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en Santé périnatale et Santé des
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FRENCH NATIONAL PERINATAL SURVEY 2010

SITUATION IN 2010 AND TRENDS SINCE 2003

Béatrice BLONDEL, Morgane KERMARREC
Epidemiological Research Unit on Perinatal Health and Women
and Children's Health, INSERM - U. 953, Paris

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Publications from the national perinatal surveys

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Trends from 1995 to 2010:

B Blondel, N Lelong, M Kermarrec, F Goffinet. Trends in perinatal health in France between 1995 and 2010. Results from the National Perinatal Surveys. J Gynecol Obstet Gynec Biol Reprod. 2012 Jun;41(4):e1-e15.

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Data from this report:

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<http://www.europeristat.com>.

For more information about this survey, contact Béatrice Blondel at beatrice.blondel@inserm.fr

Introduction

The national perinatal surveys were designed to provide reliable perinatal data, regularly updated, at the national level to monitor health trends, guide health policies, and assess the implementation of medical guidelines and preventive measures. They are based on information about health status and perinatal care collected from a representative sample of births. Three surveys were previously conducted and reported, in 1995, 1998 and 2003 [1].

Objectives of the national perinatal surveys

- to measure the principal indicators of health status, medical practices during pregnancy and delivery, and perinatal risk factors and follow their changes from the preceding surveys;
- to provide a reference national sample to enable comparisons with data from other sources;
- to contribute information to guide decision making in public health and assess health actions in the perinatal domain, based on specific questions in each survey.

The objective of this report is to describe the perinatal situation in 2010 in metropolitan France (overseas territories excluded) and put it into perspective by looking at results from the previous survey for the principal indicators of health, medical practices and risk levels. Results from 1995 to 2010 are published elsewhere [1].

Data and methods

Protocol

Every survey followed the same protocol. Data collection covered all births during one week, that is, all live born or stillborn children, in public and private maternity units – as well as children born outside these institutions and subsequently transferred to one – at a gestational age of at least 22 weeks or weighing at least 500 g at birth. In 2010, maternity units with more than 2000 annual deliveries were allowed to spread data collection out over two weeks, by collecting data for all births every other day. The design includes almost all births as only 0.4% of births take place out of hospital [2].

The information came from three sources: an interview with each woman in the postpartum ward, to obtain information about her social and demographic characteristics and prenatal care, data from the medical files about complications of pregnancy, delivery and the child's health status at birth, and another form completed by the head of the maternity unit describing its principal institutional characteristics.

Several institutions were involved in these surveys. The general organisation and development of the questionnaire were provided by the French national institute for health and medical research (Institut national de la santé et de la recherche médicale) (INSERM U953), and the Ministry of Health (the Directorate-General of Health (Direction générale de la santé) and the Direction of Research, Studies, Evaluation and Statistics (Direction de la recherche, des études, de l'évaluation et des statistiques, DREES)), as well as a scientific committee including representatives from district level Maternal and Child Health Services (physicians or midwives), directorates responsible for health care services and social services in the Ministry of Health, the French Institute for Public Health Surveillance (Institut de Veille Sanitaire), the regional and district social and health service bureaus (DRASS and DDASS), the regional health observatories (ORS), professional societies (anaesthetists, midwives, obstetricians and paediatricians), and consumer groups. INSERM coordinated the study at the national level, and the Maternal and Child Health Services of most districts at the district level. INSERM produced the report that served as the basis of this document [3]; in addition, for the 2010 survey, DREES drafted a report describing the characteristics and practices of the maternity units [4].

The National Council on Statistical Information (Comité du Label) and the French Commission on Information Technology and Liberties (CNIL) approved these surveys.

Data collected

An earlier publication described the sample studied in 2003 [1]. In principle, the surveys take place in the autumn to ensure some stability in the comparisons. Nonetheless, the last survey, which was initially planned for October 2009, was postponed until the spring of 2010 because of the A(H1N1) influenza pandemic. Data collection took place from 15 to 21 March 2010, or, in the largest units, from 15 to 28 March. The sample included 14 681 women and 14 903 children, including 440 twins and 3 triplets. The corresponding figures in 2003 were 14 482 women and 14 737 children. Of 535 maternity units operating in metropolitan France in 2010, one refused to participate, and another had no delivery during the study period. Interviews for 602 women either did not take place or were incomplete because the mother refused to participate or was discharged before the investigator saw her, or because of a language problem or the mother's or child's health status. In the absence of an interview, the minimal information was obtained from the first health certificate, required by law to be filed within eight days after the birth.

