# A Steady Number of Induced Abortions, but Fewer Women Concerned

Every year some 1.5% of French women of childbearing age have an induced abortion (1.4% in Metropolitan France), and the number of abortions has held steady for some years at about 200,000 annually (Table 1). Since abortion was legalized under Law no. 75-17 of the Public Health Code enacted on 17 January 1975, various reforms have sought to extend the availability of the procedure and to reduce social inequalities of access. These successive rulings (Box) targeted specific groups, notably, in 2001, under-age women (who had been systematically required to obtain parental consent) and non-French women (who had been required to present a residence permit for coverage of their abortion costs by the French social security system). The legal limit of 10 weeks of pregnancy (for non-therapeutic abortions) was raised to 12 weeks in 2001. Financial arrangements and access to abortion were also improved by offering cost-free procedures for all women and higher fees to practitioners in March 2013. Medical abortions have become more common since the 1990s and are available from primary healthcare physicians.

None of these relaxations or simplifications have led to a significant increase in the annual number of induced abortions or the general abortion rate (annual number of abortions divided by the total number of women of childbearing age). Nor has raising the legal limit had any significant effect in extending mean gestational age at abortion, which has held steady, as we show, at six and a half weeks after conception (largely because of the increase in medical abortions since 2004).

A higher number of induced abortions might have been expected as a result of changes in prescription practices and behavioural changes in French society, particularly the extension of the period of "sexual youth" among women due to earlier sexual debut and later marriage and childbearing (Toulemon, 2008; Le Guen and Bajos, 2014). In fact, there is little variation in abortion intensity

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<sup>\*</sup> Institut national d'études démographiques.

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

Table 1. Number of induced abortions and annual indicators, 1976-2011

| Year | Abortions<br>reported in<br>notifications <sup>(1)</sup> | Abortions<br>recorded in<br>SAE <sup>(2)</sup> | Abortions<br>estimated by<br>INED <sup>(3)</sup> | Abortions per<br>100 live births <sup>(4)</sup> | Annual<br>abortions per<br>1,000 women<br>aged 15-49 <sup>(5)</sup> | Mean<br>number of<br>abortions<br>per woman <sup>(6)</sup> |
|------|--|--|--|---|---|--|
| 1976 | 134,173  |  | 246,000  | 34.1  | 19.6  | 0.66   |
| 1981 | 180,695  |  | 245,000  | 30.4  | 18.8  | 0.62   |
| 1986 | 166,797  |  | 221,000  | 28.4  | 16.2  | 0.53   |
| 1990 | 170,428  |  | 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  | 0.49   |
| 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  | 0.50   |
| 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  | 14.1  | 0.50   |
| 2004 |  | 210,664  |  | 27.4  | 14.6  | 0.52   |
| 2005 | 166,985  | 206,543  |  | 26.6  | 14.3  | 0.51   |
| 2006 | 174,561  | 215,390  |  | 27.0  | 14.9  | 0.53   |
| 2007 | 185,498  | 213,381  |  | 27.1  | 14.7  | 0.53   |
| 2008 | 180,108  | 209,245  |  | 26.3  | 14.5  | 0.52   |
| 2009 | 171,152  | 209,988  |  | 26.5  | 14.6  | 0.53   |
| 2010 | 172,505  | 213,317 <sup>(7)</sup>                         |  | 26.4  | 14.8  | 0.53   |
| 2011 | 170,081  | 209,291 <sup>(7)</sup>                         |  | 26.4  | 14.7  | 0.53   |

Coverage: Metropolitan France.

Source: Vilain and Mouquet (2003) and Vilain (2004; 2005; 2008).

(7) Figure including data from specific health insurance funds.

<sup>(1)</sup> Statistics from notifications including elective and therapeutic abortions

Source: http://ivg\_statistiques.site.ined.fr/en/

<sup>(2)</sup> Statistique annuelle des établissements de santé (SAE). Annual statistics published by healthcare facilities (excluding therapeutic abortions).

<sup>(3)</sup> INED estimate. From 2002, the hospital statistics are considered exhaustive. *Source:* C. Rossier and C. Pirus (2007).

<sup>(4)</sup> and (5) Based on INED statistics up to 2001, and on hospital statistics from 2002 for the total number of abortions.

<sup>(6)</sup> Based on notifications up to 1997 and the PMSI medical statistics database from 1998; age in completed years.

#### **Changes in French law since 1975**

The law that legalized abortion (no. 75-17), known as the Veil Law, came into force on 17 January 1975 after parliamentary debates that had begun in December 1972 (Pavard et al., 2012). It was enacted for an experimental period of five years, then made permanent by Law no. 79-1204 of 31 December 1979. These two laws legalized abortion under a number of conditions (state of distress, pregnancy not exceeding 10 weeks, procedure undertaken by a physician in a recognized healthcare facility), and the abortion protocol included two requirements: women had to follow obligatory procedures to ensure that they were fully informed and had adequate time to prepare their decision; and they were required to attend two medical consultations (one week apart) and an appointment with a social worker.

Subsequent laws modified or relaxed some of the conditions: Law no. 82-1172 of 31 December 1982, known as the Roudy Law, authorized the reimbursement of abortion costs, with coverage of expenses by the state via the health insurance system. In the late 1980s, new medical procedures were introduced: in 1988, the abortion pill, under the name Mifépristone or RU 486, was put on the market. In 1990, its use was authorized in public hospitals. Meanwhile, in 1993, under Law no. 93-171 of 27 January 1993 (the Neiertz Law), hampering an abortion became a criminal offense, and the actions of anti-abortion groups could be punished by law. Law no. 2001-588 of 4 July 2001 raised the gestational limit for abortions from 10 to 12 weeks of pregnancy. The preliminary interview is no longer required for women over 18. Abortions may be carried out in a primary healthcare facility (medical procedure) if an agreement has been made between the practitioner and a recognized healthcare facility. Abortions may be performed without that agreement by gynaecologists and certain primary care practitioners in the case of pregnancies in the first five weeks (Decree n° 2002-796 of 3 May 2002, amended by Decree n° 2004-636 of 1 July 2004). On 1 June 1999, the "morning after" pill (Norlevo emergency contraceptive) was made available in pharmacies without a prescription for emergency contraception and could be issued free of charge to women under 18 in pharmacies (Decree n° 2002-39 of 9 January 2002). Secondary school nurses were also authorized to issue emergency contraception to students under and over 18 on certain conditions (Decree n° 2001-258 of 27 March 2001), with the aim of limiting the number of unwanted pregnancies and abortions.

but, as we shall see, some of its characteristics are evolving. For example, the mean age of the women having abortions is decreasing, with numbers levelling off among women under 18 (after a sharp rise in the 2000s) and fewer terminations among older women.

This article presents recent developments in national abortion indicators across France and analyses repeat abortion. On the basis of data from abortion notifications, these analyses describe the place of abortion in French women's reproductive trajectories in 2011, and the changes and continuities in women's recourse to abortion in relation to some of their sociodemographic characteristics.

#### I. Abortion data managed as a medical statistic

Quantitative data about abortions in France are currently obtained from three sources. Administrative (medical) statistics are the first source. They are now exhaustive and can be used for annual or even monthly analyses (the agency for information on hospital care [Agence de traitement de l'information hospitalière, ATIH], may keep monthly abortion statistics). Data taken from abortion notifications provide the second source. These notifications are completed anonymously by physicians and analysed by research institutions (INED and INSERM). The third source is provided by specific one-off surveys.

#### Abortion notification statistics

Since the 1975 law, every induced abortion entails the completion of an abortion notification (bulletin d'interruption de grossesse, BIG) by the physicians involved, guaranteeing patient anonymity. The advantage of this data source, which provides details of age, stage of pregnancy, type of procedure (data also available in health statistics) is that it includes information on the sociodemographic status of the women having an abortion, their number of previous abortions, and the date of the last one. Although this system dates from the 1975 Act, the collection and completion of notifications has changed in a number of ways, causing some variability in the information recorded (see the various versions of notification forms in Appendix A.1.). This has produced discontinuities in the data collected from the completed notifications and in their statistical analysis. The data series has not remained homogeneous since its inception in 1976 and there is also some under-recording (Rossier et al., 2009). The latest version of the notification form dates from 2011. By 2015 we shall have five consecutive years of statistical data based on an identical notification form. Beyond that date, it is not known if the system for recording data from abortion notifications will continue. If it does not, then data will be available solely through routine health records, via a single administrative source that does not include information about women's sociodemographic status. If knowledge about abortion is based on just one source, this will necessarily reinforce the predominance of the medical approach in the study of abortion and contraception (Bajos and Ferrand, 2011; Bajos et al., 2014a).

If this happens, surveys (of women having abortions or the general population) will be the only way of furthering our sociological knowledge of abortion-seeking in a richer and more detailed manner than from health statistics. The disadvantage of surveys is that they cover small samples, restricting the scope of analysis to particular sub-groups or topics. The most recent survey of women who had undergone induced abortions was carried out in 2007 on an initial sample of 200 healthcare facilities, 1,300 practitioners and 13,000 women. The time taken to collect the survey data ranged from one to six months depending on the type of abortion, the region and the women's

age (Vilain et al., 2011; Collet et al., 2012). General population surveys (on sexual behaviour or contraception) are biased by women's under-reporting of abortions (Moreau et al., 2004). The latest general population survey on contraception by INED and INSERM (Bajos et al., 2012) dates from 2010.

#### Hospital data from the PMSI

The statistical source that is becoming the main tool for the analysis and measurement of abortion is the Programme médicalisé des systèmes d'information (PMSI). It provides data on hospital procedures made available by ATIH, the agency for information on hospital care. For abortions, these data have been complemented annually since 2005 by statistics from the national wage employees' health insurance fund (ERASME database, standing for Extraction, Research, Analysis, Medico-Economic monitoring), and by statistics from specific health insurance funds (MSA for farmers, RSI for the self-employed) since 2010.

The PMSI data, collected from hospitals, then coded and centralized by ATIH, can be used for non-aggregated processing. The information given concerns age at date of abortion, method used, type of healthcare facility, locality where the procedure was performed and, since 2012, gestational age. Data on gestational age at end of pregnancy are collected for all pregnancies<sup>(1)</sup> involving hospital care. They contain no sociodemographic information other than the woman's age. Further medical variables may be added (such as number of previous abortions, date of last abortion, and number of previous pregnancies). The possible abolition of the abortion notification form may reflect a change in representations of the role of abortion. Once seen as a birth control method, it is now considered rather as an instrument for women's sexual and reproductive health; this trend is also seen for contraception (Bajos and Ferrand, 2011). When the 1975 Law was passed, the abortion notification form was designed on the lines of the birth certificate with the explicit aim of comparing abortions with births. In contrast, the most recent survey by DREES, the Health Ministry's department of research, studies, evaluation and statistics (Direction de la recherche, des études, de l'évaluation et des statistiques) forms part of a series of follow-up surveys of health service users.

