total fertility rate (TFR) exceeded two children (2.01) in metropolitan France (Appendix Table A.4; Pla and Beaume, 2011) and reached 2.4 children per woman in the DOMs. The uptrend in metropolitan France was mainly due to women over age 30 (Table 2), as fertility rose by more than 2% at ages 30-40 and by 5% after age 40.

Despite their gradual increase, births among women aged 40 or over still account for fewer than 4% of births in metropolitan France (3.6% for all of France). The share of births in this age group remains well below the level observed in the early twentieth century, when it exceeded 6% (Daguet, 1999 and 2002). However, the family situations associated with late childbearing today are rather different from those of the past. A larger proportion of late births are now first children, or births in a reconstituted family where the parents already have children from a previous union (Bessin et al., 2005). Nevertheless, fertility is still heavily concentrated at ages 25-35 (Davie and Mazuy, 2010), and both early and late childbearing remain infrequent.

Table 2. Fertility by age group since 2005 (per 1,000 women)

Age reached in the year	Sum of age-specific fertility rates						Absolute change <sup>(a)</sup>					Average 2005-2010
	2005	2006	2007	2008	2009	2010*	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	
Under 20	38	37	36	36	36	35	-1	-1	0	0	-1	-1
20-24	274	279	271	275	268	267	+5	-8	+4	-7	-1	-1
25-29	641	655	641	643	638	639	+14	-14	+2	-5	+1	0
30-34	619	642	638	651	654	665	+23	-4	+13	+3	+11	+10
35-39	281	298	300	309	315	324	+17	+2	+9	+6	+9	+9
40+	67	70	73	76	76	80	+3	+3	+3	0	+4	+3
Total	1,920	1,980	1,959	1,989	1,986	2,010	+60	-21	+30	-3	+14	+15

\* Provisional.

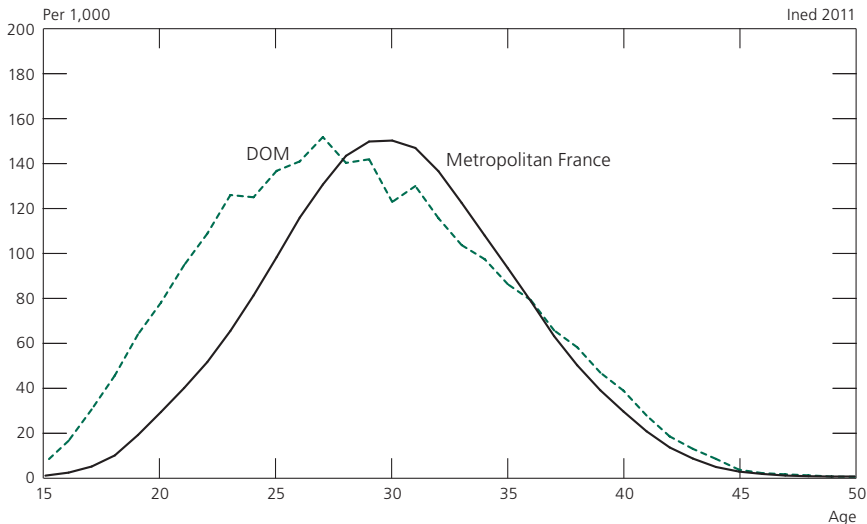
<sup>(a)</sup> Because of roundings in the rates, the changes calculated here may not correspond to the apparent differences.

**Population:** Metropolitan France.

**Source:** INSEE, population estimates (provisional results at end 2010).

The stronger fertility in the French overseas territories is mainly due to much higher fertility among younger women and slightly higher fertility after age 35. The fertility rates up to age 23 are at least twice as high in the DOMs as in metropolitan France (Figure 3), where fertility exceeds that of the DOMs only in the 28-35 age group (at these ages, the rates in metropolitan France are no more than 1.2 times higher). Moreover, although the average number

Figure 3. Age-specific fertility rates in metropolitan France and in the overseas départements in 2010 (per 1,000 women)



**Population:** Metropolitan France and overseas départements (DOM).

**Source:** Authors' calculations based on INSEE data.

of children is higher in the DOMs (the total fertility rate was 2.4 children per woman in 2010), the mean age at childbearing is 28.5 years, versus 30 years in metropolitan France. This means that women begin their reproductive life at younger ages, on average, than in metropolitan France, where fertility is higher at ages 30-35. The two childbearing profiles remain distinct, therefore, more in terms of timing than in terms of completed fertility, and it is the higher rates at younger ages in the DOMs that explain the difference in completed fertility with respect to metropolitan France. Childbearing before age 25 is not uncommon in the DOMs, especially in Réunion, where early fertility is a distinctive feature. Réunionese women born before 1985 had an average of 0.8 children before age 25 (Breton, 2007). Another specific trait of fertility in the DOMs is the prevalence of non-marital births, which represent more than three-quarters of total births, compared with 54.9% in metropolitan France (Table 3).

**Table 3. Total fertility rate, mean age at childbearing and proportion of non-marital births in the overseas *départements*, 1999 and 2008**

<i>Département</i>	1999			2008		
	Total fertility rate (children per woman)	Mean age at childbearing (years)	Percentage of non-marital births	Total fertility rate (children per woman)	Mean age at childbearing (years)	Percentage of non-marital births
Guadeloupe	2.1	28.9	65.3	2.2	29.3	74.4
Martinique	1.9	28.9	68.3	2.1	29.2	72.5
French Guiana	3.9	27.1	81.9	3.6	27.7	87.9
Réunion	2.3	27.9	60.1	2.5	28.4	69.5
Overall	2.3	28.2	66.2	2.5	28.6	74.4

*Population:* French overseas *départements* (provisional estimate for 2008).  
*Source:* Beaumel and Pla (2011a).

This sustained high level of fertility in both metropolitan France and the DOMs in 2010 has kept France at the top of the European ranking. Only Ireland and Iceland recorded higher rates of 2.07 and 2.20 children per woman, respectively, in 2010 (Appendix Table A.6). The trend towards stability or increase mainly concerns northern and western Europe. In southern Europe, the TFR is levelling off at around 1.4 children per woman. In central/eastern Europe it is still declining, especially in Hungary and Latvia, where the rate is nearing 1.2 children per woman.

The completed fertility of French cohorts is not expected to fall below 2 children per woman, and the mean age at childbearing should stabilize at around 30 years (Appendix Tables A.5 and A.7).



## IV. Abortions

### *The number of abortions remained stable in 2008 and 2009*

According to statistics from the Direction de la recherche, de l'évaluation et des statistiques (Directorate for Research, Assessment and Statistics, DREES, Ministry of Labour and Social Affairs), slightly over 220,000 induced abortions were performed in 2008 (222,805) and 2009 (222,137), down slightly from 227,050 in 2007 (Vilain, 2009; Vilain and Mouquet, 2011). The decline between 2007 and 2008 was concentrated in metropolitan France, where the number fell by 2% in 2008 then levelled off in 2009 (Table 4 and Appendix Table A.8). In the overseas *départements* as a whole, the number remained stable in 2007 and 2008, then decreased by 5% in 2009 (Table 4). For all of France, this mild decline in induced abortions since 2006 reflects a fall in the rate among women under age 30, especially the youngest women (Vilain and Mouquet, 2011). This marks a break with the rising trend in teenage abortions observed since the 1990s (Rossier et al., 2009).

**Table 4. Numbers of abortions and total abortion rate in metropolitan France and the overseas *départements* since 2005**

Year	Metropolitan France				Overseas <i>départements</i> (overall)			
	Number of abortions	Per 100 live births	Per 1,000 women aged 15-49	Total abortion rate (per woman)	Number of abortions	Per 100 live births	Per 1,000 women aged 15-49	Total abortion rate (per woman)
2005	206,311	26.6	14.2	0.51	13,111	40.4	27.7	1.00
2006	215,390	27.0	14.9	0.53	13,455	41.5	28.3	1.02
2007	213,382	27.1	14.7	0.53	13,668	41.8	28.5	1.03
2008	209,247	26.3	14.5	0.52	13,558	41.9	28.0	1.03
2009	209,268	26.4	14.6	0.52	12,869	41.2	26.5	0.98

Sources : DREES and authors' calculations.

### *Abortion more frequent in the DOMs*

Induced abortions are much more frequent in the DOMs than in metropolitan France, whatever the indicator used. The overall abortion rate stands at 27.8 per 1,000 women aged 15-49 on average in 2005-2009, nearly twice the figure of 14.6 per 1,000 for metropolitan France. The total abortion rate came to 1.01 abortions per woman versus 0.52, respectively, in the same period. The ratio of abortions to live births, at 41.3 and 26.7 per 100 live births, respectively, was 55% higher in the same period (Table 4). However, there are wide differences between individual overseas *départements*. In 2008 and 2009, the total abortion rate averaged 40.2 per 1,000 women in Guadeloupe, nearly twice that of Réunion (20.4 per 1,000). French Guiana had nearly the same rate as Guadeloupe

(36.2 per 1,000), whereas the figure for Martinique was close to that of Réunion, at 23.9 per 1,000 women (Vilain and Mouquet, 2011). But sharp disparities exist in metropolitan France as well. The frequency varies by a factor of almost two between the regions of Pays de la Loire (10.5 per 1,000 on average in 2008-2009) and Provence-Alpes-Côte d'Azur (PACA; 20.9 per 1,000). The abortion rate for Réunion is very similar to that of certain regions of metropolitan France including PACA but also Corsica, Île-de-France (Paris region) and Languedoc-Roussillon, the last three having rates of between 18 per 1,000 and 19 per 1,000.

The total abortion rate, or sum of age-specific abortion rates, is a better indicator of the change in frequency, as it does not depend on the age structure of the population at risk.<sup>(3)</sup> Like any indicator measuring the frequency of a repeatable event, it can also be broken down by order, to better analyse the characteristics of women undergoing induced abortion. The statistical notification forms, analysed by INED, were used to obtain an estimated breakdown by order in metropolitan France and the DOMs for the 2007-2009 period (Table 5). As the statistics compiled from the forms are not yet available for 2009,<sup>(4)</sup> we used the mean distribution by order<sup>(5)</sup> observed at each age for 2006-2008, which we applied to the mean abortion rates for 2007-2009, calculated from the age-specific statistics of the DREES database (Programme de médicalisation des systèmes d'informations, PMSI).

The total abortion rate in the DOMs averages slightly over one abortion per woman versus 0.53 in metropolitan France. This very high value is due to a greater frequency of both first abortions and repeat abortions. If the data in Table 5 were observed in a single cohort, they would imply that 60% of women residing in the DOMs undergo at least one abortion in their life (versus 36% in metropolitan France), and 27.5% at least two (12% in metropolitan France), with 33% (i.e. 60.4% – 27.5%) having just one (24% in metropolitan France).

### *A higher proportion of pregnancy terminations in the DOMs, except among the youngest women*

This greater frequency of first abortions and repeat abortions is reflected in age-specific abortion rates, which are distinctly higher than in metropolitan

(3) This is not the case for the overall abortion rate, which is the ratio of total induced abortions to the total female population aged 15-49. The difference is due to the fact that two populations can have strictly identical age-specific abortion rates, but the overall abortion rate for the population with the larger percentage of women aged 18-25 – the age group in which induced abortion is most frequent – will exceed the rate for the population with an older age structure.

(4) The database for induced abortions notified in 2009 is incomplete at present, as some regions are virtually absent.

(5) To obtain these distributions, we made two adjustments. First, we observed that the age distribution of induced abortions whose order was not indicated on the notification forms was nearly identical to the age distribution of those reported as first abortions. We therefore summed these two categories to estimate first abortions. Second, after calculating the distribution by order for each age (three-year average), we smoothed the resulting distributions by averaging over three consecutive ages, starting with 100% first abortions at age 12. This smoothing proved necessary because of the small number of women in certain ages and abortion orders, especially in the DOMs.

**Table 5. Distribution by order of the total abortion rate in metropolitan France and the overseas *départements* in 2007-2009 (3-year average, per 100 women)**

Abortion order	Order-specific total abortion rate (per 100 women)		Distribution by order (%)	
	Metropolitan France	Overseas <i>départements</i>	Metropolitan France	Overseas <i>départements</i>
First	36.2	60.4	68.8	59.5
Second	11.9	27.5	22.6	27.1
Third or higher	4.5	13.6	8.6	13.4
Total	52.6	101.5	100.0	100.0

*Sources* : Calculations and estimates based on DREES statistics (SAE and PMSI) and INED statistics based on data from notification forms.

France, particularly at the youngest ages (Figure 4). Before age 20, abortion rates in the DOMs are at least twice as high, and at age 14 almost four times as high. By that age, slightly more than 7 women per 1,000 residing in the DOMs have undergone an abortion, versus fewer than 2 in metropolitan France. This is because conception rates<sup>(6)</sup> in the DOMs are far higher among the young (Figure 4): they are at least twice as frequent until age 21, and up to 6 times as frequent at age 14, an age at which slightly more than 14 women per 1,000 in the DOMs become pregnant. Conception rates in the DOMs and metropolitan France do not converge until around age 30 (between ages 27 and 33). After age 35, they are once again substantially higher (70% higher on average) in the DOMs.

Yet the proportion of pregnancies ending in termination in the DOMs is lower than in metropolitan France among young women up to age 21, whereas it is higher after age 21 and until around age 40 (Figure 5). The ratio of abortions to conceptions in the DOMs is less differentiated by age, but it bottoms out at around age 30 in both the DOMs and metropolitan France. The highest proportion of wanted births is therefore probably found in that age group. The high value of the ratio at young ages indicates that abortion more frequently contributes to the increase in the age at first childbirth in metropolitan France than in the DOMs, where adolescent fertility is certainly less stigmatized. The upturn in the abortion ratio after age 35 shows that abortion no doubt also plays a role in reducing completed fertility. The higher abortion rates in the DOMs between ages 21 and 40 contribute to the reduction in fertility at these

(6) For simplicity's sake, we offer an estimate by default of age-specific conception rates by combining abortions recorded at age  $x$  (in completed years) and live births at age  $x + 1$  for which the mean age at conception is close, given the differences in mean duration of pregnancy between abortions and births. The inclusion of spontaneous abortions (not recorded) and stillbirths, after deducting births from multiple pregnancies, would yield slightly higher conception rates, and therefore slightly smaller proportions of terminated pregnancies. The comparison between metropolitan France and the DOMs is not affected, however, as the shapes of the curves and their relative levels would not be modified significantly.

Figure 4. Age-specific abortion and conception rates<sup>(a)</sup> in metropolitan France and in the overseas *départements*, 2007-2009 (per 1,000 women)

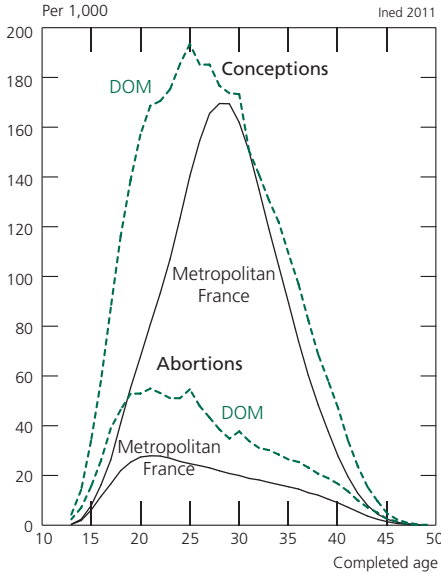
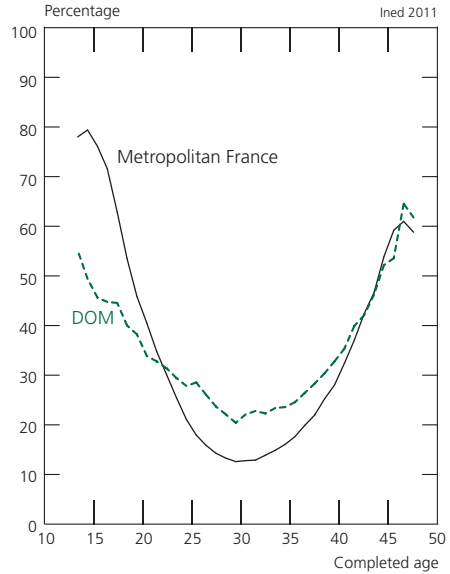


Figure 5. Percentage of conceptions<sup>(a)</sup> ending in termination at each age in metropolitan France and in the overseas *départements*, 2007-2009



<sup>(a)</sup> Sum of abortion rates at completed age  $x$  and of fertility rates at age reached in the year  $x + 1$ .  
Sources: Calculations and estimates based on DREES and INSEE statistics.

ages and to its convergence with the fertility of metropolitan France, as noted earlier.