Main results

Data quality was good in 2010, and the estimates of the perinatal indicators and their trends since 2003 are therefore reliable. The number of births was very close to that

expected, the participation rate of women was very high and women's characteristics were similar to those found in the annual statistics derived from birth certificates.

The major changes since the 2003 National Perinatal Survey are the following:

- The socio-demographic situation of women has improved with increases in their educational level, labour force participation and the proportion with highly qualified jobs. For example, the percentage of women with education beyond high school increased from 42.6 to 51.9%. Tobacco consumption during the third trimester of pregnancy decreased. Other aspects are less favourable. The postponement of childbearing to a higher maternal age is troubling, as the risks of both mothers and newborns increase significantly with maternal age. The social situation of households appears to have deteriorated in the most vulnerable groups, and the unemployment rate of the husband (or partner) increased from 5.9% to 8.5%. The increase in women's body mass index is also a concern.
- The roles of the various types of health-care providers have changed, with greater involvement of GPs and especially midwives: 39% of women had at least one visit with a midwife in the maternity unit in 2010, compared with 27% in 2003. Prenatal admission rates remained stable. Attendance at antenatal classes became more frequent: 73% of nulliparae in 2010 and 67% in 2003 took these classes. Trends are less positive for two other indicators of prenatal care. The percentage of women who reported their pregnancy to the Social Security Agency after the first trimester of pregnancy increased slightly for the first time since 1995, and this may reflect a delay in the start of prenatal care for some women. In addition, a continued increase in the number of visits and ultrasound screenings raises questions about the risk of the over-medicalisation of pregnancy.
- Deliveries now take place more often in large maternity units of more than 2000 births per year (from 35.8% in 2003 to 48.0% in 2010); this is the consequence of facility closures and mergers. This change has not resulted in an increase in travel time for women to the maternity ward where they give birth.
- The rate of caesarean sections (21.0%) did not increase significantly between the two surveys, either in the overall population or in sub-groups of women. This finding suggests a general attitude to limit the number of caesarean births. The management of pain by epidural or spinal anaesthesia became more common: 75% of women in 2003 and 82% in 2010.
- The preterm delivery rate for singleton live births has increased steadily since 1995 (4.5%); from 2003 (5.0%) to 2010 (5.5%), this rate increased slightly, but not significantly. The proportion of low-birth-weight newborns did not increase between 2003 (5.5%) and 2010 (5.1%), although it had previously increased significantly (4.6% in 1995). The differences in trends of preterm delivery and low birth weight between 2003 and 2010 may be due to chance or reflect the effects of higher BMI or decreased tobacco

consumption.

Public health measures and medical guidelines have been implemented, although unevenly:

- The results are positive for many preventive measures and medical guidelines. The decrease in amniocentesis, especially among women aged 38 and older (from 61% to 42%) shows that recent recommendations to avoid systematic amniocentesis in this age group are being followed. The appropriateness of the initial level of maternity care to the newborns' risks appears to have improved, as neonatal transfers to another hospital continue to decline. The episiotomy rate has fallen by about one third among primiparae since 1998 (from 71% to 44%); this finding suggests that increased awareness that evidence does not show benefits to routine episiotomy and the recent recommendations by the French College of Obstetricians and Gynaecologists (CNGOF) to avoid the routine use of this procedure have had a strong impact on practice. Another important change concerns the prevention of postpartum hemorrhage: prophylactic oxytocin was administered in 83% of women, which shows that the CNGOF guidelines issued in 2004 are now widely applied. The rate of breastfeeding before discharge, which had increased significantly between 1998 and 2003, has continued to rise, due at least in part to a series of measures in favour of breastfeeding since the late 90s at the national, regional and local levels.
- Some recommendations or policies have been poorly implemented. Vaccination coverage against influenza A (H1N1) among pregnant women was 29%, although official recommendations called for vaccination of all women after the first trimester of pregnancy. The early interview with a midwife (also called the fourth-month interview), which is designed to provide medical and preventive information, is still not generally available: only 21% of the women reported having had one. The explanation for this gap is probably due to the extent of the work of training and organization necessary between the different teams before this new preventive measure can be implemented.

Conclusion

This survey yielded valuable data for monitoring health and answering important questions. Repeating this survey using the same methodology thus remains important. It has two major advantages over other French national data sources. On the one hand, the women's interview provides data on many maternal social and demographic characteristics, the content of prenatal care, and preventive health behaviour. On the other hand, the introduction of new questions in each survey can provide specific information about current health problems, the implementation of public health measures and compliance with professional recommendations about medical practice.

National perinatal surveys conducted fairly close to one another serve as an important monitoring tool in the French national perinatal information system, as there is no medical birth registry. This database is also essential for answering the questions that physicians and public health policymakers ask.