#### Social inequalities in abortion-seeking

The French health statistics system is unable to reveal social inequalities in abortion, i.e. inequalities in recourse to the procedure and also, at an earlier stage, inequalities in access to contraception. Although access to contraception is extensive (in 2013, only 3% of sexually active women exposed to the risk of pregnancy were not using any method of contraception; Bajos et al., 2014b), the methods used are not always appropriate for women's lifestyles, or their

<sup>(1)</sup> The data on gestational age were added to the PMSI in order to produce stillbirth indicators (Fresson and Blondel, 2013).

social, emotional and sexual circumstances. Use of these methods, of unequal effectiveness, varies with women's sociodemographic characteristics. For abortion there are also persistent major regional disparities in abortion rates. (2) Major divergences from the mean rate (14 per 1,000) may be due to the sociodemographic structure of the local population (the size of the groups most exposed to the risk of unwanted pregnancy varies by region). They may also reveal a specific situation in a region with respect to access to emergency contraception, abortion and medical care in general. High abortion rates may reveal difficulties in access to contraception. Low rates, often interpreted as evidence of effective contraceptive cover, may also indicate more difficult access to abortion. The question of access has become a key concern for the authorities. A report for the Health Ministry in late 2013 addressed at length the problem of access to abortion in certain regions, and disparities in choice of, or access to, healthcare facilities in general (HCE-fh, 2013). In ten years, more than 130 facilities practising abortions have closed. The lack of material, financial and human resources today, and the future retirement – with no guarantee of replacement – of physicians practising abortions, raises the spectre of increasingly difficult access.

#### II. Abortions concentrated in the period of "sexual youth"

In the last twenty years, the profile of women seeking abortion has slightly changed. There is a higher proportion of young women, but the sharp increase in abortions among under-18s seen in the 1990s and early 2000s has slowed (Prioux and Barbieri, 2012). Abortion is increasingly concentrated in certain age groups (Figure 1): between ages 19 and 25, abortion rates exceed 25 per 1,000. These seven ages account for 37% of the total rate, and abortions before age 31 account for two-thirds. From 1990 to 2011, mean age<sup>(3)</sup> at abortion fell from 28.4 to 27.5 years and median age from 27.9 to 26.5. This shows that abortions are concentrated in the ages before the period of "high" fertility, which now occurs later: mean age at childbirth over this twenty-year period rose from 28.3 to 30.1 (Mazuy et al., 2014; Figure 5; Appendix Table A.4). This has occurred in parallel with the lengthening of the period of "sexual youth" (Bajos et al., 2013) between the key points of sexual and reproductive life that are first sexual intercourse and birth of first child, and that now include a lengthening period of childless conjugal life. The first formation of a stable union is often followed by a period of living together without children that is

<sup>(2)</sup> The abortion rate (in 2011) was lowest in Pays de la Loire region, followed by Brittany and Poitou-Charentes. The highest rates were recorded in Corsica, Île-de-France (Paris region), PACA (Provence-Riviera), Languedoc-Roussillon and the overseas *départements* (Vilain et al., 2013, Vilain and Mouquet, 2014; Moreau et al., 2010), these last also presenting major differences in perinatal health indicators (Blondel and Kermarrec, 2011). The results given in this article refer to metropolitan France (mainland France and Corsica), for which indicators are available over many years.

<sup>(3)</sup> Calculated from age-specific rates.

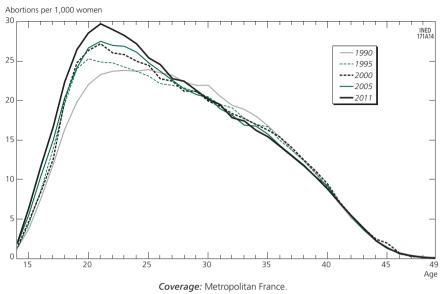


Figure 1. Abortion rates by age, 1990-2011 (per 1,000 women)

Source: Authors' calculations from DREES data and census data.

growing longer as age at first birth rises (Robert-Bobée and Mazuy, 2005). Childbearing norms remain strong, however, despite the growing flexibility and diversification in types of family life (Déchaux, 2009). Not only is it essential to be with a partner to have a child (and to be sure that the relationship is stable and that the desire to have children is shared), norms concerning age, the material conditions for raising a(nother) child, the "ideal" interval between births, etc., also come into play. All these norms apply to contraceptive and reproductive behaviour throughout women's childbearing years, and more particularly during the period of their "sexual youth". Even where contraceptive use is high, the strengthening of norms relating to fertility control, abortion as a right, and the lengthening of "youth" have led to a rise in abortions among 18-25-year-olds.

One-fifth of the women who seek abortions are students in higher education or secondary school (Table 2). Students as such have never been targeted by major national information programmes (contraception, abortion, etc.), although nearly 4% of female students have an abortion in any one year. Two out of three women having an abortion have no children or only one. More than half are not in a union, a figure that has remained stable over the years. Most abortions are the woman's first, although the proportion has been falling since 2002. It is estimated that 33% of women have at least one abortion during their lives, according to rates observed in 2011 (see Section IV).

Table 2. Characteristics of women having an induced abortion (per 100 induced abortions)

| Characteristics        | 1990    | 1997    | 2002    | 2005    | 2008    | 2011    |  |  |
|------------------------|---------|---------|---------|---------|---------|---------|--|--|
| Age                    | Age     |         |         |         |         |         |  |  |
| 17 and under           | 3.6     | 4.2     | 4.6     | 6.8     | 6.7     | 6.3     |  |  |
| 18-19                  | 6.8     | 7.3     | 7.4     | 8.6     | 8.9     | 8.5     |  |  |
| 20-24                  | 23.2    | 23.4    | 26.3    | 26.5    | 26.2    | 25.6    |  |  |
| 25-29                  | 23.8    | 22.4    | 21.3    | 20.7    | 21.8    | 21.8    |  |  |
| 30-34                  | 20.7    | 20.2    | 19.2    | 18.0    | 16.8    | 17.7    |  |  |
| 35-39                  | 14.8    | 15.3    | 14.0    | 13.1    | 13.3    | 13.5    |  |  |
| 40-44                  | 6.5     | 6.4     | 6.3     | 5.6     | 5.7     | 6.0     |  |  |
| 45+                    | 0.6     | 0.7     | 0.8     | 0.7     | 0.6     | 0.6     |  |  |
| Conjugal status        |         |         |         |         |         |         |  |  |
| Lives alone            | 44.1    | 51.1    | 54.6    | _       | _       | 51.7    |  |  |
| Lives with a partner   | 55.9    | 48.9    | 45.4    | _       | _       | 48.3    |  |  |
| Place of birth         |         |         |         |         |         |         |  |  |
| France                 | 82.6    | _       | _       | 83.7    | 84.2    | 83.7    |  |  |
| Other                  | 17.4    | _       | _       | 16.3    | 15.8    | 16.3    |  |  |
| Employment status      |         |         |         |         |         |         |  |  |
| Employed               | 51.2    | 45.3    | 49.5    | 47.7    | 51.9    | 51.6    |  |  |
| Unemployed             | 10.5    | 12.9    | 10.2    | 11.4    | 9.2     | 10.8    |  |  |
| Homemaker              | 19.0    | 16.6    | 15.3    | 14.5    | 13.3    | 12.1    |  |  |
| Student                | 14.6    | 19.8    | 18.6    | 19.9    | 18.8    | 19.0    |  |  |
| Other                  | 4.7     | 5.4     | 6.5     | 6.5     | 6.7     | 6.5     |  |  |
| Number of previous bir | ths     |         |         |         |         |         |  |  |
| 0                      | 43.6    | 45.6    | 47.5    | 45.3    | 45.2    | 42.8    |  |  |
| 1                      | 19.6    | 19.9    | 20.3    | 21.2    | 21.6    | 22.8    |  |  |
| 2                      | 20.2    | 19.5    | 18.3    | 19.0    | 19.0    | 20.2    |  |  |
| 3+                     | 16.6    | 15.0    | 13.9    | 14.5    | 14.1    | 14.1    |  |  |
| Number of previous abo | ortions |         |         |         |         |         |  |  |
| 0                      | 77.5    | 75.3    | 73.0    | 66.7    | 64.6    | 62.8    |  |  |
| 1                      | 17.7    | 19.1    | 20.7    | 24.0    | 25.3    | 26.6    |  |  |
| 2                      | 3.6     | 4.1     | 4.6     | 5.9     | 6.6     | 7.2     |  |  |
| 3+                     | 1.2     | 1.5     | 1.7     | 3.3     | 3.4     | 3.5     |  |  |
| Overall                | 100     | 100     | 100     | 100     | 100     | 100     |  |  |
| Number                 | 170,428 | 163,985 | 137,497 | 166,985 | 180,108 | 170,081 |  |  |

Note: Notification figures include elective and therapeutic abortions.

Coverage: Metropolitan France.

Source: Abortion notifications, authors' calculations.

#### III. Abortions at 6.5 weeks of pregnancy on average

The 2001 Law raised the upper limit for abortion from 10 to 12 weeks after conception, equivalent to 12 to 14 weeks of amenorrhea (since last menstrual period), an increase of two weeks. However, in metropolitan France, gestational age at abortion by any technique remained virtually stable from 1990 to 2005 and has even slightly fallen in recent years to 8.4 weeks of amenorrhea (6.4 weeks of pregnancy) in 2011, compared with 8.8 weeks (6.8 weeks of pregnancy) in

1990 and 2005. This reduction is largely due to the greater use of medical abortion. The 1 July 2004 decree allows women to seek medical abortion through their primary care physician until seven weeks of amenorrhea or five weeks of pregnancy. The circular of 6 October 2009 extended the list of professionals authorized to practise medical abortions to include family planning and education centres (Centre de planification et d'éducation familiale, CPEF) and health centres, the aim being, under the objectives of the CSIS, the council for sexual information, birth control and family education (Conseil supérieur de l'information sexuelle, de la régulation des naissances et de l'éducation familiale) to broaden access to abortion across the country.