The high frequency of abortion in the DOMs is therefore due both to higher conception rates at almost all ages, especially among the young, and to more frequent unwanted pregnancies. The proportion of terminated pregnancies is high, except at very young ages, as the fertility of adolescent girls and young women under 20 remains traditionally high in the DOMs, especially in French Guiana and Réunion. The proportion of women having undergone at least one abortion in their life is therefore substantially greater, as is the percentage of women having undergone multiple abortions. These major differences with respect to metropolitan France in regard to abortion are due to a lesser use of contraception (Halfen et al., 2006). This, in turn, is determined by several factors: “cultural resistance” to contraception (Clair, 2004), difficulties in accessing it, and information that is inadequate or unsuited to the local context, leading to more frequent contraceptive failures (Moreau et al., 2010). Moreover, sexual attitudes and behaviours differ from those of metropolitan France (Halfen et al., 2006).

## V. PACS, marriage and divorce

### *A stable number of marriages and a slower rise in PACS civil partnerships*

The steady decline in the number of marriages recorded throughout the 2000s (except 2005) did not persist in 2010 in either metropolitan France or the DOMs. A total of 251,654 marriages were registered in 2010, of which 245,334 in metropolitan France and 6,383 in the DOMs, versus 245,151 and 6,300, respectively, in 2009. It is too soon, however, to take these figures as evidence that the drift away from marriage has stopped. The frequency of first marriages also levelled off in 2010. The total first marriage rate (the sum of age-specific marriage rates for single persons) was unchanged in 2010 from 2009 (Appendix Table A.9). The mean age at first marriage was 30.0 years for women and 31.8 years for men, a difference that reflects the age gap between spouses, analysed in greater detail below (for marriages and PACS civil partnerships combined). The mean age at first marriage is therefore still rising rapidly. In 2000, it stood at 28.0 years for women and 30.1 years for men. The mean age at first marriage by cohort is following the same trend with a slight lag (Appendix Table A.10). We estimate it at 28.9 years for women born in 1975 and 30.6 years for men born in 1973, an increase of around 2.5 years (2.6 years for women, 2.4 years for men) in 10 cohorts. In the same cohorts, we estimate the proportion of persons married by age 50 at 65% for women and 63% for men, a decline of 10 and 9 points, respectively, in 10 cohorts.

The number of new PACS civil partnerships has been rising steadily since their introduction in December 1999, reaching 205,596. However, the pace of

**Table 6. PACS registered and PACS dissolved since 2007**

	2007	2008	2009	2010
<b>PACS registered (total)</b>	<b>102,023</b>	<b>146,030</b>	<b>174,562</b>	<b>205,596</b>
<i>Including PACS in the DOMs</i>	953	1,182	1,443	1,640
PACS concluded by sex of partners				
Male-male	3,708	4,780	4,895	5,209
Female-female	2,510	3,423	3,542	3,937
Male-female	95,707	137,820	166,120	196,441
Not known	98	7	5	9
<b>Number of dissolutions (total)</b>	<b>22,782</b>	<b>23,657</b>	<b>26,933</b>	<b>35,060</b>
Reason for dissolution				
Mutual consent	10,847	12,776	16,273	20,779
Unilateral request by one partner	747	715	913	1,144
Marriage	10,783	9,790	9,426	12,758
Death	371	351	293	350
Other reasons and not known	34	25	28	29
<i>Population</i> : Whole of France.				
<i>Source</i> : Ministry of Justice and Civil Liberties, SDESD.				

increase started slowing sharply in 2009. The number of new PACS partners rose by 43% in 2008, 20% in 2009 and 18% in 2010. While their number is growing in the DOMs, the PACS remains a marginal type of union there. Only 1,640 were signed in the DOMs in 2010 (Table 6), a mere 20% of all registered unions (marriages and PACS partnerships), as compared with 45% of all new registered unions in metropolitan France in the same year. The DOMs are among the *départements* with the lowest proportion of PACS partnerships (Prioux and Mazuy, 2009; Figure 5).

Almost 200,000 heterosexual couples (196,441) formed a PACS in 2010, representing 95% of the total (the proportions in the DOMs and metropolitan France are identical). The trends in recent years suggested that the number of PACS unions would equal the number of marriages by 2012-2013. However, this might not happen if the slowdown in PACS growth persists<sup>(7)</sup> and if the number of marriages remains stable for several years in a row.

PACS dissolutions increased as well, rising to around 35,000 in 2010. Of the total 911,094 PACS unions formed between 15 December 1999 and 31 December 2010, approximately 150,000 have been dissolved (including through marriage), according to statistics from the Ministry of Justice and Civil Liberties. These figures may underestimate the number of PACS dissolutions, however. Using data from a survey on taxable income and welfare benefits, INSEE estimates the number of PACS partners in metropolitan France on 1 January 2010 at one million (Davie, 2011).

### *Married partners and PACS partners are of similar age*

Legislative changes regarding the recording of data on PACS unions mean that fuller information on the partners' characteristics is now available.<sup>(8)</sup> We can now calculate age-specific and total PACS formation rates.<sup>(9)</sup> The pattern of age-specific heterosexual PACS formation rates is fairly similar to that of the age-specific marriage rates<sup>(10)</sup> (Figure 6A). Figure 6B shows the age distribution of these rates (summed to 100%). For both men and women, the curves are very similar for those who marry and those who form a PACS, while for same-sex

(7) As the number of PACS unions signed in the first two quarters of 2011 and registered with the magistrates' courts is – on present evidence – lower than the 2010 figure, the PACS growth rate may slow even further. However, the January-June 2011 figures from the Ministry of Justice and Civil Liberties understate the true total because an Act of 8 March 2011 allows *notaires* (solicitors) to register PACS unions. The statistics for court-registered PACS partnerships will therefore need to be supplemented with the figures for PACS unions recorded by *notaires*.

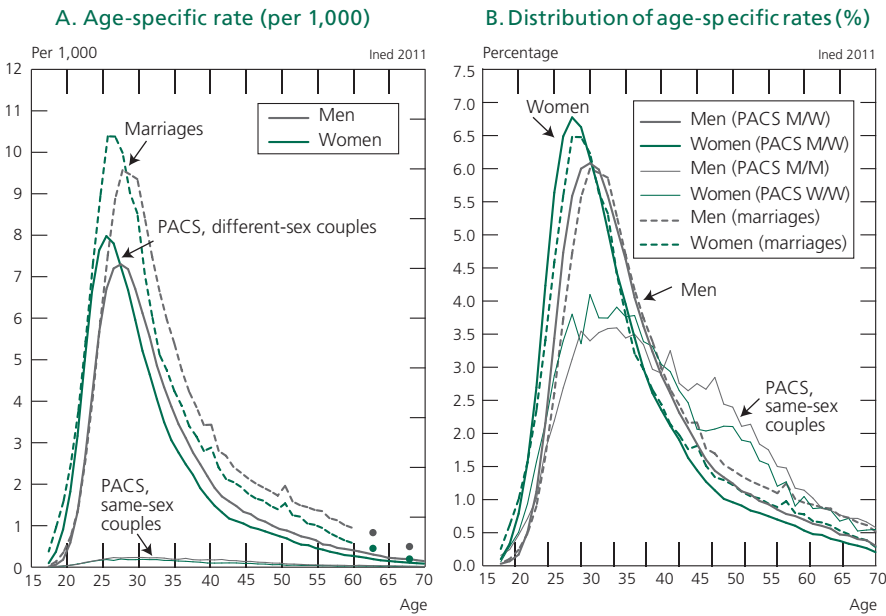
(8) Since the abrogation of Article 2, Paragraph 6, of the Decree of 21 December 1999, information on partners' ages has been recorded (Decree of 23 December 2006). We thank the Ministry of Justice and Civil Liberties for providing INED with a database on the ages of PACS partners in 2011.

(9) We calculated age-specific rates (in age reached) as the ratios of events of the year recorded at each age to the mean population of that age, in order to neutralize the effect of cohort size. The rate therefore effectively indicates a frequency, not a risk, for a given age.

(10) We refer here to all marriages for 2009, and not only to first marriages, as in the conventional indicators. As the statistics do not provide the PACS order for each partner, we need to compare the number of PACS unions against the total number of marriages, and not just first marriages.

couples, the timing of PACS formation is spread over a longer period and later mean ages. As they are not able to marry, all same-sex couples are potential candidates for PACS civil partnerships (except those already living in PACS unions). Among heterosexual couples, by contrast, a percentage is already married, especially in the older cohorts for whom the PACS did not exist. For same-sex couples, the PACS therefore concerns a potentially older population. Moreover, the Act of 21 August 2007 provided for a convergence between the PACS and marriage in terms of tax status. Both married and PACS couples are now exempt from inheritance tax, and gift tax rates are identical. For older gay and lesbian couples, the PACS is the only way to protect a partner if the other partner dies. For this protection to apply, however, the partners must have prepared wills, as the PACS does not confer automatic inheritance rights on the surviving partner. For all these reasons, it is not surprising that same-sex new PACS partners are older than heterosexual ones.

Figure 6. Marriages in 2009 and PACS in 2009-2010 by age and sex



**Note:** For the PACS, the age-specific rate is calculated from aggregated data for the years 2009 and 2010.  
**Population:** Whole of France.

**Sources:** Ministry of Justice and Civil Liberties; INSEE; authors' calculations.

The mean age at PACS formation in 2009-2010, determined from the age-specific rates, was 38.2 years for women and 39.2 years for men in same-sex couples. Among heterosexual couples the mean age was 32.2 years for women and 34.8 years for men. Same-sex PACS unions, therefore, are formed at significantly older ages. The mean ages at marriage are very close to these figures. In 2009, women married at 32.6 years, men at 35. In other words, the French marry or form PACS unions at the same age.

### *A smaller age gap between partners in PACS unions*

The age gap between PACS partners varies substantially by type of union. The mean absolute gap<sup>(11)</sup> is 3.7 years for heterosexual couples. It is distinctly wider for same-sex couples: 5 years for female couples and 7 years for male couples. As noted earlier, the union timing of same-sex couples follows a different pattern, with some partners forming PACS unions at advanced ages. This no doubt partly explains the observed differences in age gaps. It would be interesting to have more detailed information on homosexual unions in general, registered or otherwise, to see whether partners with a wide age gap more frequently register their union in order to safeguard their future, or whether, generally speaking, same-sex partners – particularly men – form unions that are less homogenous in age terms.

Age gaps between partners are smaller for heterosexual couples, and they are slightly smaller in PACS unions than for married couples. The mean absolute gaps are 3.7 and 4.4 years, respectively. The mean male-female gaps are 2.1 and 2.7 years, respectively, i.e. 0.6 years wider for married partners. The proportion of couples where the man was born at least 4 years before his partner is consistently larger among married couples, whereas a greater percentage of PACS partners are of the same age or very close in age (both born in the same year or in two contiguous years) (Figure 7). It is known that PACS partners have a higher educational level (Davie, 2011), and opportunities for meeting in educational institutions may be a factor in the similarity of partners' ages. PACS partners also tend to form couples that are more "egalitarian" than married couples (Rault et al., 2010), and this trend is reflected in the narrower age gap between partners – in contrast with marriage where the age gap is a firmly anchored factor of domination (Bozon, 1991) – although the age gap has in fact narrowed slightly for all types of union (Vanderschelden, 2006).

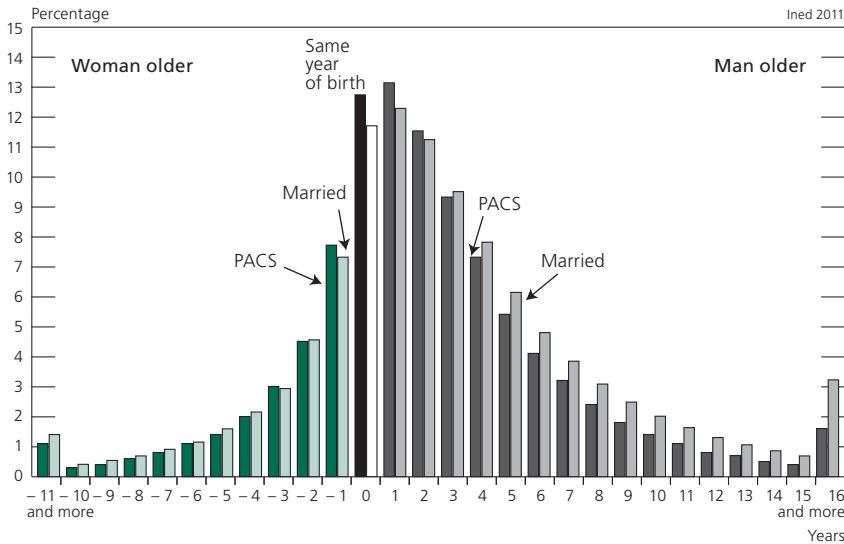
The age-specific patterns of PACS and marriage formation are nonetheless quite similar. A large majority of women who marry or form PACS unions at a young age have a partner at least two years older than themselves (Figure 8). Among women who marry before age 55, the majority have a husband at least two years older, whereas that is not the case for PACS unions. By age 30, only a minority of women form PACS unions with men more than one year their senior. For marriages, the proportion of unions with age gaps of two years or more does not fall below 50% for women until age 55 and above. The male profile is different. By age 30, the majority of men who marry or form PACS unions are at least two years older than their partners, and this pattern holds at all successive ages.

---

(11) Age gaps are calculated from the ages reached in the year of the marriage or PACS, i.e., ages expressed as differences between calendar years of birth. The mean absolute gap measures the mean age difference between the older partner and the younger partner. For heterosexual couples, the mean male-female gap measures the mean difference in age between the man and the woman. Missing birth years have been imputed. We thank INSEE for providing us with unpublished data on the birth years of both spouses for marriages registered in 2009.



Figure 7. Distribution of age differences between male and female partners, unions registered in 2009



**Interpretation:** In 13% of PACS unions and 12% of marriages registered in 2009, the man was born one year before his partner.