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Table 1. Sample size

| Size | Metropolitan France | French Guyana, Guadeloupe, Réunion | France⁽¹⁾ |
|--------------------------------------|----------------------------|---|-----------------------------|
| Districts | 96 | 3 | 99 |
| Maternity units⁽²⁾ | 535 ⁽³⁾ | 17 | 552 |
| Women | 14 681 | 506 | 15 187 |
| Births | 14 903 | 515 | 15 418 |
| singletons | 14 460 | 497 | 14 957 |
| twins | 440 | 18 | 458 |
| triplets | 3 | 0 | 3 |
| Babies | 14 903 | 515 | 15 418 |
| live births | 14 761 | 503 | 15 264 |
| stillbirths | 84 | 9 | 93 |
| termination of pregnancy | 53 | 3 | 56 |
| vital status unknown | 5 | 0 | 5 |

(1) Metropolitan France, Guadeloupe, French Guyana and Réunion

(2) One maternity refused to participate; its 51 births were filed with the first health certificate (required by law to be filed in within eight days after birth)

(3) No birth during data collection period in one metropolitan France maternity

Table 2. Completeness of data collection (sample of women or births, metropolitan France (overseas territories excluded))

| | n | % |
|---|----------|------|
| Provided data for: | | |
| maternal age ⁽¹⁾ | | |
| yes | 14401 | 98.1 |
| no | 280 | 1.9 |
| | (14 681) | |
| educational level ⁽¹⁾ | | |
| yes | 14060 | 95.8 |
| no | 621 | 4.2 |
| | (14 681) | |
| mode of delivery ⁽²⁾ | | |
| yes | 147289 | 98.8 |
| no | 174 | 1.2 |
| | (14 903) | |
| gestational age ⁽²⁾ | | |
| yes | 14832 | 99.5 |
| no | 71 | 0.5 |
| | (14 903) | |
| birthweight ⁽²⁾ | | |
| yes | 14844 | 99.6 |
| no | 59 | 0.4 |
| | (14 903) | |
| Incomplete questionnaire^(2,3,4) | 615 | 4.1 |
| | (14 903) | |
| Reasons⁽¹⁾ | | |
| women refused to participate | 202 | 33.6 |
| women were discharged before the investigator could see her | 106 | 17.6 |
| language problem | 93 | 15.5 |
| child's health status | 22 | 3.7 |
| mother's health status | 23 | 3.8 |
| anonymous delivery | 12 | 2.0 |
| other ⁽³⁾ | 124 | 20.6 |
| unknown | 20 | 3.3 |
| | (602) | |

(1) among women

(2) among births

(3) including the maternity which refused to participate (N=51)

(4) missing data for: country of birth, language spoken in childhood, household income, social security coverage, visits or examinations not done for financial reasons, housing accommodation, relatives' support, birth control, reaction to pregnancy discovery, psychological condition

Table 3. Comparison of parental social and demographic characteristics in the national perinatal survey and the vital statistics (sample of births in metropolitan France)

| | French National Perinatal Survey 2010 % | Civil Registration - INSEE 2009 % |
|---|---|---|
| Age (years)^(1,2) | | |
| < 20 | 1.4 | 1.7 |
| 20-24 | 12.2 | 13.3 |
| 25-29 | 30.3 | 31.9 |
| 30-34 | 33.2 | 31.6 |
| 35-39 | 18.0 | 17.2 |
| ≥ 40 | 5.0 | 4.2 |
| | (14 535) | (793 420) |
| Parity⁽²⁾ | | |
| 0 | 43.5 | 57.6 |
| 1 | 34.5 | 28.1 |
| 2 | 14.2 | 10.0 |
| 3 | 5.0 | 2.8 |
| ≥4 | 2.8 | 1.5 |
| | (14 582) | (793 420) |
| Legitimate birth⁽²⁾ | 47.3 | 47.1 |
| | (14 137) | (793 420) |
| Nationality⁽²⁾ | | |
| French | 86.7 | 86.9 |
| Other European (including Turkish) | 3.3 | 3.2 |
| North African | 4.8 | 4.8 |
| Other African | 2.8 | 3.0 |
| Other | 2.5 | 2.2 |
| | (14 123) | (793 420) |
| Husband's occupation^(2,3) | | |
| farmer | 1.7 | 1.2 |
| artisan, small business owner | 6.4 | 6.0 |
| professional, manager, engineer | 21.1 | 13.5 |
| intermediate | 15.9 | 19.6 |
| employee | 16.7 | 11.5 |
| skilled, unskilled manual worker | 26.2 | 29.1 |
| no occupation ⁽⁴⁾ | 11.9 | 19.1 |
| | (6 692) | (374 018) |
| Twin birth⁽⁵⁾ | 1.5 | 1.6 |
| | (14 681) | (776 524) |