Medical techniques, authorized in hospitals since 1988, have been more widely used since 1990: 16% of abortions in 1990 were medical, 19.6% in 1997, and the proportion had nearly doubled eight years later, to 44.5% in 2005. In 2008, medical abortions represented 50.3% of the total and became a clear majority in 2011, at 55.4% (Table 3). They are practised mainly in public and private hospitals. However, according to DREES data, the proportion of medical abortions practised in primary care is increasing, from 5% in 2005 to 19% in

Table 3. Mean weeks of amenorrhea (WA) at abortion by technique used, 1990-2011

| Year | We                | eks of amenorrhea (me | an)                | Proportion of medical |
|------|-------------------|-----------------------|--------------------|-----------------------|
| Teal | Surgical abortion | Medical abortion      | All abortions      | abortions (%)         |
| 1990 | 9.1               | 7.2                   | 8.8                | 16.0                  |
| 1991 | 9.0               | 7.1                   | 8.7                | 13.9                  |
| 1992 | 8.9               | 7.1                   | 8.7                | 11.3                  |
| 1993 | 8.9               | 7.2                   | 8.8                | 14.5                  |
| 1994 | 8.9               | 7.1                   | 8.7                | 15.1                  |
| 1995 | 9.0               | 7.2                   | 8.7                | 16.4                  |
| 1996 | 9.1               | 7.3                   | 8.8                | 18.5                  |
| 1997 | 9.1               | 7.3                   | 8.7                | 19.6                  |
| 2002 | 9.9               | 7.7                   | 9.1 <sup>(a)</sup> | 35.6 <sup>(a)</sup>   |
| 2005 | 10.0              | 7.2                   | 9.3 <sup>(b)</sup> | 44.5 <sup>(b)</sup>   |
| 2006 | 10.0              | 7.2                   | 9.2 <sup>(b)</sup> | 47.6 <sup>(b)</sup>   |
| 2007 | 10.0              | 7.2                   | 9.1 <sup>(b)</sup> | 48.9 <sup>(b)</sup>   |
| 2008 | 10.1              | 7.2                   | 9.1 <sup>(b)</sup> | 50.3 <sup>(b)</sup>   |
| 2009 | 10.1              | 7.2                   | 9.1 <sup>(b)</sup> | 51.9 <sup>(b)</sup>   |
| 2010 | 10.2              | 7.3                   | 8.6 <sup>(b)</sup> | 54.3 <sup>(b)</sup>   |
| 2011 | 10.0              | 7.1                   | 8.4 <sup>(b)</sup> | 55.4 <sup>(b)</sup>   |

(a) The mean duration of amenorrhea for all abortions was corrected on the basis of the exhaustive figures for surgical and medical abortions by hospital sector (public or private) in the 2002 annual healthcare statistical report (SAE). The proportion of medical abortions is also taken from SAE 2002.

(b) For 2005 to 2011, for post-stratification we used the distributions published by DREES by sector (public or private), type of abortion (surgical or medical) and woman's age (SAE), CNAM-TS 2011.

**Note:** The figures taken from notifications include elective and therapeutic abortions.

Coverage: Metropolitan France.

Sources: INED, SAE, DREES and authors' calculations.

2008 and 23% in 2011 (data from Vilain, 2013). The proportion taking place in health centres and CPEFs remains negligible (1% in 2011).

For medical abortions, the mean gestational age is shorter than for surgical ones. According to the national agency for healthcare accreditation and evaluation (Agence nationale d'accréditation et d'évaluation en santé, ANAES), <sup>(4)</sup> the medical technique is discouraged beyond seven weeks of amenorrhea (7 WA) and surgical techniques only are recommended beyond 10 WA. The mean gestational age at medical abortion has remained stable over time (7.2 WA in 1990, 7.2 in 2005 and 7.1 in 2011, i.e. just over five weeks after conception).<sup>(5)</sup> One exception was in 2002 when the gestational age at medical abortion was higher, probably due to the one-off effect of an ANAES publication in 2001 recommending the technique up to the ninth week of amenorrhea (Rossier et al., 2009).

At the same time, for surgical abortions the mean gestational age rose by nearly one week between 1997 and 2002, from 9.1 to 9.9 WA (8 weeks pregnancy), because medical abortions replaced some of the surgical ones in the earlier weeks. The number of early surgical abortions is falling because medical ones are preferred in these cases: of all surgical abortions, 13.7% occurred before 8 WA (6 weeks of pregnancy) in 2011, versus 18% in 2002 and 29% in 1997 (Table 4). Since 2002, the figures have been virtually stable, with mean gestational age levelling out at 10.2 WA in 2010 (Table 3). The previously observed rise was due to the increase in abortions after 12 WA following the 2001 law authorizing abortion up to 14 WA (Rossier et al., 2009). These late abortions, after 12 WA, represented 8% of surgical abortions in 2002 compared with 1.9% in 1997 (at that time, coding errors excepted, these corresponded to therapeutic abortions). The figure has remained stable over time: 7.4% in 2005 and 7.8% in 2011, with even a slight fall in abortions after 13 WA in 2011 (Table 4). Abortions at these gestational ages remain a small minority.

The distribution of abortions by weeks of amenorrhea changed between the 1990s and 2011 (Figure 2). Initially, the curves for 1990, 1997 and 2002 were similar, peaking at 8 WA (6 weeks of pregnancy). In 2002, the 2001 Law had a slight effect on the curve, which flattened out towards longer lengths of pregnancy than in 1997. The rise in the legal limit appears to have enabled practitioners to spread abortions more evenly over time but not necessarily to better handle late requests from women previously over the legal limit (Rossier et al., 2009). From 2005-2011, the curves peak earlier (6 WA) then flatten off up to 14 WA (Figure 2). In 2011, the mode at 6 WA was even more marked

<sup>(4)</sup> In 2004, the ANAES and other agencies were merged to form the French national authority for health (Haute autorité de santé, HAS).

<sup>(5)</sup> Gestational age in weeks is estimated directly from responses to the question about weeks of amenorrhea, or calculated as the difference between the day of the abortion and the day of the last period according to information given on the notification forms (Appendix A.1). In 2011, time since last period was recorded in weeks and days, and the data tend to support the hypothesis that time in weeks is recorded by professionals as "completed weeks". To obtain mean gestational ages we therefore added half a week to the direct answers (on the assumption that abortions "at *x* weeks" took place between "*x* weeks and 0 days" and "*x* weeks and 7 days").

Table 4. Distribution of induced abortions by weeks of amenorrhea and technique (%), 1997-2011

| Weeks of              |        | Med    | dical abor | tion   |         |         | Surg    | gical abor | tion    |        |
|-----------------------|--------|--------|------------|--------|---------|---------|---------|------------|---------|--------|
| amenorrhea            | 1997   | 2002   | 2005       | 2008   | 2011    | 1997    | 2002    | 2005       | 2008    | 2011   |
| 4                     | 1.8    | 3.0    | 1.5        | 1.8    | 2.1     | 0.6     | 1.1     | 0.2        | 0.2     | 0.3    |
| 5                     | 14.0   | 11.4   | 15.0       | 15.9   | 16.2    | 1.9     | 1.2     | 0.7        | 0.6     | 1.2    |
| 6                     | 41.4   | 34.5   | 41.9       | 42.7   | 39.6    | 8.0     | 4.2     | 2.9        | 2.8     | 3.1    |
| 7                     | 26.4   | 26.3   | 28.6       | 27.5   | 26.6    | 18.5    | 11.5    | 9.5        | 9.0     | 9.1    |
| 8                     | 7.6    | 11.6   | 7.1        | 6.8    | 10.0    | 24.3    | 22.1    | 20.8       | 19.6    | 19.1   |
| 9                     | 3.5    | 4.4    | 2.0        | 1.9    | 2.5     | 20.4    | 19.6    | 21.2       | 21.8    | 21.4   |
| 10                    | 2.0    | 2.6    | 8.0        | 0.8    | 1.0     | 13.7    | 15.5    | 17.7       | 18.0    | 18.1   |
| 11                    | 1.1    | 1.7    | 0.5        | 0.5    | 0.5     | 8.0     | 10.4    | 11.7       | 11.9    | 11.8   |
| 12                    | 0.4    | 1.1    | 0.4        | 0.4    | 0.4     | 2.7     | 6.5     | 7.9        | 7.9     | 7.9    |
| 13                    | 0.2    | 8.0    | 0.4        | 0.4    | 0.3     | 0.7     | 4.3     | 4.9        | 5.5     | 6.0    |
| 14                    | 0.1    | 0.3    | 0.2        | 0.2    | 0.1     | 0.3     | 1.3     | 1.8        | 2.1     | 1.6    |
| > 14                  | 1.5    | 2.4    | 1.5        | 1.3    | 0.7     | 0.9     | 2.4     | 0.7        | 0.6     | 0.2    |
| Overall               | 100    | 100    | 100        | 100    | 100     | 100     | 100     | 100        | 100     | 100    |
| Number <sup>(a)</sup> | 40,572 | 73,548 | 91,894     | 84,838 | 116,025 | 166,428 | 133,048 | 114,417    | 103,982 | 93,266 |

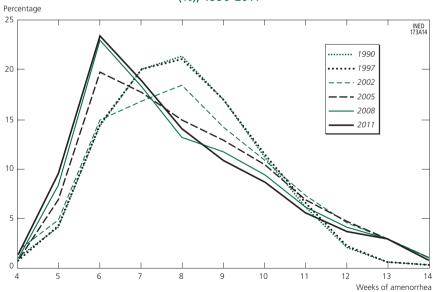
<sup>(</sup>a) Numbers are calculated from the proportion of medical abortions on the notification forms and the total number of forms (corrected for under-recording for 1997), and from the proportion of medical abortions and total numbers of abortions recorded in the SAE for 2002 and by DREES for 2005-2011.

Note: The figures taken from notifications include elective and therapeutic abortions.

Coverage: Metropolitan France.

Sources: INED, SAE, DREES and authors' calculations.

Figure 2. Distribution of abortions by weeks of amenorrhea (WA) (%), 1990-2011



Note: The figures taken from notifications include elective and therapeutic abortions.

Coverage: Metropolitan France.

Sources: Notification forms and authors' calculations.

(23.4%) than in 2008 (22.9%) and 2005 (20%). This was partly due to increased use of medical techniques.