**Coverage:** PACS unions between different-sex partners and marriages registered in 2009.

**Sources:** Ministry of Justice and Civil Liberties; INSEE; authors' calculations.

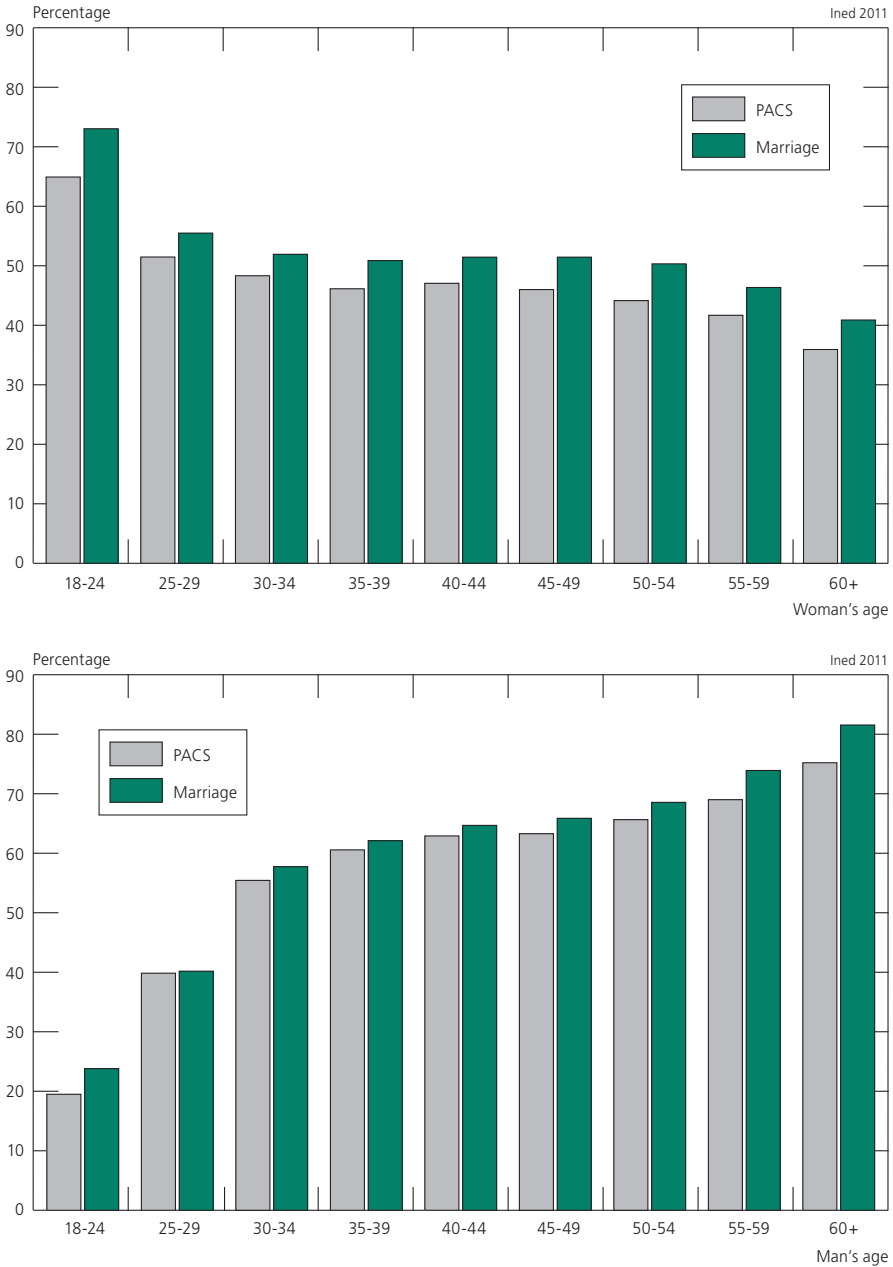
### Divorces up slightly in 2010

After several consecutive years of decline, the number of divorces rose again in 2010. The courts pronounced 133,909 divorces (including direct divorces and conversions of legal separations), a 2.5% rise from 130,601 in 2009. The increase concerned both the DOMs (3,099 divorces in 2010, up 2.5% on the previous year) and metropolitan France (130,810 divorces, up 2.5%) (Appendix Table A.9).

This new uptrend is a sign that the “automatic” effects of the new legislation are coming to an end. By shortening proceedings for divorce by mutual consent and allowing spouses who have been living apart for only two years (as against six previously) to petition for divorce unilaterally, the new law triggered a surge in divorces pronounced in 2005, and a gradual decrease in the following years. With the end of this “timing effect”, the number of divorces appears to be rising again despite the downtrend in marriages.

The way in which couples divorce is still slowly evolving (Prioux et al., 2010). Fault-based divorces are still declining, and now account for slightly under 10% of proceedings ending in divorce in 2010, versus more than 40% ten years earlier. While the share of divorces by mutual consent is stabilizing at around 54%, two categories of contested divorce are growing: divorces requested by one spouse and accepted by the other (14% of proceedings in

Figure 8. Percentage of men who are at least two years older than their partner, by the woman's age and the man's age at entry into union



Coverage: PACS unions between different-sex partners and marriages registered in 2009.

Sources: Ministry of Justice and Civil Liberties; INSEE; authors' calculations.

2000, 25% in 2010), and divorces for de facto separation (up from less than 2% of proceedings to nearly 11%). In this respect, the DOMs diverge from metropolitan France as a very large majority of divorces there are still contested. In 2010, just 30% of divorces were pronounced by mutual consent, and almost as many for de facto separation (30%) or at the request of one spouse accepted by the other (29%). The proportion of fault-based divorces (slightly over 10%) is comparable in relative terms to metropolitan France.

### *Risks remain highest five years after marriage*

The 2.5% increase in the number of divorces reflects an even sharper rise in the divorce rate, owing to the gradual decrease in the number of marriages at risk. In metropolitan France, the total divorce rate rose by 3.3% from 44.7 divorces per 100 marriages in 2009 to 46.2 per 100 in 2010<sup>(12)</sup> (Appendix Table A.9). The increase in divorce risk is particularly high among couples who have been married for 10-30 years (up by an average 5%-6%; Figure 9A). The increase is smaller for longer marriage durations (up 3.5% for marriages lasting more than 30 years) and shorter ones (up 2% at 5-10 years of marriage), and does not concern the most recent marriages (down 2% for couples married for less than 5 years). However, the 30-year pattern of changes in the risk of divorce by marriage duration shows an uptrend that is all the stronger, in relative terms, for longer marriage durations. Since 1980, the risk of divorce has risen by “only” 63% in the first 5 years of marriage, but has doubled at 10-15 years of marriage, and has been multiplied by 3.5 at 20-25 years of marriage and by 4.5 for marriage durations of over 30 years.<sup>(13)</sup>

However, the increase in the divorce rate in the past thirty years has not fundamentally altered the distribution of risk by marriage duration (as observed year after year), and the probability of divorce remains highest at around five years of marriage<sup>(14)</sup> (Figure 9B). In 2010, 2.9% of still-married couples who had married five years earlier (in 2005) got divorced, versus 1.5% in 1980 (couples married in 1975). Beyond that duration, the probability gradually diminishes, but the risk is high today at very long durations, since couples need to reach at least 34 years of marriage – compared with 20 years in 1980 – before the risk<sup>(15)</sup> falls below 5 per 1,000. These sharply

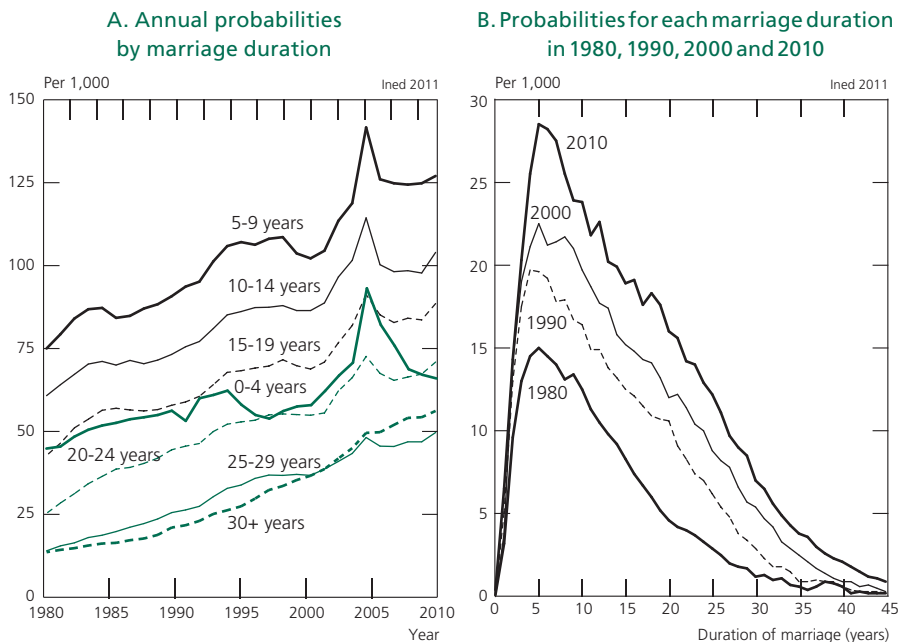
(12) We cannot calculate this indicator for overseas *départements* because of the bias that would result from their large migration flows. Moreover, we lack the necessary statistics.

(13) However, the probabilities of divorce measured here slightly underestimate the risk of divorce, especially for long marriage durations, as we cannot deduct marriages dissolved by the death of a spouse. Vital statistics do not provide information on the marriage date of married decedents (or hence on union dissolutions due to death by duration of marriage).

(14) Practically the same pattern holds with successive marriage cohorts, for which the risk peaks at around five years of marriage, except in the cohorts most affected by the 2005 surge in divorce for whom the peak occurs at the duration reached in 2005 (i.e. the 1993-2003 cohorts, including the 2000 cohort, which reached five years of marriage in 2005). Nevertheless, the decline in the risk of divorce over successive marriage durations is less perceptible when marriage cohorts are tracked.

(15) As stated earlier, however, these risks are underestimated (see note 13).

**Figure 9. Probabilities of divorce by duration of marriage, 1980-2010 (per 1,000)**



*Population:* Metropolitan France.

*Sources:* Authors' calculations based on statistics from the Ministry of Justice and Civil Liberties (SDSE) for divorces, and from INSEE (Demographic Surveys and Studies Division) for marriages.

higher probabilities concern couples who married in the 1960s and early 1970s, relatively few of whom divorced early in their marriages – people married “for life”, divorcing only in the event of serious marital breakdown – but who now have fewer qualms about ending their union. This rise in the frequency of late divorces explains the increase in the mean duration of marriage at the time of divorce, from 11.9 years in 1980 to 14.4 years in 2010.

**Do more than 45% of marriages end in divorce?**

The risk of divorce by marriage duration observed in 2010 effectively concerns persons who married between 2010 (duration 0) and 1965 (duration 45), or even earlier. What can we conclude today about the divorce rate in these successive marriage cohorts, and what estimates can we offer for the final proportion of divorced couples? The probability of divorce for marriage durations exceeding 15 years has been rising steadily since the 1980s (Figure 9A), with the exception of the 2005-2008 period, which saw a break in the trend due to the new legislation. We may reasonably assume, therefore, that the uptrend will last a few more years. If the mean trend of the past ten years persists for another decade (Table 7, last column), the final proportion of divorced couples should nearly double

between the marriage cohorts of 1965 (23.4%) and 1990 (44.6%), then level off in the 1995 cohort (44.8%). But the minimum assumption, based on a stabilization of the probability of divorce, yields values that are barely less high. We can already conclude, therefore, that the proportion of divorces will exceed 40% among couples married in the early 1990s and will very likely approach 45%.

**Table 7. Proportion of marriages ending in divorce (per 100 initial marriages)**

Year of marriage	Proportion of marriages dissolved after:						Final proportion <sup>(a)</sup>	
	5 years	10 years	15 years	20 years	25 years	30 years	minimum	maximum
1965	2.9	7.5	11.6	15.4	18.5	20.5	23.3	23.4
1970	4.0	10.4	15.9	20.7	24.4	27.0	30.3	30.7
1975	5.4	12.7	18.7	23.6	27.5	30.2	33.6	34.3
1980	6.5	14.3	20.7	26.0	30.3	33.2	36.5	37.6
1985	7.1	15.8	22.7	28.4	33.0		39.2	41.0
1990	8.3	18.4	25.5	31.6			42.1	44.6
1995	7.6	17.9	25.7				42.5	44.8
2000	10.0	20.7						
2005	9.6							

<sup>(a)</sup> Estimates based on stable unobserved marriage probabilities (minimum), or a 10-year continuation of the mean trend over the last 10 observed years from 2011 to 2020, followed by stabilization (maximum).  
*Population:* Metropolitan France.  
*Source:* Authors' calculations and estimates.

After a temporary stabilization at that level in the 1990-1995 cohorts, the rise is expected to resume in the later cohorts. Among the couples married in 2000, one in five has already divorced after 10 years of marriage (20.7%), a proportion comparable to that of the 1980 cohort after 15 years of marriage, and similar to that of the 1970 cohort after 20 years of marriage. This pattern reflects the impact of the new legislation, which resulted in an exceptional frequency of divorces in 2005, during the fifth year of marriage for the 2000 cohort. The probability reached 3.4 divorces per 100 marriages, far more than the number in a “normal” year (Figure 9B). After 5 years of marriage, as the probability of divorce has not decreased with respect to earlier cohorts (except in 2006), the final proportion of divorces in the 2000 cohort will almost certainly exceed 45%.

These estimates of the frequency of divorce in marriage cohorts are distinctly higher than those established in the early 2000s, when the stabilization of behaviour in the second half of the 1990s suggested that the figure might not exceed 38 divorces per 100 marriages (Prioux, 2003). In less than 10 years, the frequency of divorce has thus risen sharply in France, although without reaching the levels observed in Sweden or the United States, where over half of all marriages are dissolved.

## VI. Mortality

### *Steady progress*

The number of deaths in 2010 is provisionally estimated at 551,200 for all of France, of which 540,500 in metropolitan France and 10,700 in the overseas *départements* (Pla and Beaumel, 2012). The crude death rate was 8.5 per 1,000 inhabitants. For metropolitan France, as for all of France, life expectancy at birth is estimated at 78.0 years for men and 84.7 years for women, a gain of more than three months for both sexes. The gender gap remains unchanged at 6.7 years (Appendix Table A.11).

If the provisional estimates by INSEE are confirmed, male life expectancy at birth in metropolitan France will have gained 2.7 years between 2000 and 2010. This represents a mild acceleration relative to the two previous decades, during which the gains totalled 2.6 years from 1980 to 1990, and likewise from 1990 to 2000. For women, the trend has been less favourable. The 1.9 year gain in 2000-2010 is not insignificant, however, coming after 2.6 years in 1980-1990 but only 1.8 years in 1990-2000. In other words, female life expectancy has been increasing more slowly than in the decades before 1990. Throughout the second half of the twentieth century, female mortality fell far more sharply than male mortality. Only in the 1980s did the speed of the decline in male mortality catch up with that of female mortality, before outpacing it in the more recent period.

Mortality decreased among all socio-occupational categories in the past decade, continuing a trend observed since the 1970s. The pace of the decline is similar for all social classes, and major gaps in life expectancy persist. A recent INSEE study shows that life expectancy at age 35 for persons in higher-level occupations currently exceeds that of manual workers by 6.5 years for men and 3.0 years for women (Blanpain, 2011).

### *France in the European average*

In 2009, the most recent year for which comparative data are available, France remained at the European average for life expectancy at birth (Appendix Table A.12) and infant mortality (Appendix Table A.13), with no notable change on 2008. France continues to occupy a very favourable position at the top of the female ranking (84.4 years),<sup>(16)</sup> just behind Italy (84.5 years), Switzerland (84.6 years) and Spain (84.9), but its world ranking has deteriorated slightly. Until 2003, only Japan outranked France, but female life expectancy in France has been rising more slowly since the 1990s.

The French ranking is still less favourable for men (life expectancy at birth of 77.7 years in 2009 for all of France).<sup>(17)</sup> Nearly all countries of western Europe

(16) This figure concerns all *départements*. For metropolitan France alone, female life expectancy reached 84.5 years in 2009.

(17) 77.8 years for the *départements* of metropolitan France.