(1) year of delivery minus year of birth

(2) live births only

(3) legitimate births

(4) including men without occupation, unemployed men at the time of child's birth and non-responders

(5) among women

Table 4. Demographic characteristics (*sample of women in metropolitan France*)

| | 2003 | | n | 2010 | |
|--|------------------------|--------|----------|------------|-------------|
| | % | p | | % | 95% CI |
| Age (years) | | | | | |
| < 20 | 2.7 | <0.001 | 358 | 2.5 | 2.2 – 2.8 |
| 20-24 | 16.1 | | 2 086 | 14.5 | 13.9 – 15.1 |
| 25-29 | 33.3 | | 4 777 | 33.2 | 32.4 – 34.0 |
| 30-34 | 32.1 | | 4 419 | 30.7 | 29.9 – 31.5 |
| 35-39 | 13.2 | | 2 255 | 15.7 | 15.1 – 16.3 |
| ≥ 40 | 2.7 | | 506 | 3.5 | 3.2 -3.8 |
| Mean | (14 228) 29.3 ± 5.2 | | (14 401) | 29.7 ± 5.3 | |
| Number of pregnancies | | | | | |
| 0 | 34.3 | <0.001 | 4 771 | 32.9 | 32.1 – 33.7 |
| 1 | 32.4 | | 4 568 | 31.5 | 30.7 – 32.3 |
| 2 | 18.1 | | 2 674 | 18.4 | 17.8 – 19.0 |
| 3 | 7.9 | | 1 311 | 9.0 | 8.5 – 9.5 |
| ≥ 4 | 7.3 | | 1 191 | 8.2 | 7.8 – 8.7 |
| | (14 400) | | | (14 515) | |
| Parity | | | | | |
| 0 | 43.3 | NS | 6 396 | 43.4 | 42.6 – 44.2 |
| 1 | 35.0 | | 5 004 | 34.5 | 33.7 – 35.3 |
| 2 | 14.2 | | 2 069 | 14.3 | 13.7 – 14.9 |
| 3 | 4.7 | | 730 | 5.0 | 4.6 – 5.4 |
| ≥ 4 | 2.9 | | 400 | 2.8 | 2.5 – 3.1 |
| | (14 258) | | | (14 499) | |
| Married | | | | | |
| yes | 53.7 | <0.001 | 6 610 | 47.3 | 46.4 – 48.1 |
| no | 46.4 | | 7 369 | 52.7 | 51.8 – 53.5 |
| | (13 962) | | (13 979) | | |
| Cohabiting with partner | | | | | |
| yes | 92.7 | NS | 12 985 | 92.8 | 92.4 – 93.2 |
| no | 7.3 | | 1 015 | 7.3 | 6.9 – 7.7 |
| | (13 980) | | (14 000) | | |
| Residence at the end of pregnancy | | | | | |
| own accommodation | - | | 12 920 | 93.0 | 92.6 – 93.4 |
| parents, family, friends' home | - | | 805 | 5.8 | 5.4 – 6.2 |
| social care home | - | | 72 | 0.5 | 0.4 – 0.6 |
| hotel | - | | 41 | 0.3 | 0.2 – 0.4 |
| other | - | | 55 | 0.4 | 0.3 – 0.5 |
| | | | (13 893) | | |

Table 5. Educational level and geographic origin (sample of women in metropolitan France)