Since 1990, there has been little change in the characteristics of women having early or late abortions. It is still the youngest women, the unemployed (or with no reported activity) and homemakers with no children or one child who have abortions latest (Table 5). Conversely, it is the oldest women, in employment and with at least two children who have abortions early in their pregnancy. However, the gestational age at abortion does not vary by conjugal

Table 5. Mean weeks of amenorrhea at the time of abortion by women's sociodemographic characteristics, Metropolitan France, 1990-2011

| Chana stanistica   |      | N    | lean weeks o | of amenorrhe | ea   |      |  |
|--|------|------|--------------|--------------|------|------|--|
| Characteristics  | 1990 | 1997 | 2002         | 2005         | 2008 | 2011 |  |
| Age  |      |      |              |              |      |      |  |
| 17 and under   | 9.3  | 9.0  | 9.3          | 8.9          | 9.0  | 8.8  |  |
| 18-19  | 9.2  | 9.0  | 9.4          | 9.0          | 8.9  | 8.7  |  |
| 20-24  | 9.0  | 8.9  | 9.2          | 8.8          | 8.7  | 8.5  |  |
| 25-29  | 8.8  | 8.7  | 9.0          | 8.6          | 8.6  | 8.3  |  |
| 30-34  | 8.6  | 8.6  | 8.9          | 8.5          | 8.5  | 8.2  |  |
| 35-39  | 8.4  | 8.5  | 8.9          | 8.6          | 8.5  | 8.2  |  |
| 40-44  | 8.4  | 8.5  | 8.8          | 8.5          | 8.5  | 8.2  |  |
| 45+  | 8.4  | 8.6  | 8.9          | 8.2          | 8.1  | 7.9  |  |
| Conjugal status  |      |      |              |              |      |      |  |
| Lives alone  | 8.9  | 8.7  | 9.1          | _            | _    | 8.4  |  |
| Lives with a partner   | 8.7  | 8.7  | 9.1          | _            | _    | 8.3  |  |
| Place of birth   |      |      |              |              |      |      |  |
| France   | 8.8  | _    | _            | 8.7          | 8.6  | 8.4  |  |
| Other  | 8.6  | _    | _            | 8.7          | 8.7  | 8.4  |  |
| Employment status  |      |      |              |              |      |      |  |
| Employed   | 8.6  | 8.6  | 9.0          | 8.5          | 8.5  | 8.2  |  |
| Unemployed   | 9.1  | 8.9  | 9.2          | 8.9          | 8.8  | 8.6  |  |
| Homemaker  | 8.9  | 8.9  | 9.3          | 8.8          | 8.8  | 8.5  |  |
| Student  | 8.9  | 8.7  | 9.1          | 8.7          | 8.7  | 8.4  |  |
| Other  | 9.0  | 8.9  | 9.3          | 8.9          | 9.1  | 8.8  |  |
| Number of previous births  |      |      |              |              |      |      |  |
| 0  | 8.9  | 8.8  | 9.2          | 8.7          | 8.7  | 8.4  |  |
| 1  | 8.8  | 8.8  | 9.2          | 8.8          | 8.7  | 8.4  |  |
| 2  | 8.6  | 8.6  | 8.9          | 8.5          | 8.5  | 8.2  |  |
| 3+   | 8.8  | 8.7  | 9.1          | 8.7          | 8.6  | 8.3  |  |
| Number of previous abortion  | ons  |      |              |              |      |      |  |
| 0  | 8.8  | 8.7  | 9.1          | 8.7          | 8.7  | 8.4  |  |
| 1  | 8.8  | 8.7  | 9.1          | 8.7          | 8.6  | 8.3  |  |
| 2  | 8.8  | 8.8  | 9.1          | 8.7          | 8.6  | 8.3  |  |
| 3+   | 8.7  | 8.7  | 9.2          | 8.6          | 8.7  | 8.3  |  |
| Overall  | 8.8  | 8.7  | 9.1          | 8.7          | 8.6  | 8.4  |  |
| <b>Note:</b> The figures taken from notifications include elective and therapeutic abortions |      |      |              |              |      |      |  |

*Note:* The figures taken from notifications include elective and therapeutic abortions.

Sources: Notification forms and authors' calculations.

status (in a union or not), country of birth (France or elsewhere) or abortion order (first or higher).

These differences in gestational age at abortion no doubt reflect differences in access: the least advantaged women and those least experienced with the administrative and medical procedures would appear to have more difficulty in accessing abortion services, leading to delays (Rossier et al., 2009). Distance from medical infrastructure and local supply constraints may also play a part (Vilain et al., 2010).

Variations in WA by women's characteristics were generally similar from one year to another from 1997 to 2011 (Table 5).

The decrease in gestational age at abortion since 2002 is due to both an increase in early abortions (7 WA or less, 5 weeks pregnancy or less) and a reduction in late abortions (11 WA or more, less than 3 weeks before the legal limit). The proportion of early abortions rose from 39% to 53% from 2002 to 2011, whereas late abortions fell from 18% to 14%. These trends are similar across the population and apply to all groups of women (Table 6). The differences in mean WA indicated in Table 5 can be found in Table 6 too: those groups of women whose mean WA before abortion was shorter were those who had more early abortions and fewer late ones. No group is particularly diverse, with both early and late abortions. The trend towards earlier abortions over time is a general one: in all groups of women abortions are more often early and less often late (Table 6).

## IV. Fewer women are having abortions, but repeat abortions are more frequent

From 1976 to 1990, the mean number of abortions fell from 0.66 to 0.49 abortions per woman (over a lifetime), and then rose slightly to 0.53 in 2011 (Table 1). An average of 0.5 abortions per woman may correspond mathematically to very different situations. If there were no repeat abortions, then this would mean that half of all women have one abortion during their lives. Alternatively, if those who seek abortion have an average of two during their lives, then an overall average of 0.5 would mean that one-quarter of women have two. Closer to the current situation, an average of 0.5 may also signify that one-third of women seek abortion during their lives, and that these women have 1.5 abortions on average.

The proportion of repeat abortions (women who have already had an abortion) and the distribution of abortions by number of previous abortions can be estimated from the notifications and interpolated for those years where the information is lacking (notifications not recorded), after correcting the data for certain years (Appendix A.2).

Table 6. Proportions of early and late abortions by women's sociodemographic characteristics, metropolitan France, 1990-2011

| Characteristics         | Perc     | entage     | of early  | abortic  | ons (≤ 7 | WA)     | Perc      | entage | of late a | abortion | ns (≥ 11 | WA)  |
|-------------------------|----------|------------|-----------|----------|----------|---------|-----------|--------|-----------|----------|----------|------|
| Characteristics         | 1990     | 1997       | 2002      | 2005     | 2008     | 2011    | 1990      | 1997   | 2002      | 2005     | 2008     | 2011 |
| Age                     |          |            |           |          |          |         |           |        |           |          |          |      |
| 17 and under            | 28.8     | 33.5       | 32.7      | 41.6     | 40.6     | 43.7    | 15.8      | 14.2   | 21.3      | 19.6     | 20.5     | 18.1 |
| 18-19                   | 29.4     | 32.5       | 32.0      | 41.0     | 41.9     | 46.1    | 15.5      | 13.5   | 21.7      | 19.6     | 19.5     | 17.1 |
| 20-24                   | 32.6     | 34.9       | 34.9      | 44.8     | 46.3     | 50.4    | 13.4      | 12.6   | 19.5      | 16.9     | 17.1     | 14.9 |
| 25-29                   | 37.8     | 39.1       | 38.1      | 48.4     | 50.8     | 54.7    | 10.8      | 10.9   | 17.0      | 14.7     | 14.9     | 12.8 |
| 30-34                   | 42.7     | 42.3       | 40.7      | 50.1     | 51.7     | 56.9    | 8.9       | 9.3    | 15.7      | 13.7     | 13.9     | 11.6 |
| 35-39                   | 46.0     | 44.2       | 41.1      | 48.3     | 51.8     | 57.0    | 7.5       | 7.9    | 14.5      | 13.5     | 13.1     | 11.1 |
| 40-44                   | 47.1     | 44.1       | 41.0      | 49.5     | 52.3     | 56.9    | 7.3       | 7.8    | 13.2      | 12.6     | 13.0     | 11.5 |
| 45+                     | 44.6     | 41.4       | 44.7      | 55.5     | 60.2     | 61.4    | 7.3       | 8.2    | 14.4      | 9.0      | 11.0     | 10.1 |
| Conjugal status         |          |            |           |          |          |         |           |        |           |          |          |      |
| Lives alone             | 35.9     | 37.7       | 36.6      | _        | _        | 50.4    | 12.2      | 11.4   | 18.4      | _        | _        | 14.8 |
| Lives with a partner    | 40.8     | 40.8       | 38.8      | -        | -        | 54.2    | 9.7       | 9.9    | 16.6      | -        | -        | 12.5 |
| Place of birth          |          |            |           |          |          |         |           |        |           |          |          |      |
| France                  | 38.2     | _          | _         | 47.1     | 48.7     | 53.1    | 11.1      | _      | _         | 15.6     | 15.6     | 13.5 |
| Other                   | 39.8     | _          | _         | 45.8     | 47.5     | 52.5    | 9.3       | _      | _         | 15.6     | 15.5     | 13.5 |
| Employment status       |          |            |           |          |          |         |           |        |           |          |          |      |
| Employed                | 42.0     | 42.8       | 40.1      | 50.2     | 51.7     | 56.5    | 9.3       | 8.9    | 15.8      | 13.5     | 14.0     | 11.7 |
| Unemployed              | 32.5     | 35.2       | 34.9      | 41.8     | 44.9     | 48.6    | 13.8      | 12.7   | 20.2      | 19.0     | 18.0     | 16.1 |
| Homemaker               | 36.3     | 36.3       | 35.0      | 44.1     | 46.5     | 50.9    | 11.6      | 12.0   | 18.9      | 17.0     | 17.2     | 14.9 |
| Student                 | 35.6     | 38.2       | 37.3      | 46.5     | 46.4     | 50.3    | 11.9      | 11.0   | 18.1      | 15.9     | 16.4     | 14.2 |
| Other                   | 33.9     | 33.6       | 33.4      | 41.6     | 40.5     | 44.5    | 12.9      | 13.6   | 20.3      | 18.8     | 20.4     | 18.0 |
| Number of previous      | births   |            |           |          |          |         |           |        |           |          |          |      |
| 0                       | 36.9     | 38.3       | 36.7      | 46.7     | 47.8     | 51.5    | 11.8      | 11.4   | 18.4      | 16.4     | 16.5     | 14.4 |
| 1                       | 38.4     | 39.0       | 37.2      | 46.7     | 48.4     | 53.5    | 11.0      | 11.4   | 18.6      | 16.4     | 16.1     | 14.0 |
| 2                       | 43.0     | 42.0       | 40.2      | 49.5     | 51.7     | 56.2    | 8.9       | 8.8    | 15.4      | 13.3     | 13.6     | 11.5 |
| 3+                      | 37.2     | 38.0       | 37.3      | 45.3     | 48.2     | 52.9    | 10.6      | 10.0   | 16.7      | 15.9     | 15.1     | 12.9 |
| Number of previous      | aborti   | ons        |           |          |          |         |           |        |           |          |          |      |
| 0                       | 38.3     | 39.2       | 37.7      | 47.0     | 48.9     | 53.0    | 11.0      | 10.7   | 17.5      | 15.8     | 15.6     | 13.3 |
| 1                       | 38.9     | 39.2       | 37.2      | 46.9     | 48.4     | 53.3    | 10.3      | 10.7   | 17.9      | 15.7     | 16.2     | 13.7 |
| 2                       | 38.6     | 37.3       | 37.1      | 45.5     | 48.3     | 53.2    | 11.1      | 11.2   | 18.7      | 16.2     | 15.7     | 13.7 |
| 3+                      | 38.9     | 37.3       | 36.2      | 46.4     | 47.3     | 53.4    | 9.9       | 10.4   | 19.3      | 15.5     | 16.1     | 13.7 |
| Overall                 | 39.5     | 39.7       | 38.7      | 47.5     | 49.1     | 53.1    | 11.0      | 10.8   | 18.2      | 15.8     | 15.9     | 13.5 |
| Note: The figures taker | n from n | otificatio | ons inclu | de elect | ive and  | herapeu | ıtic abor | tions. |           |          |          |      |

Sources: Notification forms and authors' calculations.