(Germany, Luxembourg, Netherlands, Switzerland and United Kingdom), those of northern Europe (Iceland, Norway and Sweden) and even certain countries of southern Europe (Greece, Italy and Spain), after years of lagging behind France, now have a higher male life expectancy (Avdeev et al., 2011). Only the countries of eastern Europe and some other countries in a relatively favourable economic position, such as Austria, Belgium, Denmark, Finland and Ireland, have shorter male life expectancies than France.

The 6.7 year gender gap in life expectancy remains wider than in most other European countries, except those of eastern Europe (where it varies from 6.7 years in Slovenia to 11.2 years in Lithuania) and Finland (6.9 years).

### *Persistent gaps between the DOMs and metropolitan France*

INSEE publishes estimates of infant mortality in each overseas *département* (DOM) for 1994-2009, and male and female life expectancies at birth for 1999-2008. However, the coverage of the civil registration system in the DOMs may be incomplete, especially in French Guiana, so mortality in these overseas territories may be underestimated.

Based on the data in Table 8, infant mortality does not appear to have declined significantly in the DOMs in the past ten years, despite being substantially higher than in metropolitan France. The gap between the DOMs and metropolitan France has thus gradually widened. The infant mortality rate in the DOMs exceeded that of the other French *départements* by 60% in 1999. Today, it is almost 2.5 times as high. The DOM with the highest child mortality rate is French Guiana, where mortality still exceeds 10 deaths per 1,000 births (almost triple the rate of metropolitan France). However, the stagnation concerns all DOMs.<sup>(18)</sup> To a certain extent, it reflects the lack of progress also observed in the past five years in metropolitan *départements*, where the infant mortality rate is holding steady at 3.6 deaths per 1,000 births (Appendix Table A.11; Niel, 2011).

The trend in life expectancy at birth is more positive (Table 9). Between 1999 and 2008 in all DOMs combined, it rose from 72.6 to 75.5 years for men and from 80.7 to 82.7 years for women. As a result, the gap with the rest of France remains stable, averaging 2.1 years for men and 1.8 years for women over the period. Guadeloupe and, especially, Martinique are in a better position than Réunion and French Guiana. The maximum life expectancy gap with respect to the rest of France in the four *départements* was 3 years for men and 2.6 years for women in 2008.

(18) Given the small population size of these *départements*, large mortality fluctuations (Tables 8 and 9) make it difficult to identify clear trends there.

**Table 8. Infant mortality rates in the overseas *départements* (DOM) and in metropolitan France (per 1,000)**

	Year										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Guadeloupe	6.9	7.3	6.8	7.7	8.7	7.5	7.2	9.7	6.1	6.9	8.7
Martinique	6.8	7.1	7.4	6.3	6.3	5.1	9.3	8.2	8.8	7.5	9.3
French Guiana	10.2	12.4	14.0	10.2	11.0	10.4	10.7	12.6	12.1	13.6	10.4
Réunion	6.0	5.5	6.9	6.3	7.3	6.6	7.9	6.6	6.1	8.0	7.6
Overseas <i>départements</i>	7.0	7.2	8.1	7.3	8.1	7.2	8.5	8.6	7.7	8.8	8.6
Metropolitan France	4.3	4.4	4.5	4.1	4.0	3.9	3.6	3.6	3.6	3.6	3.7
Whole of France	4.4	4.5	4.6	4.2	4.2	4.0	3.8	3.8	3.8	3.8	3.9
Difference DOM - met. France	2.7	2.8	3.6	3.2	4.1	3.3	4.9	5.0	4.1	5.2	4.9

*Source:* Beaumel and Pla, 2011a.

**Table 9. Life expectancy at birth (in years) by sex in the overseas *départements* (DOM) and in metropolitan France**

	Year									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Males</b>										
Guadeloupe	73.7	74.6	74.7	73.9	75.4	75.4	75.1	75.0	76.2	75.6
Martinique	75.4	75.3	75.6	75.7	76.1	76.3	77.0	76.2	76.9	77.6
French Guiana	71.5	72.1	72.9	73.3	72.3	73.4	74.6	74.4	75.5	74.8
Réunion	70.9	72.0	72.7	72.0	72.6	74.1	72.7	73.1	74.7	74.6
Overseas <i>départements</i>	72.6	73.4	73.8	73.4	74.0	74.8	74.4	74.3	75.6	75.5
Metropolitan France	75.0	75.3	75.5	75.8	75.9	76.7	76.8	77.2	77.4	77.6
Whole of France	74.9	75.2	75.4	75.7	75.8	76.7	76.7	77.1	77.4	77.6
Difference met. France - DOM	2.4	1.9	1.7	2.4	1.9	1.9	2.4	2.9	1.8	2.1
<b>Females</b>										
Guadeloupe	81.6	81.6	82.2	81.9	82.6	82.9	82.6	82.7	83.2	83.4
Martinique	82.3	82.2	81.5	83.2	82.5	83.9	83.2	84.5	83.2	83.8
French Guiana	78.3	80.2	79.0	80.0	80.7	80.7	80.9	81.0	81.2	81.2
Réunion	79.9	80.2	80.7	80.6	80.6	81.1	80.5	80.8	81.9	82.1
Overseas <i>départements</i>	80.7	81.0	81.1	81.5	81.5	82.1	81.6	82.1	82.4	82.7
Metropolitan France	82.5	82.8	82.9	83.1	83.0	83.9	83.9	84.2	84.4	84.4
Whole of France	82.5	82.8	82.9	83.0	82.9	83.8	83.8	84.2	84.4	84.3
Difference met. France - DOM	1.8	1.8	1.8	1.6	1.5	1.8	2.3	2.1	2.0	1.7

*Source:* Beaumel and Pla, 2011a.



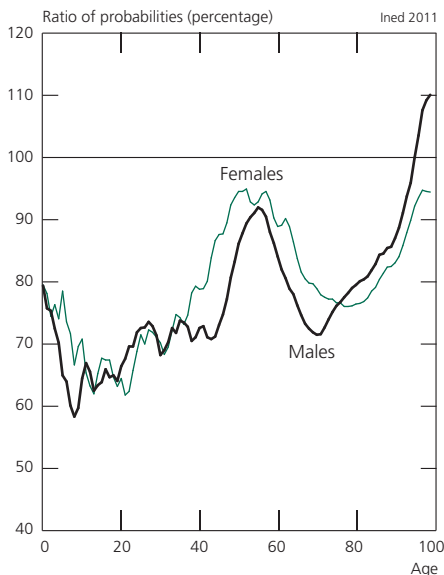
### Mortality trends that vary by age and sex

Using INSEE's detailed multi-year life tables for metropolitan France, the mortality gains achieved in the past ten years can be determined by age group and by sex.

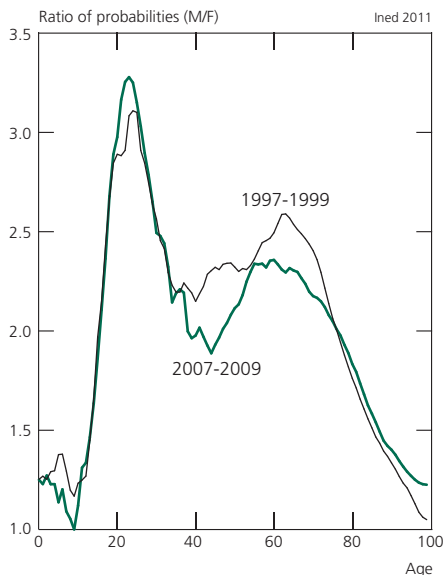
Figure 10 illustrates the changes in age-specific mortality by sex, measured by the ratios of the age-specific probabilities of dying for 2007-2009 to those of 1997-1999. Generally speaking, the largest relative gains concern children of both sexes and young adults, among whom progress is stronger for men than for women. The relative gains are weakest in the oldest age groups, where, by contrast, women are at a greater advantage. However, several age groups stand out from the trend. In the period studied, mortality fell less sharply at the youngest ages than in subsequent age groups. Maximum gains were registered at ages 10-25. Gains were weaker among women aged 40-70 and men aged 50-65 than in the surrounding age groups. Resistance to decline is particularly strong in the 50-59 group, especially among women.

Table 10 shows each age group's contribution in years to life expectancy gains achieved for each sex in the past thirty years. Less than 10% of the male gains between 1997-1999 and 2007-2009 and barely more than 5% of female gains are due to the decline in mortality under age 45, despite the major progress achieved at those ages. Mortality decline among the young has an ever weaker

**Figure 10. Mortality trends at each age from 1997-1999 to 2007-2009 (ratio of age-specific probabilities smoothed over 3 ages, except at age 0)**



**Figure 11. Excess male mortality at each age in 1997-1999 and 2007-2009 (ratio of male/female probabilities smoothed over 3 ages, except at age 0)**



Source: INSEE, 1997-1999 and 2007-2009 life tables.

impact on the change in life expectancy at birth, as the probabilities of dying at those ages are now very low. Over 75% of the years of life gained by men and over 85% of those gained by women in the same period are due to gains achieved beyond age 65 and especially beyond age 80 (40% and 65%, respectively, of total years gained).

**Table 10. Contribution of age groups to life expectancy gains (in years)**

Age group	Period					
	1977-79 to 1987-89	1987-89 to 1997-99	1997-99 to 2007-09	1977-79 to 1987-89	1987-89 to 1997-99	1997-99 to 2007-09
	Males			Females		
0-14	0.06	0.07	0.02	0.05	0.05	0.02
15-24	0.07	0.06	0.04	0.05	0.04	0.02
25-44	0.16	0.22	0.18	0.13	0.11	0.09
45-64	0.48	0.50	0.47	0.30	0.20	0.16
65-79	0.91	0.87	0.99	0.72	0.47	0.41
80+	0.71	0.78	1.15	1.18	1.11	1.30
Total	2.41	2.50	2.83	2.43	1.98	2.00
Life expectancy at end of period	72.3	74.8	77.6	80.5	82.4	84.4

*Population:* Metropolitan France.  
*Source:* Author's calculations based on INSEE life tables (Demographic Surveys and Studies Division).

Figure 11 gives the male/female ratios of the probabilities of dying by age in 1997-1999 and 2007-2009. It shows that male mortality consistently exceeds female mortality at all ages.<sup>(19)</sup> Excess male mortality is particularly high at ages 20-35 and in the 50-70 age group, for whom probabilities are twice as high for men as for women. This second excess mortality peak has been slightly eroded in the past decade owing to slower mortality decline at these ages among women relative to men. By contrast, the first peak is just as sharp in 2007-2009 as it was ten years earlier, with male mortality at least three times as high as female mortality at ages 20-25. The examination of mortality by medical cause of death sheds light on these differential trends in mortality by sex and age.

### *Changes in cause-specific mortality*

The distribution of deaths by medical cause can be analysed using the statistics compiled by the National Institute of Health and Medical Research (INSERM) until 2008, the most recent year for which data are available. With respect to the situation since 1990, the standardized mortality rate has decreased

(19) Except for a single age in years (8 years), but the probability of dying is so low at that age that it may fluctuate widely from one calendar year to the next, and we should not attach too much significance to this finding.

for both sexes for all seven major groups of medical causes of death: cancers, cardiovascular diseases, infectious diseases, respiratory diseases, other diseases, ill-defined causes, and external causes (Appendix Table A.14). However, significant variations appear when the situation is examined by sex and age group, and when causes of death are classified in greater detail, notably for the two leading causes, cardiovascular diseases and cancers.

### *Success in the fight against cardiovascular diseases*

The steepest decline concerns deaths from cardiovascular diseases. The standardized rate fell by 30% between 1998 and 2008, and has dropped by almost 50% since 1988. This is due in equal measure to fewer deaths from ischaemic heart diseases and cerebrovascular diseases, each of which has declined as a cause of death by approximately 35% in the past ten years (versus 20% for other heart diseases but nearly 40% for other diseases of the circulatory system). The main beneficiaries of the downtrend are adults aged 65-80, with a nearly 40% decrease, compared with 25% for the 45-65s and for persons aged 80 and over.

The decrease was similar for both sexes, but women began from a much lower initial level. The standardized rate of mortality from cardiovascular diseases stands at 169 and 95 per 100,000 for men and women, respectively (Appendix Table A.14), versus 239 and 136 per 100,000 ten years earlier. As overall female mortality is also lower than that of men, the share of mortality from cardiovascular diseases in overall mortality is very similar for both sexes, accounting for approximately one-quarter of the standardized rate in 2008 (Table 11).

### *Uneven gains in the fight against cancer*

Cancer mortality has also declined but to a far lesser degree. Cancer deaths have decreased by only 12% since 1998 and 20% since 1988, and cancers are now the leading medical cause of death in France, accounting for 36% of the standardized mortality rate from all causes. This is the only major cause of death that declined much less for women than for men, by 5% versus 16%, respectively, over the period 1998-2008. This pattern is especially visible in the over-45 age group, and partly explains the resistance to decline of female mortality at those ages.

The trend difference between the sexes is due mainly to divergences in smoking behaviour. While the proportion of regular smokers among men has been declining steadily since the Second World War, it has been rising continuously among women. The proportion among men has fallen from 70% in the mid-1950s to 30% today, whereas the proportion among women has risen from less than 10% to more than 20% in the same period (Hill and Laplanche, 2005). In consequence, mortality from cancers of the larynx, lung, or bronchus – the main causes of tobacco-related death – has risen by 37% among women in the past 10 years (and by more than 80% in the past 20), while among men it has fallen by 18% in 10 years (and by 23% since 1988).

The proportion of current or former smokers is still far higher among men than among women, however. As a result, the male standardized mortality rate for these types of cancer is still four times as high as the female rate. Similarly, cancers of the upper aerodigestive tract and oesophagus – also heavily influenced by smoking – are decreasing less quickly for women (a 12% decrease for both since 1998) than for men (a 38% decrease in cancers of the upper aerodigestive tract and 31% in oesophageal cancers).

Trends for other cancers have been very encouraging, however, particularly for stomach cancer, whose standardized mortality rate has fallen by 27% since 1998 (25% for men and 29% for women), and prostate cancer (for men), down by 24% in the same period.

**Table 11. Standardized mortality rates by major age groups in 2008\* (per 100,000) and distribution by cause of death (%)**

Cause of death	Age group						
	0-14	15-24	25-44	45-64	65-79	80+	All ages
<b>Males</b>							
Standardized rates, all causes (per 100,000)	4	6	13	69	240	1157	675
Infectious diseases	2.8	0.9	2.9	1.8	1.7	2.1	1.9
Cancers	7.4	9.8	17.1	47.4	46.4	24.6	36.6
Cardiovascular diseases	2.9	4.3	11.9	17.3	24.3	35.8	25.2
Respiratory diseases	1.3	1.1	2.2	2.9	5.9	10.0	6.2
Cancers of the digestive organs	0.6	1.0	4.8	8.4	5.1	3.8	5.4
Other diseases	72.1	9.1	12.7	10.2	11.4	18.3	14.3
Death from external causes	12.9	73.7	48.5	12.0	5.2	5.4	10.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Females</b>							
Standardized rates, all causes (per 100,000)	3	2	6	31	114	769	361
Infectious diseases	3.0	2.5	2.5	1.7	1.9	2.2	2.0
Cancers	7.2	16.1	40.3	56.7	45.8	17.6	34.8
Cardiovascular diseases	3.9	7.5	11.2	12.0	22.7	39.6	26.5
Respiratory diseases	1.8	1.6	2.1	2.5	4.6	7.7	5.3
Cancers of the digestive organs	1.1	1.0	4.7	6.8	4.9	4.3	4.9
Other diseases	72.8	18.3	13.1	10.8	15.4	23.4	19.0
Death from external causes	10.1	52.9	26.2	9.6	4.7	5.2	7.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<p>* These rates are slightly different from those of Appendix Table A.14 because of the calculation method used. Ill-defined causes have been distributed across other causes. For a definition of the major groups of causes and the method used to distribute ill-defined causes, see Meslé (2006).  <b>Population:</b> Metropolitan France  <b>Source:</b> Authors' calculations based on INSERM statistics (CépiDc).</p>							

### *Sharp drop in accidental deaths but weak decline in suicides and homicides*

Accidental mortality has fallen sharply in the past ten years, decreasing by 50% both for road-traffic accidents (which mostly involve young adults) and for accidental falls (which mainly affect the elderly). Mortality due to other accidents declined by 14%. By contrast, deaths due to suicide decreased by only 9% (the rate increases with age) and deaths due to homicide by only 7%. The homicide mortality rate actually rose very slightly among men in this period but remains below 8 per 100,000, a figure too low to influence the overall trend in deaths from external causes.