| | 2003 | | 2010 | | |
|--|----------|---------|----------|-------|-------------|
| | % | p | n | % | 95% CI |
| Educational level | | | | | |
| primary or none | 3.7 | < 0.001 | 340 | 2.4 | 2.1 - 2.7 |
| secondary: general | 9.8 | | 1 161 | 8.3 | 7.8 - 8.8 |
| secondary: technical | 22.4 | | 2 473 | 17.6 | 17.0 - 18.2 |
| high school: general | 9.8 | | 1 318 | 9.4 | 8.9 - 9.9 |
| high school: technical | 11.7 | | 1 478 | 10.5 | 10.0 - 11.0 |
| beyond high school | 42.6 | | 7 290 | 51.9 | 51.1 - 52.7 |
| <i>some college</i> | - | | | 2 996 | 21.3 |
| <i>college</i> | - | | 2 487 | 17.7 | 17.1 - 18.3 |
| <i>post-graduate</i> | - | | 1 807 | 12.9 | 12.3 - 13.5 |
| | (13 736) | | (14 060) | | |
| Nationality | | | | | |
| French | 88.2 | NS | 12 237 | 86.7 | 86.1 - 87.3 |
| Other European | 2.7 | | 470 | 3.3 | 3.0 - 3.6 |
| North African | 4.4 | | 675 | 4.8 | 4.4 - 5.2 |
| Other African | 2.5 | | 395 | 2.8 | 2.5 - 3.1 |
| Other | 2.3 | | 346 | 2.5 | 2.2 - 2.8 |
| | (14 010) | | (14 123) | | |
| Maternal country of birth | | | | | |
| France | - | | 11 478 | 81.8 | 81.2 - 82.4 |
| Other European countries | - | | 551 | 3.9 | 3.6 - 4.2 |
| North Africa | - | | 988 | 7.0 | 6.6 - 7.4 |
| Other African countries | - | | 550 | 3.9 | 3.6 - 4.2 |
| Other countries | - | | 471 | 3.4 | 3.1 - 3.7 |
| | | | (14 038) | | |
| Year of arrival in France⁽¹⁾ | | | | | |
| 2009/2010 | - | | 222 | 9.3 | 8.1 - 9.8 |
| 2005/2008 | - | | 644 | 27.0 | 25.2 - 27.7 |
| 2000/2004 | - | | 672 | 28.2 | 26.4 - 28.9 |
| before 2000 | - | | 847 | 35.5 | 33.6 - 36.3 |
| | | | (2 385) | | |
| Language spoken in childhood | | | | | |
| French | - | | 10 373 | 74.9 | 74.2 - 75.6 |
| other language | - | | 1 885 | 13.6 | 13.0 - 14.2 |
| French and other language | - | | 1 589 | 11.5 | 11.0 - 12.0 |
| | | | (13 847) | | |

(1) If birth abroad and residence in France

Table 6. Women's employment – part 1 (*sample of women in metropolitan France*)

| | 2003 | | n | 2010 | | |
|--|----------|----------|----------|-------|-------------|-------------|
| | % | p | | % | 95% CI | |
| Occupational status at the end of pregnancy | | | | | | |
| employed | 61.0 | <0.001 | 9 507 | 67.2 | 66.4 – 68.0 | |
| housewife | 23.9 | | 1 869 | 13.2 | 12.6 – 13.8 | |
| student | 1.7 | | 344 | 2.4 | 2.1 – 2.7 | |
| unemployed | 10.0 | | 1 711 | 12.1 | 11.6 – 12.6 | |
| other status | 3.5 | | 718 | 5.1 | 4.7 – 5.5 | |
| | (13 757) | | (14 149) | | | |
| Unemployment duration⁽¹⁾ | | | | | | |
| < 3 months | - | | 193 | 13.1 | 11.4 – 13.7 | |
| 3 – 5 | - | | 325 | 22.1 | 20.0 – 22.8 | |
| 6 – 11 | - | | 528 | 35.9 | 33.4 – 36.7 | |
| 12 – 23 | - | | 279 | 19.0 | 17.0 – 19.6 | |
| 24 and more | - | | 147 | 10.0 | 8.5 – 10.5 | |
| | | | (1 472) | | | |
| Mother's occupation⁽²⁾ | | | | | | |
| farmer | 0.8 | < 0.001 | 55 | 0.6 | 0.4 – 0.7 | |
| artisan. small business owner | 2.4 | | 170 | 1.8 | 1.5 – 2.0 | |
| professional, manager, engineer | 12.3 | | 1 562 | 16.5 | 15.8 – 17.1 | |
| intermediate | 22.5 | | 2 613 | 27.6 | 26.7 – 28.3 | |
| office worker and lower level | 34.5 | | 2 714 | 28.6 | 27.7 – 29.3 | |
| civil service | | | | | | |
| shop assistant | 13.3 | | 902 | 9.5 | 8.9 – 10.0 | |
| service worker | 7.1 | | 811 | 8.6 | 8.0 – 9.1 | |
| skilled manual worker | 3.6 | | 283 | 3.0 | 2.7 – 3.3 | |
| unskilled manual worker | 3.2 | | 339 | 3.6 | 3.2 – 3.9 | |
| no occupation ⁽³⁾ | 0.3 | | 33 | 0.4 | 0.3 – 0.5 | |
| | (8 352) | | (9 482) | | | |
| Worked during pregnancy⁽⁴⁾ | | | | | | |
| yes | 66.0 | | < 0.001 | 9 898 | 70.2 | 69.4 – 71.0 |
| no | 34.0 | 4 205 | | 29.8 | 29.0 – 30.6 | |
| | (13 904) | (14 103) | | | | |