Since 1975, the proportion of repeat abortions has risen continuously (Figure 3). In the 1970s, repeat abortions represented less than one in ten of the total, but these abortions may have been preceded by one or more illegal ones before 1975, not reported in the notifications. After 1980, the proportion of repeat abortions continued to rise, and third or higher abortions (two or more previous abortions) also became more frequent, accounting for 29% of repeat abortions in 2011.

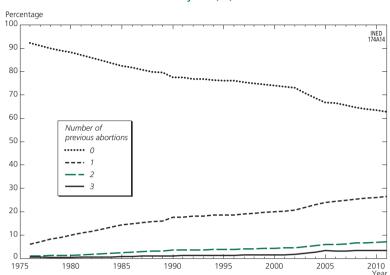


Figure 3. Distribution of abortions by number of previous abortions and year (%)

**Note:** The figures for 1998, 1999, 2000, 2001, 2003, and 2004 have been interpolated. The figures taken from notifications include elective and therapeutic abortions.

Sources: Notification forms and authors' calculations.

On the basis of the distribution of abortions by order at each age and in each year, it is possible to break down the total indicator into mean numbers of first and repeat abortions per woman (Figure 4). According to this estimate, the number of first abortions per woman is 0.33, meaning that 33% of women have an abortion at some point in their lives; the number of repeat abortions was 0.21 in 2011.

The rise in the proportion of repeat abortions is recorded for all categories of women noted in Table 2; a similar overall rise was earlier noted for 2002-2007 by Bajos, Prioux and Moreau (2013).

Even if the notification is not correctly completed (Appendix A.2), correcting the information about the year of previous abortion makes it possible to measure the frequency and timing of repeat abortions more accurately. After having their first abortion, 28 per 1,000 women abort again within the year (amounting to an annual rate of 56 per 1,000) and 72 per 1,000 the following year (Figure 5). The rate subsequently declines sharply and is lower than 20 per 1,000 nine years after the first abortion. The rates are lower after a second abortion (57 per 1,000 in the year following a second abortion), and the decline over time is very similar to that after a first one. After a third and, more markedly still, a fourth or higher abortion, rates are high just after the abortion and then decline more rapidly. Some women are exposed at certain times in their lives to situations in which the probability of having an abortion is high, and this is particularly true if they have already had more than one. The median interval

Figure 4. Number of abortions per woman, by order and year

Note: For this graph we have adopted DREES estimates of the mean number of abortions per woman from 1991 on (Vilain, 2014). Based on the INED estimates (Table 1), the increase in repeat abortions is more regular over the period, and the levelling-off of second or higher abortions between 1985 and 1995 is less marked.

The figures taken from notifications include elective and therapeutic abortions.

Sources: Notification forms and authors' calculations.

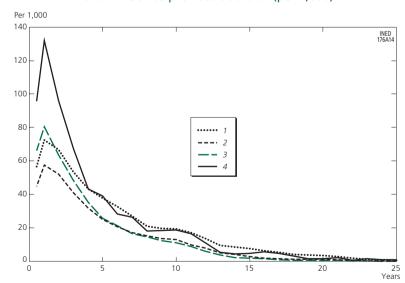


Figure 5. Abortion rates by number of previous abortions and time since previous abortion (per 1,000)

**Note:** Incidence rates calculated as the ratio of order r+1 abortions at time t to order r abortions in year (2011 – t). The rate in the first year, at time 0.5 (two abortions in one year) has been doubled in order to be presented as an annual rate. The figures taken from notifications include elective and therapeutic abortions. **Sources:** Notification forms and authors' calculations.

between two abortions is short: half of second abortions occur within three and a half years of the first one. The median interval between abortions decreases with the number of previous abortions: 3.1 years before a third abortion and less than 2.5 years for subsequent abortions. For all abortion orders, one-quarter of repeat abortions occur within 18 months of the previous one, and three-quarters within seven years.

Measuring the probability of a further abortion not only by the interval since the previous one but also by the woman's age at the previous abortion has only a marginal effect on probabilities, since the effects of age and number of previous abortions are additive. The probability of having a first abortion is estimated from the total rate to be 33%. After the first abortion, the probability of a further one is estimated at 41%. After two or three abortions, the probabilities are slightly lower, between 30% and 32% (Table 7). After the first abortion, the mean interval between abortions is five years, and any repeat abortions after two or three previous ones are somewhat closer together. Since the probability of having a subsequent abortion is highly dependent on age at the previous one, mean age at repeat abortion depends little on abortion order, unlike the mean interval between abortions. For all orders, abortions occur on average at age 27.7; first abortions occur on average at age 26.7 years, and third and higher abortions at age 30.6.

Table 7. Probability of a further abortion, mean age at abortion and interval between abortions in 2011

| Previous abortions | Probability of further abortion (%) | Mean age at abortion (years) | Time since previous abortion (years) |
|--------------------|-------------------------------------|------------------------------|--------------------------------------|
| 0                  | 33.3                                | 26.7                         | _                                    |
| 1                  | 40.7                                | 28.8                         | 5.1                                  |
| 2                  | 30.0                                | 30.2                         | 4.6                                  |
| 3+                 | 32.2                                | 30.6                         | 3.8                                  |

**Note:** Mean age at abortion based on rates by order and age; interval between abortions based on rates by interval and order.

Sources: Notification forms and authors' calculations.

Because of missing and incomplete data, it is impossible to accurately estimate the probabilities of repeat abortions for the years between 2002 and 2011, but the 2011 estimate follows the observed trend based on existing estimates for 1980, 1990 and 2002 (Rossier et al., 2009). Repeat abortions are becoming more frequent, so the stability of the total abortion rate is the result of two opposing trends: the number of women ever having an abortion during their lives is falling, and the probability of having a further abortion after a first one has been rising since 2002. The 2011 results follow trends observed over the last 30 years (Table 8), but the probabilities of a further abortion after two or three previous ones, which were stable between 1980 and 2000, have risen sharply since then.

Table 8. Probability of having an abortion by number of previous abortions and year (%)

| Previous abortions |      | Year of a | abortion |      |
|--------------------|------|-----------|----------|------|
| Previous aportions | 1980 | 1990      | 2002     | 2011 |
| 0                  | 54   | 38        | 38       | 33   |
| 1                  | 15   | 18        | 28       | 41   |
| 2                  | 22   | 22        | 23       | 30   |
| 3+                 | 28   | 28        | 25       | 32   |

**Sources:** 1980, 1990, and 2002: Rossier et al., 2009. The 1980 and 1990 figures were estimated from the abortion cohorts of 1976 and 1985, respectively; 2011: model by age and time since previous abortion. Notification forms and authors' calculations.

In the 1980s and 1990s, the probability at a given age of having a repeat abortion was lower than that of having a first one: experience of an abortion sometimes motivated women to adopt more effective contraception. Alongside this "learning" effect there was a "selection" effect: a limited group of women not using effective contraception had abortions repeatedly, leading to a rise in the abortion rate by number of previous abortions (Blayo, 1996). By 2002, the probability at a given age of having an abortion no long depended on the number of previous abortions, showing that these learning and selection effects had diminished (Rossier et al., 2009). Frequency of abortion varied with the circumstances of women's sexual and emotional lives, and their economic and social situation, with no strong correlation with any previous abortions. The 2001 Law confirmed women's right to abortion and improved access to it, marking a certain normalization of abortion as a possible solution to an unwanted pregnancy. In 2002, the probability of having an abortion after the age of 25 was 26% and did not vary with the number of previous abortions. From 2002 to 2011, the probability of having a first abortion fell at all ages (Figure 6), but the probability of having a second one rose strongly: among women who had a first abortion at around age 25, the 2011 rate indicates that 44% had a repeat abortion, compared with 20% among women who had not had an abortion by age 25. After two or more abortions, the probabilities of a further abortion are slightly lower than after a first one. More broadly, the probability of having an abortion was higher in 2011 for women who had already aborted once than for women who had not had an abortion when they were younger. (6)

In 2007, DREES conducted a survey of women who had terminated a pregnancy (Vilain et al., 2011). Those who had had two or more abortions reported more frequently than other women that they were using contraception when they became pregnant (Bajos et al., 2013). The survey identified which groups of women were more likely than others to have repeat abortions (no supplementary health insurance, born in sub-Saharan Africa), but this was unrelated to their use of contraception. Bajos et al. (2013) hypothesize that

<sup>(6)</sup> This remains true even on the extreme assumption that all the abortions for which information about previous ones was lacking in 2011 were first abortions.

Per 1,000 70 INED Previous 60 abortions None One 50 Two ···· Three 40 30 20 10 Ω 18-20 15-17 21-23 24-26 27-29 30-32 33-35 36-38 39-41 42-44 Age at previous abortion (or age if first abortion) 18-23 24-26 27-29 30-32 33-38

Figure 6. Probability of having a further abortion by number of previous abortions in 2011 and age (%)

Age at previous abortion (for the "three previous abortions" curve)

Note: The "2002" curve shows probability by age of having a first abortion in 2002, given that in that year there was practically no correlation with the number of previous abortions: in 2002 the curves of probability of repeat abortion by number of previous ones virtually coincided (Rossier et al., 2009). The figures taken from notifications include elective and therapeutic abortions.

Sources: Notification forms and authors' calculations.

when faced with emotional or social situations where the risk of an unwanted pregnancy is high, the women having an abortion do not get any advice about changing their contraception, especially if they were already taking the pill before becoming pregnant, although having an abortion is in itself evidence of the inefficacy of their contraceptive method.

The proportion of women having more than one abortion is low in France (14%, Table 9), but with the increase over the last decade in age at union formation and first birth, the change in attitudes to casual sexual relations,

Table 9. Distribution of women by lifetime number of abortions (%)

| Number       | Year |      |      |      |  |  |  |
|--------------|------|------|------|------|--|--|--|
| of abortions | 1980 | 1990 | 2002 | 2011 |  |  |  |
| 0            | 46.0 | 62.0 | 61.6 | 66.7 |  |  |  |
| 1            | 45.9 | 31.1 | 27.8 | 19.7 |  |  |  |
| 2            | 6.3  | 5.3  | 8.2  | 9.5  |  |  |  |
| 3+           | 1.8  | 1.5  | 2.4  | 4.1  |  |  |  |

**Note:** The figures taken from notifications include elective and therapeutic abortions. **Sources:** Notification forms and authors' calculations based on Table 8.

and the growth of economic insecurity, situations where women are exposed to the risk of an unwanted pregnancy are becoming more frequent (Bajos et al., 2013). Since the 1970s, increased use of effective contraceptives has reduced the frequency of unwanted pregnancies, but when one does occur, abortion is more frequent, so the number of abortions has not declined (Bajos et al., 2004).