### *Other diseases*

The most worrying situation – in addition to the trend in female cancer mortality – concerns mortality due to mental disorders and diseases of the nervous system, which has risen sharply in the past 10 years. These diseases affect older adults in particular. Deaths due to Alzheimer's disease have increased by an estimated 70% in the past decade or so (Aouba et al., 2011). However, as the disease was not recorded in the statistics until 1979, and concerns an age group frequently affected by multiple pathologies which make the underlying cause of death hard to identify, its increase may be due partly to advances in diagnosis, medical practices and certification.

Mortality rates from infectious diseases, diseases of the digestive system, and diseases of the respiratory system are still falling, very slowly for the first category but significantly for the second (down 23% since 1998) and third (almost 40%). However, their share of overall mortality has become very small. These three types of diseases now account for only 2%, 5% and 6% of overall mortality, respectively, with minimal differences between the sexes (Table 11).

## Overview

The total population of France on 1 January 2011 is estimated at 65 million, an increase of 5.5 per 1,000 from 1 January 2010. Of the total, 63.1 million reside in metropolitan France and 1.9 million in the overseas *départements* (DOMs). Growth was slightly higher than in 2009. It was twice as high in the DOMs (11.2 per 1,000) as in metropolitan France (5.4 per 1,000). Population ageing is more pronounced in metropolitan France than in the DOMs, but the trend is expected to accelerate in the latter. France already has 17,000 centenarians, nearly nine out of ten of whom are women. The proportion of persons aged 60 years and over is set to rise rapidly in the coming years, with a substantial percentage of centenarians in the total population by 2050.

Fertility exceeds 2 children per woman (2.01 in metropolitan France and 2.4 in the DOMs in 2010), owing to the increase in fertility after ages 30, 35 and especially 40. However, in metropolitan France, the percentage of births to

mothers aged 40 and over remains very small (3.5%) and well below the figure recorded in the early twentieth century. Fertility norms in the DOMs are different, in certain respects, from those observed in metropolitan France. Fertility at young ages is more common, and adolescent girls who become pregnant less frequently have abortions. A very large majority of children are born to unmarried parents. The number of induced abortions remained stable in 2008 and 2009. In metropolitan France, the proportion of terminated pregnancies varies sharply with age. Three-quarters of adolescent pregnancies end in abortion, compared with fewer than 12% at age 30. In the DOMs, differences by age are narrower, but abortions are more frequent overall, so the proportion of women who terminate a pregnancy is distinctly higher than in metropolitan France.

The number of marriages has levelled off after several years of decline, and the number of PACS civil partnerships rose again in 2010, although the rate of increase is declining steadily (+18% in 2010 versus +20% in 2009 and +43% in 2008). Couples marry or form PACS unions at nearly the same age, except in the case of same-sex couples, whose mean age is much higher. The mean age gap between heterosexual partners entering a PACS union is slightly narrower than for couples who marry, because PACS partners are more often of similar age and the man is less often much older than his partner. Nevertheless, the patterns of age gaps by age at union are fairly similar in marriages and PACS partnerships.

The number of divorces increased again slightly in 2010, and the total divorce rate moved back up to 46.2 divorces per 100 marriages. The final proportion of marriages that will end in divorce is estimated at 45% for couples married in the 1990s. Although the risk of divorce remains highest after around 5 years of marriage, the probability of divorcing after 30-35 years of marriage has risen considerably in the past 30 years.

Advances in mortality continue. The largest gains have been achieved after age 65, especially with regard to cardiovascular diseases. Cancer mortality has declined, but remains the main cause of death. Mortality due to mental disorders and diseases of the nervous system is rising significantly, owing to the growing proportion of elderly persons who develop degenerative diseases. However, statistical recording of this type of disease began only recently, a factor that may also explain the substantial increase in this cause of death.

The past decade has seen more modest progress for women (a gain of 1.9 years in life expectancy at birth between 2000 and 2010) than for men (a gain of 2.7 years) but women's mean length of life still exceeds that of men by 6.7 years (84.7 years and 78.0 years, respectively, in 2010).

Mortality is higher in the DOMs than in metropolitan France. The most notable differences concern children under one year of age. Infant mortality – a good indicator of local health conditions – is more than twice as high, at 8.6 per 1,000 births versus 3.7 per 1,000 in metropolitan France. The rate varies considerably between *départements*, exceeding 10 deaths per 1,000 births in French Guiana. However, this infant mortality differential has little impact on life expectancy at birth, which is very close to that of metropolitan France.



## STATISTICAL APPENDIX

Table A.1. Population change (in thousands) and crude rates (per 1,000)<sup>(1)</sup>

Year	Mid-year population	Live births	Deaths	Growth			Crude rates (per 1,000)			
				Natural increase	Net migration	Total	Birth rate	Death rate	Growth	
									Natural increase	Total
1985	55,284	768	552	+216	+38	+254	13.9	10.0	+3.9	+4.6
1990	56,709	762	526	+236	+80	+316	13.4	9.3	+4.1	+5.6
1995	57,844	730	532	+198	+40	+238	12.6	9.2	+3.4	+4.1
2000	59,062	775	531	+244	+70	+314	13.1	9.0	+4.1	+5.3
2001	59,476	771	531	+240	+85	+325	13.0	8.9	+4.1	+5.5
2002	59,894	762	535	+226	+95	+321	12.7	8.9	+3.8	+5.4
2003	60,304	761	552	+209	+100	+309	12.6	9.2	+3.4	+5.1
2004	60,734	768	509	+259	+105	+364	12.6	8.4	+4.2	+6.0
2005	61,181	774	528	+247	+95	+342	12.7	8.6	+4.1	+5.6
2006	61,597	797	516	+281	+115	+372	12.9	8.4	+4.5	+6.4
2007*	61,965	786	521	+265	+70	+335	12.7	8.4	+4.3	+5.4
2008*	62,304	796	532	+264	+75	+339	12.8	8.5	+4.3	+5.4
2009*	62,620	793	538	+255	+70	+325	12.7	8.6	+4.1	+5.2
2010*	62,960	802	540	+262	+75	+337	12.7	8.6	+4.2	+5.4

<sup>(1)</sup> Population and rates revised after the census survey 2009.  
 \*Provisional.  
**Population:** Metropolitan France.  
**Source:** INSEE, Demographic Surveys and Studies Division, Pla and Beaumel (2012).

Table A.2. Age distribution of the population on 1 January (%)

Age group	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010*	2011*
0-19	29.2	27.8	26.1	25.6	25.0	24.9	24.8	24.6	24.5	24.4	24.4
20-59	52.7	53.2	53.8	53.8	54.1	54.1	53.8	53.4	53.1	52.7	52.3
60+	18.1	19	20.1	20.6	20.9	21.0	21.4	22.0	22.4	22.9	23.3
<i>including:</i>											
65+	12.8	13.9	15.0	16.0	16.5	16.6	16.5	16.6	16.7	16.8	16.9
75+	6.3	6.8	6.1	7.2	8.1	8.3	8.5	8.6	8.8	8.9	9.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Provisional.  
**Population:** Metropolitan France.  
**Source:** INSEE, Demographic Surveys and Studies Division, series revised after census survey 2009.



**Table A.3. Legal long-term immigration of foreign nationals (adults and minors) from the European Economic Area (EEA) and from countries without freedom of movement rights in Europe**

Year admitted for residence	EEA nationals*			Non-EAA nationals			Total admissions
	Adults	Minors	Total	Adults	Minors	Total	
1994	43,885	3,812	47,697	60,272	11,594	71,866	119,563
1995	41,118	3,305	44,423	54,123	7,634	61,757	106,180
1996	40,082	3,176	43,258	55,676	7,052	62,728	105,986
1997	38,485	2,821	41,306	78,620	7,505	86,125	127,431
1998	40,092	2,941	43,033	99,638	13,208	112,846	155,879
1999	40,064	2,727	42,791	89,698	12,631	102,329	145,120
2000	40,325	2,957	43,282	105,263	11,883	117,146	160,428
2001	39,406	3,146	42,552	127,287	12,855	140,142	182,694
2002	39,729	3,015	42,744	148,536	14,427	162,963	205,707
2003	39,012	3,073	42,085	158,504	14,808	173,312	215,397
2004	39,273	3,944	43,217	153,035	15,611	168,646	211,863
2005			52,600	151,396	13,291	164,685	207,285
2006			51,765	150,983	9,972	160,955	212,720
2007			55,000	134,859	9,799	144,658	199,658
2008			55,000	146,550	9,506	156,056	211,056

\* European Union member states + Iceland, Liechtenstein and Norway; enlargement from 14 to 24 countries from 2004; from 24 to 26 from 2007 with the entry of Bulgaria and Romania.

Pursuant to the Act of 26 November 2003, foreign nationals of the 14 old EU member states are no longer required to hold a residence permit. A provisional estimate of 40,000 admissions of these EU nationals from 2004 to 2007 was introduced to correct the resulting under-estimation. From 2005, figures are estimated from annual census survey data.

**Sources:** First residence permits with a validity of at least one year granted to foreign nationals arriving in France as adults: Ministry of the Interior (AGDREF) (calculated by INED). From 2006, entries of minors are also counted on the basis of data collected by the Ministry of the Interior (and no longer by the ANAEM, Agence nationale de l'accueil des étrangers et des migrations, as previously).

Table A.4. Fertility since 1970

Year	Sum of age-specific rates (per 100 women)			Mean age at childbearing		Non-marital fertility	
	15-27	28 and over	Total (TFR)	All births	First births <sup>(1)</sup>	Sum of age- specific rates (per 100 women)	Share in total fertility (%)
1970	143	104	247	27.2	23.9	16	6.4
1975	118	74	193	26.7	24.1	16	8.5
1980	116	78	194	26.8	24.5	22	11.4
1985	99	82	181	27.5	25.2	36	19.6
1990	84	94	178	28.3	26.0	53	30.1
1995	69	102	171	29.0	26.8	65	37.9
2000	69	119	187	29.4	27.4	81	43.2
2001	69	119	188	29.4	27.4	83	44.3
2002	67	119	186	29.5	27.5	84	44.7
2003	66	121	187	29.5	27.6	86	45.6
2004	67	123	190	29.6	27.7	89	46.8
2005	66	126	192	29.7	27.8	92	47.9
2006	67	131	198	29.8	27.8	98	49.7
2007	65	131	196	29.8	27.9	100	50.9
2008	66	133	199	29.9	28.0	103	51.6
2009*	65	134	199	30.0		104	52.9
2010*	65	136	201	30.0		109	54.2

\* Provisional data.  
**Sources:** INSEE, Surveys and Demographic Studies Division. Series revised after the 2006 census except :  
<sup>(1)</sup> 1970-1995: Laurent Toulemon, from EHF (Study of Family History) 1999; 2000: estimate based on vital records; 2002-2008: calculations by G. Desplanques (2008) then E. Davie and M. Mazuy (2010) based on annual census surveys, minus 0.3 years to offset age over-estimation with this method.  
**Population:** Metropolitan France.

**Table A.5. Cohort fertility: cumulative fertility up to selected ages, estimated completed fertility (mean number of children per 100 women), and mean age of childbearing (in years and tenths of years)**

Birth cohort	Cumulative fertility per 100 women (age in completed years)				Projection at constant rate*		Trend projection**	
	24	29	34	39	Completed fertility	Mean age at child-bearing	Completed fertility	Mean age at child-bearing
1930	90	177	231	256	263	27.5	263	27.5
1935	89	181	233	254	258	27.1	258	27.1
1940	96	181	225	238	241	26.4	241	26.4
1945	99	174	206	219	222	26.0	222	26.0
1950	89	154	192	207	211	26.5	211	26.5
1955	77	148	190	209	213	27.0	213	27.0
1960	66	139	184	206	212	27.7	212	27.7
1961	63	135	181	203	209	27.9	209	27.9
1962	60	131	179	202	208	28.1	208	28.1
1963	56	127	176	200	207	28.3	207	28.3
1964	53	122	173	198	205	28.5	205	28.5
1965	49	118	170	196	203	28.7	204	28.7
1966	46	114	168	195	202	28.9	202	28.9
1967	44	111	167	194	202	29.1	202	29.1
1968	42	109	166	193	201	29.2	201	29.2
1969	39	105	163	192	200	29.4	200	29.4
1970	37	103	162	192	200	29.5	200	29.6
1971	35	100	160	191	199	29.7	200	29.7
1972	33	98	159		198	29.8	200	29.9
1973	32	97	159		199	29.9	201	30.0
1974	31	96	160		199	29.9	202	30.0
1975	30	96	161		201	30.0	204	30.1
1976	30	95	160		200	30.0	205	30.2
1977	31	96						
1978	31	95						
1979	31	96						
1980	31	95						
1981	32	96						
1982	32							
1983	31							
1984	32							
1985	31							
1986	31							

\*For the 1930-61 cohorts, observed completed fertility and mean age of childbearing; for later cohorts, unobserved rates are assumed equal to rates observed at the same age in 2010.

\*\*For the 1930-61 cohorts, observed completed fertility and mean age of childbearing; for later cohorts, unobserved rates have been estimated by extrapolating the trend of the last 15 years.