(1) duration unknown for 14% of unemployed women

(2) for employed women at the end of pregnancy

(3) declared status : no occupation

(4) regardless of occupational status at the end of pregnancy

Table 6bis. Women's employment – part 2 (*sample of women in metropolitan France*)

| | 2003 | | 2010 | | |
|---|---------|--------|---------|------|-------------|
| | % | p | n | % | 95% CI |
| Employment status⁽¹⁾ | | | | | |
| permanent contract or civil servant | - | | 7 257 | 77.4 | 76.6 – 78.1 |
| fixed-term contract | - | | 1 275 | 13.6 | 12.9 – 14.2 |
| self-employed | - | | 482 | 5.1 | 4.7 – 5.5 |
| trainee, apprentice | - | | 83 | 0.9 | 0.7 – 1.1 |
| others | - | | 283 | 3.0 | 2.7 – 3.3 |
| | | | (9 380) | | |
| Working time⁽¹⁾ | | | | | |
| full-time | - | | 7 632 | 79.4 | 78.6 – 80.1 |
| part-time | - | | 1 978 | 20.6 | 19.8 – 21.3 |
| | | | (9 610) | | |
| Gestational age at last day worked^(1,2) | | | | | |
| 1-14 weeks | 8.5 | <0.001 | 826 | 9.2 | 8.6 – 9.7 |
| 15-28 | 42.1 | | 3 613 | 40.0 | 39.0 – 40.8 |
| 29-32 | 25.5 | | 2 648 | 29.3 | 28.4 – 30.1 |
| > 32 | 23.9 | | 1 943 | 21.5 | 20.7 – 22.2 |
| | (8 922) | | (9 030) | | |

(1) for women employed during pregnancy

(2) cessation of work without resumption before delivery, for any reason (medical reasons, prenatal leave, employment contract termination, vacations, personal reasons...); gestational age estimated from the last date worked in 2010 and in weeks of gestation in 2003

Table 7. Husband or partner's employment⁽¹⁾ (sample of women in metropolitan France)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| Occupational status at the time of the interview | | | | | |
| employed | 90.4 | <0.001 | 11 858 | 88.1 | 87.6 – 88.6 |
| student | 0.7 | | 158 | 1.2 | 1.0 – 1.4 |
| unemployed | 5.9 | | 1 139 | 8.5 | 8.0 – 9.0 |
| other | 3.0 | | 312 | 2.3 | 2.0 – 2.5 |
| | (13 406) | | (13 467) | | |
| Unemployment duration⁽²⁾ | | | | | |
| < 3 months | - | | 235 | 24.5 | 21.8 – 25.2 |
| 3 - 5 | - | | 214 | 22.3 | 19.7 – 30.0 |
| 6 - 11 | - | | 247 | 25.8 | 23.0 – 26.5 |
| 12 - 23 | - | | 148 | 15.4 | 13.1 – 16.0 |
| 24 and more | - | | 115 | 12.0 | 9.9 – 12.5 |
| | | | (959) | | |
| Occupation⁽³⁾ | | | | | |
| farmer | 2.2 | <0.001 | 225 | 1.9 | 1.7 – 2.1 |
| artisan, small business owner | 7.5 | | 827 | 7.0 | 6.5 – 7.4 |
| professional, manager, engineer | 16.7 | | 2 365 | 20.0 | 19.3 – 20.7 |
| intermediate | 16.8 | | 2 155 | 18.3 | 17.6 – 18.9 |
| office worker and lower level civil service | 16.1 | | 1739 | 14.7 | 14.1 – 15.3 |
| shop assistant | 6.4 | | 410 | 3.5 | 3.2 – 3.8 |
| service worker | 1.7 | | 161 | 1.4 | 1.2 – 1.6 |
| skilled manual worker | 26.2 | | 2 878 | 24.4 | 23.6 – 25.1 |
| unskilled manual worker | 6.0 | | 1 017 | 8.6 | 8.1 – 9.1 |
| no occupation ⁽⁴⁾ | 0.3 | | 27 | 0.2 | 0.1 – 0.3 |
| | (12 829) | | (11 804) | | |

(1) for all women, including those who did not live with their husband or partner