Abortion is a solution for avoiding an unwanted birth, and is now a right rather than a "last resort". From 2002 to 2011, the situations in which the risk of having an abortion are high probably became more lasting, or some women found themselves in situations of transition more than once and were thus more often faced in their lives with an unwanted pregnancy. It is no longer obligatory to attend a preliminary interview before an abortion, and while this may have simplified the process of getting one, it has reduced the number of interviews before or after the abortion, which are supposed to be offered systematically but in fact rarely are (CSIS, 2011); these interviews provide an opportunity for physicians to offer contraception more suited to each woman's situation. All these factors may explain why some women find themselves, more often than in the past, in a situation where they have more than one abortion, whereas the number of women who never have one is increasing.

#### **Overview**

A total of 209,000 induced abortions were performed in France in 2011. After declining until the mid-1990s, then rising slightly until the mid-2000s, this number has stabilized, and the total abortion rate has levelled off at 0.53 per woman.

This stability is accompanied by three major developments. First, abortions are declining after age 25, but are increasingly frequent among 18-25-year-olds (abortion among the under-18 is not increasing as much as before). As first births occur later and young people are economically less secure, young women more often find themselves in situations where they do not wish to bring an unwanted pregnancy to term.

The 2001 law facilitated access to abortion and raised the legal limit from 10 to 12 weeks pregnancy, (i.e. from 12 to 14 weeks of amenorrhea). A temporary increase in gestational age at abortion was recorded in 2002, but since then it has resumed its decline, from a mean of 9.1 weeks of amenorrhea in 2002 to 8.4 weeks in 2011. All population groups now have speedier access to abortion, thanks to the development of medical abortion, which is practised earlier: in 2011, more than 55% of abortions were medical, compared with only 36% in 2002.

The stability of the abortion rate between 2002 and 2011 (0.51 or 0.53 lifetime abortions per woman) is the result of two opposing trends. The proportion of women ever having an abortion during their lives has fallen from

38% to 33%, and the probability of having a second abortion has risen from 28% to 41%. In 2002, the probability at each age of having a further abortion did not depend on previous abortion history, whereas in 2011, women having recently had an abortion were more likely to have repeat abortion.

Rossier et al. (2009) note that abortion, now a key component of a woman's reproductive rights, became a routine option for women after the 2001 Law, with frequency of abortion in 2002 varying according to economic and social factors. Difficult situations were characterized by longer mean gestational ages at abortion. A 2007 DREES survey of women who had had an abortion confirmed and detailed these social differences and transition situations: women having abortions are more often living alone and have no steady job (Vilain, 2011).

In 2011, the increase in repeat abortions reflected the higher frequency, for some women, of situations in which they were exposed to the risk of an unwanted pregnancy without wishing to bring it to term. The inclusion of the year of previous abortion in the 2011 notifications makes it possible to analyse these repeat abortions, which often occur in rapid succession. According to the 2007 survey, women who had repeat abortions had more frequently taken the pill before the abortion than other women (Bajos et al., 2013) and had not anticipated the risk of a further unwanted pregnancy, so had not used the morning-after pill (Vilain, 2011). A more determined information campaign about contraceptive methods would likely improve these women's protection. The increase in repeat abortions probably also reflects the fact that, for these women, having an abortion is just one of the "risks" they face at certain times in their lives.



#### **APPENDICES**

# Appendix A.1. Abortion notification forms – 2011 and previous versions

#### Form used since 2011

| cerfa   | RÉPUBLI  | IQUE FRANÇA   | ISE  |   |
|---|--|---|--|---|
| N° 12312*03<br>Ce modèle Cerfa a cours<br>également en bleu   | MINISTÈRE C  | CHARGÉ DE LA  | SANTÉ  |   |
|   | BULLETI  | N STATIST   | TOUE   |   |
| Ce bulletin   | D'INTERRUP   |   |  |   |
| ne doit faire<br>aucune mention de  | DE G   | ROSSESSI  | E  |   |
| l'identité<br>de la femme   | Artide 5 de la   | du Code de la santé<br>convention type pré<br>2212-9 du même cod                      | vue à  | Cachet de l'établissement   |
| sauf réintervention chir  | ent par le médecin qui pratique<br>urgicale à la suite d'un échec<br>RELATIVES AU I                | d'IVG médicamente   | use.   | e, <u>y compris pour motif médical.</u><br>CAL  |
| Département   | Lieu de  | e l'acte médical  | Ш  | Statut de l'établissement ST  |
| Guadeloupe = 971,<br>Martinique = 972,<br>Guyane = 973,<br>La Réunion = 974,<br>Mayotte = 976                                 | Cabinet de ç Cabinet de ç Centre de pl   | diniquegynécologiegynécologieg<br>généraliste ou autre .<br>anification ou d'éducanté | 2 a é du du sa constant de la consta | ce lequel le praticien a conventionné ou au sein duquel fe pratiqué l'acte. Ne concerne que les items 1, 2 et 3 lieu de l'acte médical Public |
| B. DONNÉES I  | RELATIVES À LA   | A FEMME   | C. DONNÉ   | ES MÉDICALES  |
| Date de naissance   |  | DATNAI  | Date de l'acte   |   |
| Département ou lieu   | mois année<br>i de naissance   |   | inun   |   |
| (Guadeloupe = 971, Martiniqui<br>La Réunion = 974, Mayotte = 9<br>Étranger: Europe = EUR; Mag<br>Autres pays d'Afrique = AFR: | 9 = 972, Guyane = 973,<br>976, COM (ex-TOM) = 098<br>hreb = AFN,<br>Asie = ASI; Autres pays = AUT) | LNAIS   | jour<br>Date de l'intervent<br>Sinon date de pris  | mois année<br>ion pour une IVG chirurgicale<br>e de la MIFEPRISTONE.  |
| Département ou lier   |  |   | Durée d'améno<br>(en semaines et en  | jours) DSAS DSAJ  |
| Activité professionn  |  | DOM   | S'agit-il d'une  | semaines jours interruption médicale de grossesse ?   |
| Cocher une case Occupe un emp   | AC'  |   | C'est-à-dire avec l'attes  | Oui 1 IMG   |
|   | ı chômage  | 2   | de deux médecins (art. L   | 2213-1) Non 2   |
|   | r  | 3   | Technique emp  | ployée  |
|   | ève  | 4   | Cocher une ou  | plusieurs cases   |
|   | 5  |   | Chirurgicale avec  | anesthésie locale   |
| Vie en couple   | , VEC  |   |  | anesthésie générale TCG   |
|   | 1 2 VEG<br>Oui Non   |   | Médicamenteuse   | ТМ  |
|   |  |   |  |   |
|   |  |   | Nombre de nai antérieures  | ssances GA  |
|   |  |   |  | antérieures IVGA  |

#### Form used from 2005 to 2010

| cerfa  | RÉPUBLIQUE FRANÇA  | AISE  |
|--|--|---|
| N° 12312*02  | Ministère chargé de la   | Santé   |
| Ce modèle Cerfa a cours<br>également en vert foncé                               |  |   |
|  | BULLETIN STATIST   | CIOUE   |
| Ce bulletin <b>D'I</b>   | NTERRUPTION VOL  |   |
| ne doit faire  | DE GROSSESSI   |   |
| aucune mention de<br>l'identité  | DE GROSSESSI   | Cachet de l'établissement   |
| de la femme  | Article L2212-10 du code de la santé et de l'article 5 de la convention type |   |
| _  | l'article R2212-9 du même cod  |   |
| A remplir obligatoirement par  | le médecin qui pratique une interruptio                                      | on volontaire de grossesse, <u>y compris pour motif médical</u> .                   |
| A. DONNÉES RELA  | TIVES AU LIEU DE L   | 'ACTE MÉDICAL   |
| Département  | Lieu de l'acte me  | 5   |
| 0.014  | DEP Hôpital ou clinique  | avec lequel le praticien a conventionné  1 ou au sein duquel a été pratiqué l'acte. |
| Guadeloupe = 971,<br>Martinique = 972,   | Cabinet de gynécologue   | Public 1  |
| Guyane = 973,<br>La Réunion = 974,   | ou de gynéco-obstétricien  | Privé à but non lucratif  |
| Mayotte = 976  | Cabinet de généraliste ou  | autre Privé à but lucratif 3  |
| B. DONNÉES RELA  | TIVES À LA FEMME   | C. DONNÉES MÉDICALES  |
| <b>*</b> * * * * * * * * * * * * * * * * * *                                     | AGE  | Date de l'acte médical  |
| Âge à la date de l'acte  | ans  | 2 0   |
| Département ou lieu de na  | issance  |   |
| (Guadeloupe = 971, Martinique = 972, C<br>La Réunion = 974, Mayotte = 976, TOM   | Suyane = 973,<br>= 098 LNAIS   | Jour Mois Année  Date de l'intervention pour une IVG chirurgicale.                  |
| Étranger : Europe = EUR ; Asie = ASI ; A<br>Amérique du Nord = AMN ; Amérique di | frique = AFR ;<br>v Sud = AMS)   | Sinon date de prise de la MIFEPRISTONE.  Date du début des dernières règles         |
| Département ou lieu de do  | micile   | DDR   |
|  |  | 2 0   |
| Activité professionnelle   | DOM  | Jour Mois Année   |
| Cocher une case  | ACT  | Durée de gestation en semaines d'aménorrhée DSA                                     |
| Occupe un emploi   | 1  | S'agit il d'une interruption médicale de  |
| Actuellement au chôma  | ge <sub>2</sub>  | S'agit-il d'une interruption médicale de grossesse ?                                |
| Femme au foyer   |  | C'est-à-dire avec l'attestation légale  |
| Étudiante ou élève   |  | Technique employée  |
| Autre  | 5  | Cocher une ou plusieurs cases   |
|  |  | Chirurgicale avec anesthésie locale TCL   |
|  |  | Chirurgicale avec anesthésie générale TCG   |
|  |  | Médicamenteuse  |
|  |  | Nombre de naissances GA   |
|  |  | antérieures   |
| Cachet et Signe  | uture du médecin   | Nombre d'IVG antérieures IVGA   |
|  |  |   |