**Population:** Metropolitan France.

**Source:** Calculations and estimates based on data from INSEE, Demographic Surveys and Studies Division.

Table A.6. Total fertility rates in Europe  
(children per woman)

	Year										
	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010 <sup>(1)</sup>
Austria	1.65	1.47	1.46	1.42	1.36	1.40	1.40	1.38	1.41	1.39	1.44
Belgium	1.68	1.51	1.62	1.56	1.67	1.76	1.80	1.81	1.82	1.83	–
Bulgaria	2.05	1.97	1.82	1.23	1.26	1.32	1.38	1.42	1.48	1.57	1.49
Cyprus	–	–	–	2.03	1.64	1.42	1.45	1.39	1.46	1.51	–
Czech Republic	2.10	1.96	1.90	1.28	1.14	1.28	1.33	1.44	1.50	1.49	1.49
Denmark	1.55	1.45	1.67	1.80	1.78	1.80	1.85	1.84	1.89	1.84	1.87
Estonia	–	–	2.05	1.38	1.38	1.50	1.55	1.63	1.65	1.62	1.63
Finland	1.63	1.65	1.78	1.81	1.73	1.80	1.84	1.83	1.85	1.86	1.87
France	–	–	–	–	1.89	1.94	2.00	1.98	2.01	2.00	2.02
France (metropolitan)	1.95	1.81	1.78	1.71	1.87	1.92	1.98	1.96	1.99	1.99	2.01
Germany	1.56	1.37	1.45	1.25	1.38	1.34	1.33	1.37	1.38	1.36	1.39
Greece	2.23	1.67	1.40	1.31	1.26	1.33	1.40	1.41	1.51	1.45	1.44
Hungary	1.91	1.85	1.87	1.57	1.32	1.31	1.34	1.32	1.35	1.33	1.25
Ireland	–	–	2.11	1.84	1.89	1.86	1.89	2.01	2.07	2.07	2.07
Italy	1.64	1.42	1.33	1.19	1.26	1.32	1.35	1.37	1.42	1.41	1.41
Latvia	–	–	–	–	–	1.31	1.35	1.41	1.44	1.31	1.17
Lithuania	1.99	2.08	2.03	1.55	1.39	1.27	1.31	1.35	1.47	1.55	1.55
Luxembourg	1.38	1.38	1.60	1.70	1.76	1.63	1.65	1.61	1.61	1.59	1.63
Malta	–	–	–	–	1.70	1.38	1.39	1.37	1.44	1.44	1.38
Netherlands	1.60	1.51	1.62	1.53	1.72	1.71	1.72	1.72	1.77	1.75	1.79
Poland	–	–	2.06	1.62	1.35	1.24	1.27	1.31	1.39	1.40	1.38
Portugal	2.25	1.72	1.56	1.41	1.55	1.40	1.36	1.33	1.37	1.32	–
Romania	2.43	2.31	1.83	1.33	1.31	1.32	1.32	1.30	1.35	1.38	–
Slovakia	2.31	2.25	2.09	1.52	1.30	1.25	1.24	1.25	1.32	1.41	1.40
Slovenia	–	1.71	1.46	1.29	1.26	1.26	1.31	1.38	1.53	1.53	1.57
Spain	2.20	1.64	1.36	1.17	1.23	1.35	1.38	1.40	1.46	1.40	1.39
Sweden	1.68	1.74	2.13	1.73	1.54	1.77	1.85	1.88	1.91	1.94	1.98
United Kingdom	1.90	1.79	1.83	1.71	1.64	1.78	1.84	1.90	1.96	1.94	–
Iceland	2.48	1.93	2.30	2.08	2.08	2.05	2.08	2.09	2.15	2.23	2.20
Norway	1.72	1.68	1.93	1.87	1.85	1.84	1.90	1.90	1.96	1.98	1.95
Switzerland	1.55	1.52	1.58	1.48	1.50	1.42	1.44	1.46	1.48	1.49	–

<sup>(1)</sup> Numbers in italics are provisional estimates communicated to Eurostat by national statistical offices.  
Source: Eurostat.

Table A.7. Cohort fertility in Europe

Cohort	Completed fertility (per woman)					Mean age at childbearing (years)					Last available year <sup>(2)</sup>
	1954- 1955	1959- 1960	1964- 1965	1969- 1970	1974- 1975 <sup>(1)</sup>	1954- 1955	1959- 1960	1964- 1965	1969- 1970	1974- 1975 <sup>(1)</sup>	
Austria	1.77	1.71	1.66	1.61	1.60-1.62	25.8	26.5	27.3	28.2	28.6-28.8	2008
Belgium	1.83	1.87	1.84	1.83	1.81-1.86	26.7	27.4	28.3	29.1	29.5-29.7	2008
Bulgaria	2.04	1.96	1.84	1.66	1.52-1.53	24.0	23.7	23.5	24.3	25.7	2008
Czech Rep.	2.08	2.03	1.95	1.87	1.74	24.5	24.5	24.9	25.7	27.6-27.7	2008
Denmark	1.84	1.88	1.93	1.97	1.95-1.97	27.2	28.4	29.2	29.7	30.1-30.2	2008
Estonia	–	–	–	1.90	1.81-1.83	–	–	–	26.3	27.6-27.7	2008
Finland	1.88	1.95	1.92	1.88	1.87-1.90	27.9	28.6	29.2	29.5	29.9-30.1	2008
France (metro.)	2.13	2.12	2.04	1.99	2.00-2.04	27.0	27.7	28.6	29.5	29.9-30.1	2008
Germany	1.66	1.66	1.56	1.49	1.51-1.54	26.4	27.1	28.1	29.0	29.3-29.5	2008
Greece	2.02	1.97	1.79	1.62	1.53-1.55	25.9	26.0	27.0	28.5	29.7-29.9	2008
Hungary	1.96	2.02	1.98	1.88	1.68-1.69	24.9	25.0	25.5	26.3	27.6-27.7	2008
Ireland	–	–	2.21	2.13	2.07-2.13	–	–	30.2	31.0	31.3-31.5	2008
Italy	1.80	1.69	1.55	1.45	1.38-1.44	27.1	27.9	29.3	30.4	31.0-31.4	2007
Latvia <sup>(3)</sup>	–	–	–	–	–	–	–	–	–	–	2008
Lithuania	1.97	1.92	1.72	1.76	1.67-1.69	26.3	26.0	26.1	25.9	26.5	2008
Luxembourg	1.67	1.75	1.83	1.84	1.78-1.81	27.6	28.6	29.2	29.6	29.8-30.0	2008
Netherlands	1.88	1.86	1.79	1.76	1.76-1.81	28.1	29.2	30.0	30.5	30.7-30.8	2008
Poland	–	–	–	1.84	1.57-1.60	–	–	–	26.1	27.0-27.2	2008
Portugal	2.03	1.90	1.83	1.69	1.55-1.59	26.2	26.4	27.4	28.3	28.9-29.1	2008
Romania	2.33	2.16	1.94	1.62	1.53-1.54	25.0	24.5	24.2	25.2	26.1-26.2	2008
Slovakia	2.23	2.17	2.05	1.91	1.69-1.70	25.2	25.0	25.0	25.4	26.5-26.6	2008
Slovenia	–	–	1.79	1.70	1.63	–	–	25.8	27.2	28.8	2008
Spain	1.93	1.80	1.65	1.48	1.36-1.42	27.2	27.8	29.2	30.5	31.5-31.8	2008
Sweden	2.02	2.05	2.03	1.97	1.92-1.95	27.9	28.6	28.9	29.5	30.4-30.6	2008
United Kingdom	2.01	1.97	1.92	1.87	1.86-1.89	27.1	27.8	28.4	28.8	29.2-29.4	2007
Iceland	2.55	2.46	2.40	2.32	2.21-2.22	26.6	27.4	28.0	28.4	29.2	2008
Norway	2.05	2.09	2.07	2.05	1.98-1.99	27.0	28.0	28.6	29.0	29.7	2008
Switzerland	1.75	1.78	1.69	1.63	1.59-1.61	28.0	28.6	29.5	30.1	30.5-30.6	2008

<sup>(1)</sup> Two estimates are proposed. One is based on rates that remain unchanged with respect to the last observation year, the other on a continuation of the trend at each age over the last 15 observed years.

<sup>(2)</sup> Last available year upon which extrapolations are based.

<sup>(3)</sup> The series of published rates (2002-2008) cannot be used to calculate and estimate completed fertility.

**Sources:** Calculations and estimations based on age-specific fertility rates published on the Eurostat website.

Table A.8. Number of induced abortions and annual indices since 1976

Year	Abortions reported in notifications <sup>(1)</sup>	Abortions recorded in SAE <sup>(2)</sup>	Abortions estimated by INED <sup>(3)</sup>	Abortions per 100 live births <sup>(4)</sup>	Annual abortions per 1000 women aged 15-49 <sup>(4)</sup>	Mean number of abortions per woman <sup>(4)</sup>
1976	134,173		246,000	34.1	19.6	0.66
1981	180,695		245,000	30.4	18.7	0.62
1986	166,797		221,000	28.4	16.1	0.53
1990	170,423		209,000	27.4	14.8	0.49
1991	172,152		206,000	27.1	14.4	0.48
1992	167,777		206,000	27.7	14.3	0.48
1993	166,921		206,000	28.9	14.3	0.49
1994	163,180		207,000	29.1	14.3	0.49
1995	156,181	179,648	207,000	28.4	14.2	0.50
1996	162,792	187,114	207,000	28.2	14.2	0.50
1997	163,985	188,796	207,000	28.5	14.2	0.50
1998		195,960	207,000	28.0	14.2	0.51
1999		196,885	206,000	27.7	14.2	0.51
2000		192,174	206,000	26.6	14.2	0.51
2001		202,180	206,000	26.7	14.3	0.51
2002	137,497	206,596		27.1	14.3	0.51
2003		203,300		26.7	14.0	0.50
2004		210,664		27.4	14.5	0.52
2005	166,985	206,311		26.6	14.2	0.51
2006	174,561	215,390		27.0	14.9	0.53
2007	185,498	213,382		27.1	14.7	0.53
2008	179,367	209,247		26.3	14.5	0.52
2009		209,268		26.4	14.6	0.52

<sup>(1)</sup> Statistics from notifications including elective and therapeutic abortions.  
<sup>(2)</sup> Hospital statistics (elective abortions only). **Source:** DREES.  
<sup>(3)</sup> INED estimate (elective abortions). From 2002, the hospital statistics are considered exhaustive.  
**Source:** C. Rossier and C. Pirus (2007).  
<sup>(4)</sup> Based on INED estimates up to 2001 and on hospital statistics from 2002.  
**Population:** Metropolitan France.

Table A.9. Characteristics of nuptiality and divorce since 1985

Year	Number of marriages	Total first marriage rate				Number of divorces <sup>(c)</sup>	Total divorce rate per 100 marriages	Number of PACS unions	Number of PACS dissolutions
		Overall rate <sup>(a)</sup>		Overall probability <sup>(b)</sup>					
		Men	Women	Men	Women				
1985	269,419	0.53	0.54	0.69	0.73	107,505	30.5		
1986	265,678	0.52	0.53	0.68	0.71	108,380	31.1		
1987	265,177	0.51	0.52	0.67	0.70	106,526	31.0		
1988	271,124	0.52	0.53	0.67	0.71	108,026	31.3		
1989	279,900	0.54	0.55	0.67	0.71	107,357	31.5		
1990	287,099	0.55	0.56	0.68	0.71	107,599	32.1		
1991	280,175	0.54	0.55	0.66	0.70	106,418	33.2		
1992	271,427	0.52	0.53	0.65	0.68	107,994	33.5		
1993	255,190	0.49	0.50	0.62	0.65	110,757	34.8		
1994	253,746	0.48	0.49	0.61	0.64	115,785	36.7		
1995	254,651	0.48	0.50	0.60	0.63	119,189	38.2		
1996	280,072	0.53	0.55	0.64	0.67	117,382	38.0		
1997	283,984	0.54	0.56	0.64	0.67	116,158	38.0		
1998	271,361	0.52	0.54	0.62	0.65	116,349	38.4		
1999	286,191	0.56	0.58	0.64	0.67	116,813	38.9	6,151	7
2000	297,922	0.58	0.60	0.65	0.68	114,005	38.2	22,276	624
2001	288,255	0.57	0.59	0.64	0.66	112,631	37.9	19,632	1,872
2002	279,087	0.55	0.57	0.62	0.65	115,861	39.2	25,311	3,185
2003	275,963	0.55	0.56	0.62	0.64	125,175	42.5	31,585	5,292
2004	271,598	0.53	0.55	0.60	0.63	131,335	44.8	40,093	7,043
2005	276,303	0.54	0.55	0.60	0.63	152,020	52.3	60,473	8,690
2006	267,260	0.52	0.53	0.58	0.61	135,910	46.9	77,362	9,583
2007	267,194	0.51	0.52	0.58	0.60	131,320	45.5	102,023	22,782
2008	258,749	0.49	0.51	0.56	0.58	129,379	45.1	146,030	23,657
2009	245,151	0.47	0.48	0.53	0.56	127,578	44.7	174,562	26,933
2010	245,334	0.46	0.47	0.53	0.55	130,810	46.2	205,596	35,060

<sup>(1)</sup> Ratios of number of first marriages to number of persons of same age, summed to age 49.  
<sup>(2)</sup> Ratios of number of first marriages to (estimated) number of never-married persons at the same age, combined to age 49.  
<sup>(3)</sup> Direct divorces and separations converted into divorces.  
**Population:** Metropolitan France.  
**Sources:** INSEE, Division of Demographic Surveys and Studies; French Ministry of Justice.

Table A.10. Characteristics of nuptiality by birth cohort

Male birth cohort	Men			
	Proportion ever-married at age 49*	Mean age at first marriage* (years)	Proportion ever-married	
			At age 24	At age 30
1943	0.88	24.5	0.55	0.81
1948	0.87	24.5	0.56	0.80
1953	0.85	25.0	0.52	0.75
1958	0.79	26.4	0.39	0.64
1963	0.72	28.2	0.23	0.52
1965	0.70	28.9	0.19	0.47
1967	0.68	29.4	0.16	0.44
1969	0.66	30.0	0.12	0.41
1971	0.64	30.4	0.09	0.39
1973	0.63	30.6	0.08	0.37
1975			0.06	0.34
1977			0.06	0.32
1979			0.06	0.29
1981			0.05	
1983			0.05	
1985			0.04	
Female birth cohort	Women			
	Proportion ever-married at age 49*	Mean age at first marriage* (years)	Proportion ever-married	
			At age 22	At age 28
1945	0.92	22.3	0.59	0.86
1950	0.90	22.6	0.57	0.83
1955	0.87	22.9	0.53	0.77
1960	0.82	24.3	0.42	0.67
1965	0.75	26.3	0.24	0.54
1967	0.73	27.0	0.19	0.50
1969	0.70	27.5	0.15	0.46
1971	0.68	28.1	0.12	0.43
1973	0.66	28.6	0.09	0.40
1975	0.65	28.9	0.07	0.38
1977			0.07	0.36
1979			0.06	0.33
1981			0.06	0.30
1983			0.05	
1985			0.05	
1987			0.04	

\*Unobserved marriage probabilities are assumed to be stable at the average level observed in the last 3 years.  
*Population:* Metropolitan France.  
*Source:* Calculations and estimates based on INSEE data.



Table A.11. Characteristics of overall mortality since 1985

Year	Life expectancy (years)				Mortality rate (per 1,000 live births)		Survivors at age 60 (per 1,000 at birth)	
	At birth		At age 60		Infant <sup>(1)</sup>	Neonatal <sup>(2)</sup>	Male	Female
	Male	Female	Male	Female				
1985	71.3	79.4	17.9	23.0	8.3	4.6	803	913
1986	71.5	79.7	18.1	23.2	8.0	4.3	807	915
1987	72.0	80.3	18.4	23.7	7.8	4.1	814	918
1988	72.3	80.5	18.7	23.9	7.8	4.1	816	919
1989	72.5	80.6	18.8	24.0	7.5	3.8	818	920
1990	72.7	81.0	19.0	24.2	7.3	3.6	822	923
1991	72.9	81.2	19.2	24.4	7.3	3.5	824	923
1992	73.2	81.5	19.4	24.6	6.8	3.3	827	925
1993	73.3	81.5	19.4	24.6	6.5	3.1	828	924
1994	73.7	81.9	19.7	25.0	5.9	3.2	832	926
1995	73.9	81.9	19.7	24.9	4.9	2.9	836	928
1996	74.1	82.1	19.7	25.0	4.8	3.0	841	929
1997	74.6	82.3	19.9	25.2	4.7	3.0	847	931
1998	74.8	82.4	20.0	25.3	4.6	2.9	850	931
1999	75.0	82.5	20.2	25.3	4.3	2.7	852	932
2000	75.3	82.8	20.4	25.6	4.4	2.8	855	933
2001	75.5	82.9	20.6	25.7	4.5	2.9	855	933
2002	75.8	83.1	20.8	25.8	4.1	2.7	857	934
2003	75.9	83.0	20.8	25.6	4.0	2.6	859	935
2004	76.7	83.9	21.5	26.5	3.9	2.6	868	937
2005	76.8	83.9	21.4	26.8	3.6	2.3	868	939
2006	77.2	84.2	21.8	26.7	3.6	2.3	871	939
2007	77.4	84.4	21.9	26.9	3.6	2.4	874	941
2008	77.6	84.4	22.0	26.9	3.6	2.4	877	940
2009*	77.8	84.5	22.2	27.0	3.7	2.4	876	940
2010*	78.0	84.7	22.4	27.2	3.6	2.4	880	942

\* Provisional.  
<sup>(1)</sup> Deaths under one year per 1,000 live births.  
<sup>(2)</sup> Deaths before 28 days per 1,000 live births.  
**Population:** Metropolitan France.  
**Source:** INSEE, Demographic Surveys and Studies Division.