(2) unemployment duration unknown for 15.8% of husbands or partners

(3) for employed husbands or partners at the time of the interview

(4) declared status: no occupation

Table 8. Living conditions⁽¹⁾ (sample of women in metropolitan France)

| | 2003 | | n | 2010 | |
|--|----------|--------|----------|------|--------------|
| | % | p | | % | 95% CI |
| Income from employment | | | | | |
| yes | 92.1 | <0.001 | 12 480 | 90.6 | 90.1 – 91 .1 |
| no | 7.9 | | 1 291 | 9.4 | 8.9 – 9.9 |
| | (13 660) | | (13 771) | | |
| All resources⁽²⁾ | | | | | |
| unemployment benefits | 18.7 | <0.001 | 1 972 | 14.3 | 13.7 – 14.9 |
| other benefits | | | 1 193 | 8.6 | 8.1 – 9.1 |
| other financial support ⁽³⁾ | 2.8 | | 766 | 5.5 | 5.1 – 5.9 |
| income from work | 77.5 | | 9 789 | 70.8 | 70.0 – 71.6 |
| none | 1.0 | | 107 | 0.8 | 0.7 – 0.9 |
| | (13 780) | | (13 827) | | |
| Income per month | | | | | |
| less than 500 euros | - | | 289 | 2.1 | 1.9 – 2.3 |
| 500-999 | - | | 1 072 | 7.9 | 7.4 – 8.3 |
| 1000-1499 | - | | 1 385 | 10.3 | 9.8 – 10.8 |
| 1500-1999 | - | | 1 988 | 14.7 | 14.1 – 15.3 |
| 2000-2999 | - | | 4 113 | 30.4 | 29.6 – 31.2 |
| 3000-3999 | - | | 2 810 | 20.8 | 20.1 – 21.5 |
| 4000 and more | - | | 1 856 | 13.7 | 13.1 – 14.3 |
| | | | (13 513) | | |
| Social Security at the beginning of pregnancy | | | | | |
| yes | 97.3 | <0.001 | 13 748 | 99.0 | 98.8 – 99.2 |
| with supplementary health insurance | - | | 11 325 | 81.5 | 80.9 - 82.1 |
| without supplementary health insurance | - | | 625 | 4.5 | 4.2 – 4.8 |
| Universal medical coverage (for the very poor) | - | | 1 798 | 12.9 | 12.3 – 13.5 |
| no | 2.7 | | 140 | 1.0 | 0.8 – 1.2 |
| | (13 708) | | (13 888) | | |
| Any medical visits or examinations not done for financial reasons⁽⁴⁾ | | | | | |
| yes | 2.3 | <0.001 | 611 | 4.4 | 4.1 – 4.7 |
| no | 97.7 | | 13 231 | 95.6 | 95.3 – 95.9 |
| | (13 734) | | (13 842) | | |

(1) household income or woman's income for single mothers

(2) if several resources, classified in this order ; statistical test performed by combining unemployment and other benefits

(3) excluding family and housing benefits

(4) including dental care in 2010 only

Table 9. Birth control and fertility treatments (sample of women in metropolitan France)

| | 2003 | | n | 2010 | |
|--|----------|----|----------|------|-------------|
| | % | p | | % | 95% CI |
| Contraceptive method used in the past | | | | | |
| yes | - | | 12 673 | 91.7 | 91.2 – 92.2 |
| no | - | | 1148 | 8.3 | 7.8 – 8.8 |
| | | | (13 821) | | |
| Last contraceptive method⁽¹⁾ | | | | | |
| pill ⁽²⁾ | - | | 9 959 | 80.4 | 79.7 – 81.1 |
| intrauterine device | - | | 757 | 6.1 | 5.7 – 6.5 |
| implant, patch, vaginal ring | - | | 357 | 2.9 | 2.6 – 3.2 |
| condom | - | | 1 122 | 9.1 | 8.6 – 9.6 |
| withdrawal | - | | 74 | 0.6 | 0.5 – 0.7 |
| periodic abstinence | - | | 72 | 0.6 | 0.5 – 0.7 |
| other method | - | | 40 | 0.3 | 0.2 – 0.4 |
| | | | (12 381) | | |
| Reasons for stopping birth control | | | | | |
| wish to become pregnant | - | | 10 044 | 80.0 | 79.3 – 80.7 |
| already pregnant | - | | 946 | 7.5 | 7.0 – 7.9 |
| other reasons | - | | 1 564 | 12.5 | 11.9 – 13.0 |
| | | | (12 554) | | |
| Fertility treatment⁽³⁾ | | | | | |
| none | 95.1 | NS | 12 908 | 94.4 | 94.0 – 94.8 |
| in vitro fertilisation ⁽⁴⁾ | 1.7 | | 317 | 2.3 | 2.0 – 2.5 |
| intrauterine insemination | 0.8 | | 129 | 0.9 | 0.7 – 1.1 |
| ovulation induction alone | 2.4 | | 320 | 2.3 | 2.0 – 2.5 |
| | (13 530) | | (13 674) | | |