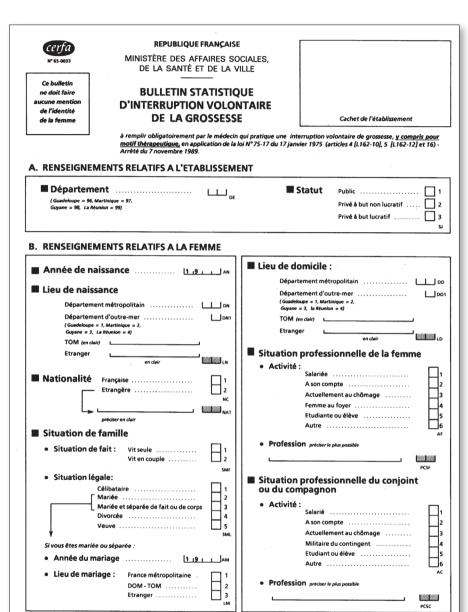
#### Form used in 2002<sup>(7)</sup>

| <i>cerfa</i><br>N° 65-0033   | <b>RÉPUBLIQUE FRANÇA</b><br>MINISTÈRE DE LA SANTÉ, DE L<br>DES PERSONNES HANDI              | A FAMILLE ET   |  |  |  |  |
|--|---|--|--|--|--|--|
| Ce bulletin<br>ne doit faire<br>aucune mention<br>de l'identité<br>de la femme | BULLETIN STATIST D'INTERRUPTION VOL DE LA GROSSES à complir chilinatoirement par la média   | TIQUE ONTAIRE SSE cin qui pratique une ini oi N°75-17 du 17 janvie rrêté du 7 novembre 18  | Cachet de l'établissement<br>terruption volontaire de grossesse, <u>v. compris pour</u><br>er 1975 (article 4 [L162-10],5 [L162-12] et 16) et de la<br>1899.   |  |  |  |
| Département (Guadeloupe =96, Mar Guyane = 98, La Réun                          |   | ■ Statut   | Public<br>Privé à but non lucratif<br>Privé à but lucratif   |  |  |  |
| B. RENSEIGNEMEN  | TS RELATIFS À LA FEMME  | Lieu de d  | dominile   |  |  |  |
| Année de naissan   | ce 1 9  |  | partement métropolitain  |  |  |  |
| Lieu de naissance  |   |  |  |  |  |  |
| Département mé   |   | Département d'outre-mer<br>(Guadeloupe = 1, Martinique = 2,<br>Guyane = 3, La Réunion = 4) |  |  |  |  |
| Département d'o  | utre-mer  |  |  |  |  |  |
| (Guadeloupe = 1, Mar<br>Guyane = 3, La Réuni                                   | tinique = 2,  | T.O.M. (en toutes lettres)   |  |  |  |  |
| •  | lettres, une lettre par case)   |  |  |  |  |  |
| 1.0.11. (0.1.00.00   | iomos, une iomo par oace)   | Étranger (pays en toutes lettres)  |  |  |  |  |
|  |   |  |  |  |  |  |
| Étranger (pays en  | toutes lettres)   |  |  |  |  |  |
|  |   | Situation  | n professionnelle de la femme  |  |  |  |
| <b>.</b>   |   | Activité :   | Salariée   |  |  |  |
| Nationalité França<br>Étrang   |   |  | A son compte   |  |  |  |
| _  |   |  | Actuellement au chômage  |  |  |  |
| Si vous etes etrangere   | , préciser en clair votre nationalité   | Femme au foyer   |  |  |  |  |
|  |   |  | Étudiante ou élève   |  |  |  |
| NAT  |   |  | A A  |  |  |  |
| Situation de famill  | e<br>Vit seule  | Professio  | n préciser le plus possible  |  |  |  |
| Situation de fait :  | Vit en couple   |  |  |  |  |  |
| Situation légale :   | 2 SMF   | Cituation  | n professionnelle du conjoint  |  |  |  |
| Célibataire<br>Mariée  |   |  | ·  |  |  |  |
|  | e de fait ou de corps   | Activité :   | A son compte   |  |  |  |
| Divorcée   |   |  | Actuellement au chômage  |  |  |  |
| Veuve  |   |  | Militaire du contingent  |  |  |  |
| Si vous êtes mariée ou sép   | parée   |  | Étudiant ou élève  |  |  |  |
| Année du mariage   |   |  | Autre  |  |  |  |
| a Liou do marisco  | France métropolitaine   | Professio  | n préciser le plus possible  |  |  |  |
| Lieu de mariage :  | DOM-TOM   |  |  |  |  |  |
|  | Etranger  |  |  |  |  |  |
|  | 111   |  |  |  |  |  |
| andicapées, à l'INED et à l'IN-<br>oncernant. Dans ce cas, ce droi             | SERM. La loi n° 78-17 du 6 janvier 1978 ga<br>t d'accès peut être exercé par les femmes per | arantit aux personnes u<br>ndant deux années civile  | au ministère de la Santé, de la Famille et des Personnes<br>ın droît d'accès et de rectification pour les informations les<br>se suivant l'événement auprès du ministère de la Santé, de la<br>sitiques) par l'intermédiaire du médecin de leur choix. |  |  |  |

<sup>(7)</sup> See note about data quality for 2002 (in French): http://www.ined.fr/statistiques\_ivg/2002/qualite\_donnees\_2002.pdf

|  |                     |            |                                |                                     |                          |   | Date de                                 |  |  |
|--|---------------------|------------|--------------------------------|-------------------------------------|--------------------------|---|---|--|--|
| Avez-vous eu d'autres grossesses ?   |                     |            |                                |                                     |                          | l'intervention 2 0                              |   |  |  |
| Oui Non  |                     |            |                                |                                     |                          | Ш_  |   |  |  |
| Si oui, indiquez pour chaque grossesse <u>antérieure à la présente :</u> - <u>l'issue</u> en mettant une croix dans celle des quatre colonnes qui convient !  - <u>l'année et le mois</u> de l'issue |                     |            |                                |                                     |                          | Durée de gestation     en semaines d'aménorrhée |   |  |  |
| Nota:  | en cas d<br>comme s | 'accoucher | nent multiple<br>it de grosses | , remplissez le<br>ses distinctes ( | tableau<br>une ligne     | -   |   | n médicale de grossesse ?<br>gale signée des deux médecins   |  |
|  | Iss                 | ue         |                                |                                     |                          | -   | Oui                                     | Non  |  |
|  |                     |            |                                |                                     |                          | Si oui, est-ce un risque : - p                  | our la femme                            |  |  |
| Avor-<br>tement  |                     | Mois       | Année                          |                                     | - pour l'enfant à naître |   |   |  |  |
| orovo-<br>qué  | spon-<br>tané       | né         | vivante                        |                                     |                          | =   | Techniques employées                    | Cocher toutes les cases qui conviennent  |  |
|  |                     |            |                                |                                     |                          |   | Aspiration                              | qui convenient   |  |
|  |                     |            |                                |                                     |                          |   | Aspiration et contrôle à la cu          | rette  |  |
|  |                     |            |                                |                                     |                          |   | Curetage                                |  |  |
|  |                     |            |                                |                                     |                          |   | Dilatation mécanique                    |  |  |
|  |                     |            |                                |                                     |                          |   | Mifépristone (Mifégyne)                 |  |  |
|  |                     |            |                                |                                     |                          |   | Prostaglandines                         |  |  |
|  |                     |            |                                |                                     |                          |   | Autres médicaments (à préc              | iser ci-dessous)   |  |
|  |                     |            |                                |                                     |                          |   |   |  |  |
|  |                     |            |                                |                                     |                          |   | Autres techniques (à précise            | er ci-dessous)   |  |
|  |                     |            |                                |                                     |                          |   |   |  |  |
|  |                     |            |                                |                                     |                          | -   | Anesthésie                              | Cocher toutes les cases<br>qui conviennent   |  |
|  |                     |            |                                |                                     |                          |   | Anesthésie générale                     |  |  |
|  |                     |            |                                |                                     |                          |   | Anesthésie profonde                     |  |  |
|  |                     |            |                                |                                     |                          |   | Anesthésie locale                       |  |  |
|  |                     |            |                                |                                     |                          |   | Autres (à préciser ci-dessou            | s)   |  |
|  |                     |            |                                |                                     |                          |   |   |  |  |
|  |                     |            |                                |                                     |                          |   | Aucune                                  |  |  |
|  |                     |            |                                |                                     |                          |   | Durée totale d'hospital                 | sation   |  |
|  |                     |            |                                |                                     |                          | 11_   |   | н  |  |
| Nombre total de grossesses antérieures   |                     |            |                                |                                     |                          |   | Complications per-opé  Oui (à préciser) | ratoires<br>Non  |  |
|  |                     |            | .,                             |                                     |                          |   | Oui (a preciser)                        | NOT  |  |
| ■ Date   | e du débi           | ut des d   | ernières r                     | _                                   | 0                        |   |   | CPO CPO  |  |
| Jour Mois Année  |                     |            |                                |                                     |                          |   | Si oui, y a-t-il eu transfe             |  |  |
|  |                     |            |                                |                                     |                          |   | Oui                                     | Non  |  |
|  |                     |            |                                |                                     |                          |   |   | Ce bulletin ne sera utilisé qu'à<br>des fins de santé publique et de<br>statistique. Il doit être adressé<br>par l'établissement au médecin<br>inspecteur régional de la santé,<br>dans le mois suivant l'inter- |  |

#### Form used from 1989 to 1997



Conformément aux articles 4 et 16 de la loi nº 75-17 du 17 janvier 1975, ce bulletin est destiné au ministère des Affaires sociales, de la Santé et de la VIIIE, à l'INED et à l'INSERM. Le loi nº 78-17 du 6 janvier 1978 garantit aux personnes un droit d'accès et de rectification pour les informations les concernant. Dans ce cas, ce droit d'accès peut l'en exarcé par les fommes pendant les deux années viviles suivant l'événement auprès du ministère des Affaires sociales, de la Santé et de la VIIIe (Service des statistiques, des études et des systèmes d'information) par l'intermédiaire du médicin de leur choix.