Table A.12. Life expectancy at birth in Europe in 2009

	Life expectancy at birth (years)		
	Male	Female	Difference (F – M)
Austria	77.6	83.2	5.6
Belgium	77.3	82.8	5.5
Bulgaria	70.1	77.4	7.3
Czech Republic	74.2	80.5	6.3
Denmark	76.9	81.1	4.2
Estonia	69.8	80.2	10.4
Finland	76.6	83.5	6.9
France	77.7	84.4	6.7
Germany	77.8	82.8	5.0
Greece	77.8	82.7	4.9
Hungary	70.3	78.4	8.1
Ireland	77.4	82.5	5.1
Italy (2008)	79.1	84.5	5.4
Latvia	68.1	78.0	9.9
Lithuania	67.5	78.7	11.2
Luxembourg	78.1	83.3	5.2
Netherlands	78.7	82.9	4.2
Poland	71.5	80.1	8.6
Portugal	76.5	82.6	6.1
Romania	69.8	77.4	7.6
Slovakia	71.4	79.1	7.7
Slovenia	75.9	82.6	6.7
Spain	78.6	84.9	6.3
Sweden	79.4	83.5	4.1
United Kingdom (2008)	78.3	82.5	4.2
Croatia	73.0	79.7	6.7
Iceland	79.8	83.8	4.0
Norway	78.7	83.2	4.5
Switzerland	79.9	84.6	4.7

*Source:* Eurostat, except France (INSEE).

Table A.13. Infant mortality in Europe (rate per 1,000 live births)

	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010
Austria	14.3	11.2	7.8	5.4	4.8	4.2	3.6	3.7	3.7	3.8	3.9
Belgium*	12.1	9.8	8.0	6.0	4.8	3.7	4.0	3.9	3.7	3.4	3.5
Bulgaria	20.2	15.4	14.8	13.3	13.3	10.4	9.7	9.2	8.6	9.0	9.4
Czech Republic	16.9	12.5	10.8	7.7	4.1	3.4	3.3	3.1	2.8	2.9	2.7
Denmark	8.4	7.9	7.5	5.1	5.3	4.4	3.8	4.0	4.0	3.1	3.4
Estonia	17.1	14.1	12.3	14.9	8.4	5.4	4.4	5.0	5.0	3.6	3.3
Finland	7.6	6.3	5.6	3.9	3.8	3.0	2.8	2.7	2.6	2.6	2.3
France <sup>(1)*</sup>				5.0	4.5	3.8	3.8	3.8	3.8	3.8	3.6
France metro <sup>(1)*</sup>	10.0	8.3	7.3	4.9	4.4	3.6	3.6	3.6	3.6	3.7	3.6
Germany*	12.4	9.1	7.0	5.3	4.4	3.9	3.8	3.9	3.5	3.5	3.5
Greece*	17.9	14.1	9.7	8.1	5.9	3.8	3.7	3.5	2.7	3.1	
Hungary*	23.2	20.4	14.8	10.7	9.2	6.2	5.7	5.9	5.6	5.1	5.3
Ireland	11.1	8.8	8.2	6.4	6.2	4.0	3.6	3.1	3.8	3.2	
Italy	14.6	10.5	8.2	6.2	4.5	3.8	3.6	3.5	3.3	3.9	3.4
Latvia	15.3	13.0	13.7	18.8	10.4	7.8	7.6	8.7	6.7	7.8	5.7
Lithuania	14.5	14.2	10.2	12.5	8.6	6.8	6.8	5.9	4.9	4.9	4.3
Luxembourg	11.5	9.0	7.3	5.5	5.1	2.6	2.5	1.8	1.8	2.5	3.4
Netherlands	8.6	8.0	7.1	5.5	5.1	4.9	4.4	4.1	3.8	3.8	3.8
Poland	25.4	22.1	19.4	13.6	8.1	6.4	6.0	6.0	5.6	5.6	5.0
Portugal*	24.2	17.8	11.0	7.5	5.5	3.5	3.3	3.4	3.3	3.6	2.4
Romania	29.3	25.6	26.9	21.2	18.6	15.0	13.9	12.0	11.0	10.1	9.8
Slovakia	20.9	16.3	12.0	11.0	8.6	7.2	6.6	6.1	5.9	5.7	5.7
Slovenia*	15.3	13.0	8.4	5.5	4.9	4.1	3.4	2.8	2.4	2.4	2.5
Spain*	12.3	8.9	7.6	5.5	4.4	3.8	3.5	3.5	3.3	3.3	3.2
Sweden	6.9	6.8	6.0	4.1	3.4	2.4	2.8	2.5	2.5	2.5	2.5
United Kingdom	13.9	11.1	7.9	6.2	5.6	5.1	4.9	4.7	4.6	4.7	
Croatia					7.4	5.7	5.2	5.6	4.5	5.3	
Iceland	7.7	5.7	5.9	6.1	3.0	2.3	1.4	2.0	2.5	1.8	2.2
Norway	8.1	8.5	6.9	4.0	3.8	3.1	3.2	3.1	2.7	3.1	2.8
Switzerland*	9.0	6.7	6.7	5.0	5.3	4.2	4.4	3.9	4.0	4.3	3.8

Source: Eurostat, except <sup>(1)</sup>.

<sup>(1)</sup> INSEE for the whole of France in 1995 and 2009 and for metropolitan France in 2010.

\* Provisional data for 2010.

Table A.14. Standardized death rates (per 100,000) by sex and groups of causes of death<sup>(a)</sup>

Cause of death	Males												
	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>23 groups of causes</b>													
Lung cancer	63	67	70	70	66	65	64	63	63	64	63	62	60
Stomach cancer	20	17	14	12	10	9	9	9	9	8	8	8	7
Cancer of the intestine	31	29	29	28	25	25	25	24	24	24	23	22	22
Prostate cancer	28	30	32	29	26	26	26	26	24	23	22	22	21
Other neoplasms	176	180	171	160	152	151	149	146	140	139	136	134	130
Ischaemic heart diseases	117	118	96	85	76	72	70	68	64	62	58	56	54
Other heart diseases	130	115	93	90	81	79	78	78	72	71	69	69	68
Cerebro-vascular diseases	123	103	71	59	47	45	44	43	38	37	35	34	33
Other diseases of the circulatory system	38	35	29	26	21	21	20	19	17	16	16	15	15
Tuberculosis (all forms)	5	3	2	2	2	2	1	1	1	1	1	1	1
AIDS	0	0	8	13	3	3	3	2	2	2	2	2	2
Influenza	2	2	3	1	2	0	1	1	0	1	0	0	0
Other infectious and parasitic diseases	11	12	10	11	12	11	12	12	10	11	11	11	11
Other diseases of the respiratory system	83	79	71	69	53	50	50	52	44	47	42	42	42
Alcoholism and cirrhosis of the liver	56	46	35	29	28	28	27	27	25	24	24	23	23
Diabetes	11	11	9	9	15	15	14	15	14	14	13	13	13
Other mental disorders and diseases of the nervous system	28	28	31	30	40	42	41	45	39	42	41	41	42
Other diseases of the digestive system	41	35	29	25	20	20	20	21	19	19	19	18	19
Other diseases	56	50	40	37	36	36	35	37	33	32	32	31	32
Motor-vehicle accidents	30	26	26	20	19	19	18	15	13	13	12	12	11
Suicides	29	34	29	29	26	25	25	26	25	25	24	23	23
Other deaths from external causes	63	54	51	44	36	35	34	36	32	31	31	31	31
Unspecified or ill-defined causes of death	74	70	56	48	46	49	49	51	44	45	43	44	46
<b>6 broad groups of causes</b>													
Cancer	318	324	317	300	280	275	272	267	260	258	251	247	241
Cardiovascular diseases	409	371	288	260	225	217	211	208	190	187	177	173	169
Infectious and parasitic diseases, diseases of the respiratory system	101	97	95	95	72	65	66	69	58	62	56	56	56
Other diseases	193	169	143	131	138	140	138	144	130	132	129	126	128
Injuries and poisoning	123	114	106	93	81	79	78	77	70	69	67	66	66
Unspecified or ill-defined causes of death	74	70	56	48	46	49	49	51	44	45	43	44	46
<b>All causes</b>	1,217	1,145	1,005	928	842	826	814	815	751	753	723	713	706

Cause of death	Females												
	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>23 groups of causes</b>	6	7	8	9	10	11	12	13	13	14	14	15	15
Lung cancer	9	7	6	5	4	4	4	3	3	3	3	3	3
Stomach cancer	19	18	17	16	15	14	14	14	14	14	13	13	13
Cancer of the intestine	27	28	29	29	27	26	26	26	26	25	25	24	24
Breast cancer	11	10	8	7	6	7	6	7	6	6	6	6	6
Cancer of the uterus	76	74	70	69	67	67	67	65	63	63	62	60	61
Other neoplasms	51	51	42	35	30	29	28	27	24	23	22	21	20
Ischaemic heart diseases	93	81	64	61	54	53	53	53	47	45	45	45	45
Other heart diseases	88	74	52	41	33	32	31	31	27	26	25	23	23
Cerebro-vascular diseases	19	17	14	12	9	9	8	8	7	7	6	6	6
Other diseases of the circulatory system	1	1	1	1	1	1	1	1	1	1	0	0	0
Tuberculosis (all forms)	0	0	1	3	1	1	1	1	1	1	1	1	0
AIDS	2	2	2	1	1	0	0	0	0	0	0	0	0
Influenza	7	7	6	7	8	7	7	8	6	7	6	6	7
Other infectious and parasitic diseases	33	33	31	30	24	21	22	23	19	21	18	19	19
Other diseases of the respiratory system	19	15	12	10	9	9	9	9	8	8	8	7	7
Alcoholism and cirrhosis of the liver	10	9	8	7	10	10	10	10	9	9	8	8	8
Diabetes	22	22	24	24	32	33	34	37	31	33	33	33	34
Other mental disorders and diseases of the nervous system	27	23	18	16	13	13	13	13	12	12	11	11	11
Other diseases of the digestive system	38	34	29	28	27	27	27	29	25	24	24	23	23
Other diseases	10	9	9	7	6	6	6	4	4	4	3	3	3
Motor-vehicle accidents	11	12	10	10	8	8	9	8	9	8	8	8	8
Suicides	36	31	27	23	19	19	19	20	17	16	16	16	16
Other violent deaths	48	44	35	31	28	29	30	32	26	27	26	26	27
Unspecified or ill-defined causes of death	147	143	138	135	129	128	128	127	125	124	123	121	122
<b>6 broad groups of causes</b>	250	223	172	148	126	123	119	119	106	104	98	95	95
Cancer	43	43	42	41	34	30	31	33	27	30	26	26	27
Cardiovascular diseases	116	103	91	85	91	92	93	98	85	85	84	83	84
Infectious and parasitic diseases, diseases of the respiratory system	57	53	46	40	34	34	33	33	29	28	27	26	26
Other diseases	48	44	35	31	28	29	30	32	26	27	26	26	27
Injuries and poisoning	662	609	525	480	442	436	434	442	398	399	384	377	380
Unspecified or ill-defined causes of death													
<b>All causes</b>													

(a) Standardized rate calculated from mortality rates by five-year age group (in completed years) and from standard European population (according to the structure proposed by the WHO). Thanks to a new analysis of INSERM data, the age groups now have the same definition for all years. The contents of the cause-of-death groups are defined in Table 15 (item numbers refer to ICD-9 for 1980 to 1999 and ICD-10 from 2000).

Population: Metropolitan France.  
Source: F. Meslé from INSERM data.

**Table A.15. Cause-of-death groups and the corresponding items in the international classification of diseases (ninth and tenth revisions)**

	ICD-9	ICD-10
<b>Cancer</b>		
Lung cancer	140 to 239	C00 to D48
Stomach cancer	162	C33 to C34
Cancer of the intestine	151	C16
Breast cancer	152 to 154	C18 to C21
Cancer of the uterus	174, 175	C50
Prostate cancer	179 to 180; 182	C53 to C55
Other neoplasms	185	C61
<b>Cardiovascular diseases</b>		
Ischaemic heart diseases	140 to 150; 155 to 161; 163 to 173; 181;	C00 to C15; C17; C22 to C32; C37 to C49;
Other heart diseases	183 to 184; 186 to 239	C51; C52; C56 to C60; C62 to D48
Cerebro-vascular diseases	390 to 459	I00 to I99
Other diseases of the circulatory system	410 to 414	I20 to I25
<b>Infectious and parasitic diseases, diseases of the respiratory system</b>	390 to 405; 415 to 429	I00 to I15; I26 to I51
Tuberculosis (all forms)	430 to 438	I60 to I69
AIDS	440 to 459	I70 to I99
Influenza	000 to 139; 460 to 519	A00 to B99; J00 to J98
Other infectious and parasitic diseases of ICD Chapter I	010 to 018	A15 to A19; B90
Other diseases of the respiratory system	042 to 044	B20 to B24
<b>Other diseases</b>	487	J10 to J11
Alcoholism and cirrhosis of the liver	001 to 009; 020 to 041; 045 to 139	A00 to A09; A20 to B19; B25 to B89; B91 to B99
Diabetes	460 to 586; 490 to 519	J00 to J06; J12 to J98
Other mental disorders and diseases of the nervous system	240 to 389; 520 to 779	D50 to D89; E00 to H95; K00 to Q99
Other diseases of the digestive system	291; 303; 305.0; 571.0 to 3;.5	F10; K70; K73 to K74
Other diseases	250	E10 to E14
<b>Injuries and poisoning</b>	290; 292 to 302; 304; 305.1 to 389	F00 to F09; F11 to H95
Motor-vehicle accidents	520 to 570; 571.4; 571.6 to 579	K00 to K67; K71; K72; K75 to K93
Suicides	240 to 246; 251 to 289; 580 to 779	D50 to D89; E00 to E07; E15 to E89; I00 to Q99
Other deaths from external causes	800 to 999	V01 to Y89
<b>Unspecified or ill-defined causes of death</b>	810 to 819; 826 to 829	V01 to V9
<b>All causes</b>	800 to 807; 820 to 825; 830 to 949; 960 to 999	X60 to X84
	780 to 799	W00 to X59; X85 to Y89
	001 to 999	R00 to R99
		A00 to R99; V01 to Y89