| ■ Ave  | ez-vous                  |   | s?   |                                    | oui 1        | (a remplir par le médecin)  Date de l'intervention  |  |  |  |
|--|--------------------------|---|--|------------------------------------|--------------|---|--|--|--|
| Si oui,  |                          |   |  | antérieure à la<br>x dans celle de |              | ■ Durée de gestation<br>en semaines d'aménorrhée  |  |  |  |
| Nota   | color<br>- l <u>'ann</u> | ines qui cor<br>ée et le mo<br>d'accouche | nvient<br>i <u>is</u> de l'issue<br>ment multi |                                    | z le tableau | Le motif est-il strictement thérapeutique ?  cest- à- dire avec l' attestation légale signée de deux médecins  oui non 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                  |  |  |  |
|  | pour ci                  | haque enfa                                | int)   | esses distinctes                   | , (one ngre  | Si oui, est-ce Un risque pour la femme  |  |  |  |
| Avor-  | Avor-                    | ue  |  |                                    |              | ■ Techniques employées Cocher toutes les cases qui conviennent  |  |  |  |
| ement<br>provo-<br>qué   | tement<br>spon-<br>tané  | Mort-<br>né                               | Nais-<br>sance<br>vivante                      | Mois                               | Année        | Aspiration  |  |  |  |
|  | 2                        | 3   | 4  | ш                                  | [1,9]        | Curetage   3   3   3   3   3   3   3   3   3  |  |  |  |
|  | 2                        | 3   | 4  | للا                                | 1,911        | Prostaglandines6 Autres médicaments7  |  |  |  |
|  | 2                        | 3   | 4  | للا                                | 1.9          | préciser Autres techniques  |  |  |  |
| 1  | 2 🔲                      | 3   | 4  | Ш                                  | 1.91         | préciser  |  |  |  |
|  | 2                        | з 🗌                                       | 4  | لللا                               | 1,91         | Anesthésie  Cocher toutes les cases qui conviennent   |  |  |  |
| 1  | 2                        | 3   | 4  | ш                                  | 1.91         | Anesthésie générale         1           Analgésie profonde         2           Anesthésie locale         3  |  |  |  |
| 1 🔲  | 2                        | 3 🗌                                       | 4 🗌  | لـلـا                              | [1,9]        | Autre 4   |  |  |  |
| 1  | 2                        | 3   | 4  | لللا                               | 1,91         | préciser Augune   |  |  |  |
| 1 🗆  | 2                        | 3   | 4  | للا                                | [1,9]        | Aucune  |  |  |  |
| 1 🔲  | 2                        | 3   | 4  | ш                                  | [1,9]        | En heures   |  |  |  |
| 1 🔲  | 2 🔲                      | 3   | 4  | Мх                                 | 1,9          | ■ Complications per-opératoires   |  |  |  |
| . • N  | lombre t                 | otal de g                                 | rossesses                                      | s antérieure                       | es LLI       | non 2   |  |  |  |
| ■ Date du début des dernières règles  • sioui, y a-t-il eu transfert ? oui non 1 2  TR |                          |   |  |                                    |              |   |  |  |  |
|  |                          |   | 1. 1   |                                    |              | Ce bulletin ne sera utilisé qu'<br>des fins de santé publique et de<br>statistique. Il doit être adress<br>par l'établissement au médeci<br>inspecteur régional de la santé |  |  |  |

## Appendix A.2. Estimates of number of previous abortions and year of previous abortion

Until 2002, the abortion notification was a two-sided form (Appendix A.1) with a table summarizing all previous pregnancies with their dates (month, year) and outcome of the pregnancy (induced abortion, miscarriage, stillbirth, live birth). The table was preceded by a question about any pregnancies before this abortion and followed by a summary question on the total number of previous pregnancies. In 2005, DREES adopted a new notification form that recorded much less detail: the table was replaced by two questions about the number of previous abortions and the number of previous births (with no question about miscarriages or stillbirths, and no preliminary question to see if the woman had had previous pregnancies). The proportion of incomplete answers, which had previously ranged between 3% and 5%, shot up to 15% and then gradually fell again as professionals learnt to use the new form. In 2009 and 2010, the number of abortions preceded by a large number of previous ones (especially 5) rose considerably, for no apparent reason, and then returned to the previous trend line in 2011. Data from these two years have consequently been corrected to fit with 2005-2008 and 2011, on the assumption that there were coding errors in 2009 and 2010.  $^{(8)}$  The adoption in 2011 of a new notification form providing further information on the year of previous abortion saw a sharp increase in the proportion of forms where the question about the number of previous abortions was not completed (from 5% in 2010 to 17% in 2011). Two extreme hypotheses may be used to impute the missing values: first, that the number of previous abortions was "randomly" recorded or not recorded, so that the notifications containing this information are representative of all abortions; second, that the information was omitted mainly in cases of first abortion, where the question about previous abortions was redundant. Based on the first hypothesis, 40% of abortions are repeat abortions and 32% of women have at least one abortion during their lives, as defined by 2011 figures. Based on the second, the proportion of repeat abortions is only 33%: having an abortion is slightly more frequent (36% of women have at least one during their lives), but repeat abortions less so (Appendix Table A.2).

The 2011 change of format did not take effect immediately and nearly 40% of 2011 abortions were reported using the 2010 format notification form. The number of missing answers to the previous abortion question was only 11% for the 2010 format, compared with 20% for the 2011 format. The new notification forms include an additional question about year of previous abortion (redundant for first abortions) so professionals may not have felt it necessary to answer the questions about previous abortions. We thought it prudent, therefore, to estimate the distribution of abortions by number of previous abortions on the

<sup>(8)</sup> The correction raises the estimate of abortion rates given in Figure 5 for orders 4+ in 2001, for times since previous abortion of 1 and 2 years.

basis of the 2010 format notifications only. This is the distribution given in Table 2 and used to analyse repeat abortions.

Table A.2. Distribution of abortions by order in 2011 and order-specific total rate by hypothesis regarding incomplete notifications

| Abortion<br>order |            | ibution of abor<br>ation of missin |             | Total rate<br>(abortions per woman) |          |             |
|-------------------|------------|------------------------------------|-------------|-------------------------------------|----------|-------------|
|                   | I.N. rand. | I.N. = 1                           | 2010 format | I.N. rand.                          | I.N. = 1 | 2010 format |
| 1                 | 59.8       | 66.7                               | 62.8        | 0.32                                | 0.37     | 0.33        |
| 2                 | 28.8       | 23.9                               | 26.6        | 0.15                                | 0.12     | 0.14        |
| 3                 | 7.8        | 6.4                                | 7.2         | 0.04                                | 0.03     | 0.04        |
| 4+                | 3.7        | 3.0                                | 3.5         | 0.02                                | 0.02     | 0.02        |
| Overall           | 100.0      | 100.0                              | 100.0       | 0.53                                | 0.53     | 0.53        |

**Note:** I.N. rand.: hypothesis of randomly distributed incomplete notifications; I.N. = 1: hypothesis whereby all incomplete notifications correspond to first abortions (no previous abortion); 2010 format: observed distribution from completed "2010 format" notifications. This is the distribution used in this article. **Sources:** Notification forms and authors' calculations.

The question about the year of previous abortion, valuable for monitoring the intervals between repeat abortions, was removed from the notification form in 2002. It was re-introduced in 2011, but the information is only exploitable in 55% of cases: out of 57,000 repeat abortion notifications, the date of previous abortion was given for only 31,000; the 22,000 old 2010 format notifications did not contain the question and on 4,000 of the new ones no answer is given. This information about previous abortions is fairly reliable, however, because it shows a regular rise in the proportion of repeat abortions from year to year if only the old format notifications are used for 2011. Regarding the information about the year of previous abortion, provided only in the new format notifications for 2011, the use by medical staff of either the new or the old form is independent of women's characteristics and we may assume that the observed distributions can be applied to all abortions, including those for which the information is missing on the notification. Furthermore, the recorded intervals between abortions are short and the distribution of abortions by number of previous abortions changes only gradually, so an error in dates of previous abortions has little impact on the estimated probability of having a repeat abortion. The main source of uncertainty is the missing information about the number of previous abortions (see Appendix Table A.2).

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### Magali MAZUY, Laurent TOULEMON, Élodie BARIL • A STEADY NUMBER OF INDUCED ABORTIONS, BUT FEWER WOMEN ARE CONCERNED

The number of induced abortions in France is fairly stable, at about 210,000 a year. The total abortion rate in 2011 was 0.53 abortions per woman during her lifetime. Recourse to abortion rises between ages 18 and 25 (the increase among under-18s recorded in 1995-2005 has slowed) and falls after age 25. The raising of the legal limit from 10 to 12 weeks of pregnancy in 2001 led to an increase in the mean gestational age at abortion, but since 2002, it has resumed its downward trend as medical abortions have become more widespread (55% of induced abortions in 2011). The proportion of first abortions continues to fall, as does the proportion of women who ever have an abortion: according to the 2011 rates, one woman in three has an abortion at some time in her life. After a first abortion, the probability of having another increases; it stood at 41% in 2011, compared with 28% in 2002 and 18% in 1990. In 2002, the probability of having an abortion did not correlate with previous abortion history, whereas by 2011 the probability of a repeat abortion was higher than that of a first abortion. More so than ten years ago, certain women find themselves in a situation of seeking abortion at various points in their lives.

### Magali MAZUY, Laurent TOULEMON, Élodie BARIL • LE NOMBRE D'IVG EST STABLE, MAIS MOINS DE FEMMES Y ONT RECOURS

Le nombre des interruptions volontaires de grossesse (IVG) est à peu près stable en France, autour de 210000 par an. L'indice conjoncturel s'établit en 2011 à 0,53 IVG par femme au cours de la vie. Le recours à l'IVG augmente entre 18 et 25 ans (la hausse pour les femmes mineures observée entre 1995 et 2005 a ralenti), et diminue aux âges supérieurs à 25 ans. Le changement de la durée maximale légale de grossesse de 10 à 12 semaines en 2001 avait entraîné une hausse des délais moyens; depuis 2002 la durée moyenne de grossesse a repris sa baisse, en raison de la diffusion des IVG médicamenteuses (55 % des IVG en 2011). La part des premières IVG poursuit sa diminution, tout comme la part des femmes ayant recours à l'IVG au cours de leur vie : d'après les taux de 2011, une femme sur trois aurait recours à l'IVG. Après une première IVG, la probabilité de recourir à nouveau à l'IVG augmente et atteint 41 % en 2011, contre 28 % en 2002 et 18 % en 1990. En 2002, la probabilité de recourir à une IVG ne variait pas selon les antécédents d'IVG, alors qu'en 2011 la probabilité d'une IVG répétée est plus forte que celle d'une première IVG. Certaines femmes sont donc, plus qu'il y a dix ans, en situation de recourir à l'IVG à différents moments de leur vie.

## Magali Mazuy, Laurent Toulemon, Élodie Baril • El número de abortos voluntarios (IVG) es estable, pero el número de mujeres concernidas ha disminuido

El número de abortos voluntarios (IVG) en Francia es más o menos estable y se sitúa alrededor de 210000 por año. En 2011, el índice coyuntural fue de 0,53 abortos por mujer. El recurso al aborto aumenta entre 18 años y 25 años y disminuye más allá de los 25 años; la alza observada de 1995 a 2005 en las mujeres menores de edad ha frenado. La prolongación de la duración máxima legal del embarazo de 10 a 22 semanas en 2001 provocó un aumento de la duración media pero desde 2002, la duración media del embarazo ha vuelto a bajar, a causa de la difusión de los abortos provocados mediante productos médicos (55% de los abortos en 2011). La proporción de mujeres que abortan por primera vez continua disminuyendo, así como la de mujeres que recurren al aborto en el curso de su vida: según las tasas de 2011, un tercio de las mujeres recurriría a él al menos una vez durante sus vidas. Después de un primer aborto, la probabilidad de recurrir de nuevo a él aumenta, y alcanza 41% en 2011 contra 28% en 2002 y 18% en 1990. En 2002, la probabilidad de recurrir al aborto no variaba según el número de abortos precedentes, mientras que en 2011 la probabilidad de un aborto repetido es mayor que la de un primer aborto. Así pues, las mujeres susceptibles de recurrir al aborto en diferentes momentos de su vida son más numerosas que hace diez años.

**Keywords:** Induced abortion, elective abortion, France, repeat abortions.

Translated by Roger Depledge.