## REFERENCES

- AOUBA Albertine, EB Mireille, REY Grégoire, PAVILLON Gérard, JOUGLA Eric, 2011, "Données sur la mortalité en France : principales causes de décès en 2008 et évolutions depuis 2000", *Bulletin épidémiologique hebdomadaire*, 22(2011/06), pp. 249-255.
- AVDEEV Alexandre, EREMENKO Tatiana, FESTY Patrick, GAYMU Joëlle, LE BOUTEILLEC Nathalie, SPRINGER Sabine, 2011, "Populations and demographic trends of European countries, 1980-2010", *Population, English Edition*, 66(1), pp. 9-130.  
[http://www.ined.fr/en/resources\\_documentation/publications/population/bdd/publication/1548/](http://www.ined.fr/en/resources_documentation/publications/population/bdd/publication/1548/)
- BESSIN Marc, LEVILAIN Hervé, RÉGNIER-LOILIER Arnaud, 2005, "Avoir des enfants "sur le tard" : une exploration statistique de la "parenté tardive" à partir de l'EHF 1999", in Lefevre Cécile, Filhon Alexandra (eds.), *Histoires de familles, histoires familiales : les résultats de l'enquête Famille de 1999*, Paris, INED, Cahier 156, pp. 283-307.
- BEAUMEL Catherine, PLA Anne, 2011a, "La situation démographique en 2009", *Insee résultats*, 122, Société,  
<http://www.insee.fr/fr/publications-et-services/irweb.asp?id=sd2009>
- BEAUMEL Catherine, PLA Anne, 2011b, "Statistiques d'état civil sur les naissances en 2010", *Insee résultats*, 123, Société,  
<http://www.insee.fr/fr/publications-et-services/irweb.asp?id=sd20101>
- BLANPAIN Nathalie, 2010, "15 000 centenaires en 2010 en France, 200 000 en 2060 ?", *Insee première*, 1319, 4 p.,  
[http://www.insee.fr/fr/themes/document.asp?reg\\_id=0&ref\\_id=ip1319](http://www.insee.fr/fr/themes/document.asp?reg_id=0&ref_id=ip1319)
- BLANPAIN Nathalie, 2011, "L'espérance de vie s'accroît, les inégalités sociales face à la mort demeurent", *Insee première* 1372, 4 p.,  
<http://www.insee.fr/fr/ffc/ipweb/ip1372/ip1372.pdf>
- BONNET Carole, CAMBOIS Emmanuelle, CASES Chantal, GAYMU Joëlle, 2011, "Elder care and dependence: no longer just a woman's concern?", 2011, *Population and Societies*, 483, 4 p.,  
[http://www.ined.fr/en/resources\\_documentation/publications/pop\\_soc/bdd/publication/1564/](http://www.ined.fr/en/resources_documentation/publications/pop_soc/bdd/publication/1564/)
- BOZON Michel, 1990, "Women and age gap between spouses: an accepted domination?", *Population, An English Selection*, 3, pp. 113-148.
- BRETON Didier, 2007, "Natalité, fécondité et comportements reproductifs", in Sandron Frédéric (ed.), *La population réunionnaise : analyse démographique*, IRD éditions, pp. 43-72.
- BRETON Didier, CONDON Stéphanie, MARIE Claude-Valentin, TEMPORAL Franck, 2009, "The challenges of population ageing and migration in the French overseas départements", *Population and Societies*, 460, 4 p.,  
[http://www.ined.fr/en/resources\\_documentation/publications/pop\\_soc/bdd/publication/1480/](http://www.ined.fr/en/resources_documentation/publications/pop_soc/bdd/publication/1480/)
- CLAIR Marion, 2004, "Interruptions volontaires de grossesses en Guadeloupe : qui, où, comment ?", *InfoSanté Antilles-Guyane*, 13, 6 p.
- COMITÉ INTERMINISTÉRIEL DE CONTRÔLE DE L'IMMIGRATION, 2011, *Les orientations de la politique de l'immigration et de l'intégration : septième rapport établi en application de l'article L.111-10 du code de l'entrée et du séjour des étrangers et du droit d'asile*, La Documentation française, 219 p.
- DAGUET Fabienne, 2002, *Un siècle de fécondité française*, Insee résultats, Société, 8, 305 p.
- DAGUET Fabienne, 1999, "Maman après 40 ans", in Insee, *Données sociales, La Société française*, pp. 21-27.
- DAVIE Emma, 2011, "Un million de pacsés début 2010", *Insee première*, 1336, 4 p.,  
<http://www.insee.fr/fr/ffc/ipweb/ip1336/ip1336.pdf>

- DAVIE Emma, MAZUY Magali, 2010, "Women's fertility and educational level in France: Evidence from the annual census surveys", *Population, English Edition*, 65(3), pp. 415-450, [http://www.ined.fr/en/resources\\_documentation/publications/demographic\\_trends/bdd/publication/1525/](http://www.ined.fr/en/resources_documentation/publications/demographic_trends/bdd/publication/1525/)
- HALFEN Sandrine, FENIES Karine, UNG Bun, GREMY Isabelle, 2006, *Les connaissances, attitudes, croyances et comportements face au VIH/sida aux Antilles et en Guyane en 2004*, ANRS-ORS Île-de-France, 290 p.
- HILL Catherine, LAPLANCHE Agnès, 2005, "Évolution de la consommation de cigarettes en France par sexe, 1900-2003", *Bulletin épidémiologique hebdomadaire*, 21-22, pp. 94-97.
- LÉON Olivier, 2010, "La population des régions en 2040. Les écarts de croissance démographique pourraient se resserrer", *Insee première*, 1326, 4 p. [http://www.insee.fr/fr/themes/document.asp?ref\\_id=ip1326](http://www.insee.fr/fr/themes/document.asp?ref_id=ip1326)
- MESLÉ France, 2006, "Recent improvements in life expectancy in France: Men are starting to catch up", *Population, English Edition*, 61(4), pp. 365-388.
- MOREAU Caroline, TRUSSELL James, DESFRÈRES Julie, BAJOS Nathalie, 2010, "Peri-abortion contraceptive use in the French islands of Guadeloupe and La Reunion: variation in the management of post-abortion care", *The European Journal of Contraception and Reproductive Health Care*, 15(3), pp. 186-196.
- NIEL Xavier, *Les facteurs explicatifs de la mortalité infantile en France et leur évolution récente. L'apport de l'échantillon démographique permanent*, Insee, Direction des statistiques démographiques et sociales, Document de travail, F1106, 35 p., [http://www.insee.fr/fr/publications-et-services/docs\\_doc\\_travail/F1106.pdf](http://www.insee.fr/fr/publications-et-services/docs_doc_travail/F1106.pdf)
- PISON Gilles, 2011, "The population of the world", *Population and Societies*, 480, 8 p. [http://www.ined.fr/en/resources\\_documentation/publications/pop\\_soc/bdd/publication/1543/](http://www.ined.fr/en/resources_documentation/publications/pop_soc/bdd/publication/1543/)
- PLA Anne, BEAUMEL Catherine, 2011, "Bilan démographique 2010. La population française atteint 65 millions d'habitants", *Insee première*, 1332, 4 p., [http://www.insee.fr/fr/themes/document.asp?reg\\_id=0&ref\\_id=ip1332](http://www.insee.fr/fr/themes/document.asp?reg_id=0&ref_id=ip1332)
- PLA Anne, BEAUMEL Catherine, 2012, "Bilan démographique 2011. La fécondité reste élevée", *Insee première*, 1385, 4 p., [http://www.insee.fr/fr/themes/document.asp?reg\\_id=0&ref\\_id=ip1385](http://www.insee.fr/fr/themes/document.asp?reg_id=0&ref_id=ip1385)
- PRIOUX France, 2003, "Recent demographic developments in France", *Population, English Edition*, 58(4-5), pp. 525-558.
- PRIOUX France, MAZUY Magali, 2009, "Recent demographic developments in France: Tenth anniversary of the PACS civil partnership, and over a million contracting parties", *Population, English Edition*, 64(3), pp. 393-442, [http://www.ined.fr/en/resources\\_documentation/publications/demographic\\_trends/bdd/publication/1490/](http://www.ined.fr/en/resources_documentation/publications/demographic_trends/bdd/publication/1490/)
- PRIOUX France, MAZUY Magali, BARBIERI Magali, 2010, "Recent demographic developments in France: Fewer adults live with a partner", *Population, English Edition*, 65(3), pp. 363-414, [http://www.ined.fr/en/resources\\_documentation/publications/demographic\\_trends/bdd/publication/1526/](http://www.ined.fr/en/resources_documentation/publications/demographic_trends/bdd/publication/1526/)
- RALLU Jean-Louis, 2009, "Population and development in the overseas territories of Europe", *Population and Societies*, 456, 4 p., [http://www.ined.fr/en/resources\\_documentation/publications/pop\\_soc/bdd/publication/1461/](http://www.ined.fr/en/resources_documentation/publications/pop_soc/bdd/publication/1461/)
- RALLU Jean-Louis, DIAGNE Annel, 2005, "La population des départements d'outre-mer depuis les années 1950", in Bergouignan Christophe, Blayo Chantal, Parant Alain, Sardon Jean-Paul, Tribalat Michèle (eds *La population de la France : évolutions démographiques depuis 1946*, Pessac, Cudep, pp. 103-125.
- RAULT Wilfried, LETRAIT Muriel, GROUPE CSF, 2010, "Formes d'unions différentes, profils distincts ? Une comparaison des pacsé.e.s en couple de sexe différent et des marié.e.s", *Sociologie*, 1(3), pp. 319-336.
- ROSSIER Clémentine, TOULEMON Laurent, PRIOUX France, 2009, "Abortion trends in France, 1990-2005", *Population, English Edition*, 64(3), pp. 443-476,



[http://www.ined.fr/en/resources\\_documentation/publications/demographic\\_trends/bdd/publication/1491/](http://www.ined.fr/en/resources_documentation/publications/demographic_trends/bdd/publication/1491/)

SANDRON Frédéric, 2007, “Dynamique de la population réunionnaise (1663-2030)”, in Sandron Frédéric (ed.), *La population réunionnaise : analyse démographique*, Paris, IRD éditions, pp. 27-41.

TEMPORAL Franck, MARIE Claude-Valentin, with Stéphane BERNARD, “Labour market integration of young people from the French overseas *départements*: At home or in metropolitan France?”, *Population, English Edition*, 66(3-4), pp. xxx

THIERRY Xavier, 2008, “Towards a harmonization of European statistics on international migration”, *Population and Societies*, 442, 4 p.,

[http://www.ined.fr/en/resources\\_documentation/publications/pop\\_soc/bdd/publication/1350/](http://www.ined.fr/en/resources_documentation/publications/pop_soc/bdd/publication/1350/)

VANDERSCHULDEN Mélanie, 2006, “L'écart d'âge entre conjoints s'est réduit”, *Insee première*, 1073, 4 p.,

[http://www.insee.fr/fr/themes/document.asp?ref\\_id=ip1073](http://www.insee.fr/fr/themes/document.asp?ref_id=ip1073)

VILAIN Annick, 2009, “Les interruptions volontaires de grossesse en 2007”, *Études et résultats*, 713, 6 p.

VILAIN Annick, MOUQUET Marie-Claude, 2011, “Les interruptions volontaires de grossesse en 2008 et 2009”, *Études et résultats*, 765, 6 p.

### Magali MAZUY, France PRIoux, Magali BARBIERI • RECENT DEMOGRAPHIC DEVELOPMENTS IN FRANCE: SOME DIFFERENCES BETWEEN OVERSEAS DÉPARTEMENTS AND METROPOLITAN FRANCE

The total population of France on 1 January 2011 is estimated at 65 million, of whom 1.9 million reside in overseas *départements* (DOMs). With growth of 11.2 per 1,000 in 2010, the DOM population is growing at twice the rate of metropolitan France (5.4 per 1,000), and its age structure is younger. Its fertility is slightly higher, at 2.4 children per woman versus 2.0 for metropolitan France in 2010, and the mean age at childbearing is younger (28.5 years and 30 years, respectively). The frequency of abortion in the DOMs is distinctly higher, and repeat abortions more common. The number of marriages in France remained stable in 2010, while that of civil unions (PACS) continued to grow but at a slower pace. Civil unions and marriages are celebrated at almost identical ages, but the age gap between civil partners is slightly smaller than for married couples. The frequency of divorce among longer marriage durations has increased considerably in the past 30 years. Life expectancy at birth in 2010 was estimated at 78.0 years for men and 84.7 years for women. Men have registered greater gains than women in the past 20 years, and the gains for both sexes increasingly concern mortality after age 65. Life expectancy at birth in the DOMs almost matches that of metropolitan France, but infant mortality is at least twice as high.

### Magali MAZUY, France PRIoux, Magali BARBIERI • L'ÉVOLUTION DÉMOGRAPHIQUE RÉCENTE EN FRANCE : QUELQUES DIFFÉRENCES ENTRE LES DÉPARTEMENTS D'OUTRE-MER ET LA FRANCE MÉTROPOLITAINE

Au 1<sup>er</sup> janvier 2011, la population de la France est estimée à 65 millions d'habitants, dont 1,9 million résident dans les départements d'outre-mer (DOM). L'accroissement de la population de ces départements est deux fois plus rapide (+ 11,2 ‰ en 2010) que celui de la métropole (+5,4 ‰), et la structure par âge de leur population est plus jeune. La fécondité est un peu plus élevée (2,4 enfants par femme en 2010 contre 2,0) et l'âge moyen à la maternité plus jeune (respectivement 28,5 ans et 30 ans). La fréquence des avortements y est nettement plus forte, ainsi que celle des avortements répétés. Le nombre de mariages est resté stable en 2010, et l'augmentation des pacs s'est poursuivie, mais à un rythme ralenti. On se pacse et on se marie presque au même âge, toutefois l'écart d'âge entre les conjoints pacés est légèrement plus réduit que pour les mariés. La fréquence des divorces aux durées de mariage élevées a beaucoup augmenté depuis 30 ans. L'espérance de vie à la naissance en 2010 est estimée à 78,0 ans pour les hommes et 84,7 ans pour les femmes. Les progrès depuis 20 ans sont plus importants pour les hommes que pour les femmes, et concernent de plus en plus la mortalité après 65 ans. L'espérance de vie à la naissance est presque aussi élevée dans les DOM qu'en métropole, mais la mortalité infantile y est au moins deux fois plus forte.

### Magali MAZUY, France PRIoux, Magali BARBIERI • LA EVOLUCIÓN DEMOGRÁFICA RECIENTE DE FRANCIA: ALGUNAS DIFERENCIAS ENTRE LOS DEPARTAMENTOS DE ULTRAMARINOS Y FRANCIA METROPOLITANA

El 1<sup>o</sup> de enero de 2011, la población de Francia es estimada a 65 millones de habitantes, de los cuales 1,9 millones residen en los departamentos de ultra-mar (DOM). El crecimiento de estos departamentos es dos veces más rápido (+11,2 ‰ en 2010) que el de la metrópoli (+5,4 ‰), y la estructura por edad de la población es más joven. La fecundidad es un poco más elevada (2,4 hijos por mujer contra 2,0) y la edad media a la maternidad más joven (respectivamente 28,5 años y 30 años). La frecuencia de los abortos es netamente más fuerte en los DOM y los abortos repetidos más frecuentes. El número de matrimonios se ha mantenido estable en 2010, y el aumento del Pacs (Pacto civil de solidaridad) ha continuado, aunque a un ritmo más lento. El Pacs y el matrimonio acontecen casi a la misma edad, pero la diferencia de edad entre los cónyuges pacados es ligeramente más baja que entre los que se casan. La frecuencia de los divorcios en las duraciones elevadas de matrimonio ha aumentado mucho en los últimos treinta años. La esperanza de vida al nacimiento en 2010 es estimada a 78,0 años para los hombres y a 84,7 años para las mujeres. Los progresos desde hace 20 años son más importantes en los hombres que en las mujeres, y conciernen cada vez más la mortalidad después de los 65 años. La esperanza de vida al nacimiento es casi tan elevada en los DOM que en la metrópoli, pero la mortalidad infantil es al menos dos veces más fuerte.

---

Keywords: France, demographic situation, overseas *départements*, fertility, abortion, union and union dissolution, age at marriage and at PACS civil partnership, mortality.

---

Translated by Jonathan Mandelbaum.