(1) if several methods declared, selection in this order

(2) 1383 women among 9 959 combined contraceptive pill and condom

(3) Including treatments only listed below

(4) with or without ICSI

Table 10. Psychological context (sample of women in metropolitan France)

| | 2003 | | 2010 | | |
|--|----------|--------|----------|------|-------------|
| | % | p | n | % | 95% CI |
| Reaction to pregnancy discovery | | | | | |
| happy to be pregnant now | - | | 10 433 | 75.5 | 74.5 – 76.2 |
| pregnancy desired earlier | - | | 1 523 | 11.0 | 10.5 – 11.5 |
| pregnancy desired later | - | | 1 442 | 10.4 | 9.9 – 10.9 |
| would rather not be pregnant | - | | 428 | 3.1 | 2.8 – 3.4 |
| | | | (13 826) | | |
| Relatives support⁽¹⁾ | | | | | |
| very well supported | - | | 9 246 | 67.0 | 66.2 – 67.8 |
| well supported | - | | 3 778 | 27.4 | 26.7 – 28.1 |
| not very supported | - | | 578 | 4.2 | 3.9 – 4.5 |
| not supported | - | | 189 | 1.4 | 1.2 – 1.6 |
| | | | (13 791) | | |
| Psychological condition⁽¹⁾ | | | | | |
| good | 70.6 | <0.001 | 9 571 | 69.3 | 68.5 – 70.1 |
| fairly good | 20.4 | | 3 007 | 21.8 | 21.1 – 22.5 |
| fairly bad | 6.7 | | 888 | 6.4 | 6.0 – 6.8 |
| bad | 2.4 | | 349 | 2.5 | 2.2 – 2.8 |
| | (13 706) | | (13 815) | | |
| Visits to health care professional for psychological problems | | | | | |
| no | - | | 13 093 | 94.6 | 94.2 – 95.0 |
| yes, psychiatrist | - | | 142 | 1.1 | 0.8 – 1.2 |
| yes, other doctor | - | | 69 | 0.5 | 0.4 – 0.6 |
| yes, psychologist or psychotherapist | - | | 446 | 3.2 | 2.9 – 3.5 |
| yes, other professional or unknown | - | | 92 | 0.7 | 0.1 – 0.3 |
| | | | (13 842) | | |

(1) « On the psychological status, how did you feel during pregnancy? »

Table 11. Weight and height (sample of women in metropolitan France)

| | 2003 | | n | 2010 | |
|--|------------|---------|----------|------------|-------------|
| | % | p | | % | 95% CI |
| Height | | | | | |
| < 150 cm | 0.7 | NS | 70 | 0.5 | 0.4 – 0.6 |
| 150-159 | 20.2 | | 2 641 | 19.2 | 18.5 – 19.9 |
| 160-169 | 57.5 | | 7 801 | 56.8 | 56.0 – 57.6 |
| 170-179 | 20.8 | | 3 085 | 22.5 | 21.8 – 23.2 |
| ≥ 180 | 0.9 | | 145 | 1.1 | 0.9 – 1.3 |
| | (13 718) | | (13 742) | | |
| Weight before pregnancy | | | | | |
| ≤ 39 kg | 0.2 | < 0.001 | 33 | 0.2 | 0.1 – 0.3 |
| 40-49 | 11.2 | | 1 269 | 9.2 | 8.7 – 9.7 |
| 50-59 | 39.8 | | 4 944 | 35.8 | 35.0 – 36.0 |
| 60-69 | 28.1 | | 4 085 | 29.6 | 28.8 – 30.4 |
| 70-79 | 11.9 | | 1 812 | 13.1 | 12.5 – 13.7 |
| ≥ 80 | 8.8 | | 1 658 | 12.0 | 11.5 – 12.5 |
| | (13 710) | | (13 801) | | |
| BMI before pregnancy | | | | | |
| < 18.5 | 9.3 | <0.001 | 1 127 | 8.3 | 7.8 – 8.8 |
| 18.5 – 24.9 | 68.0 | | 8 812 | 64.6 | 63.8 – 65.4 |
| 25 – 29.9 | 15.4 | | 2 360 | 17.3 | 16.7 – 17.9 |
| 30 or more | 7.5 | | 1 347 | 9.9 | 9.4 – 10.4 |
| | (13 605) | | (13 646) | | |
| Pregnancy weight gain⁽¹⁾ | | | | | |
| < 5 kg | 4.3 | <0.001 | 623 | 4.6 | 4.2 – 4.9 |
| 5-9 | 17.6 | | 2 158 | 15.8 | 15.2 – 16.4 |
| 10-12 | 26.4 | | 3 489 | 25.5 | 24.8 – 26.2 |
| 13-15 | 24.7 | | 3 309 | 24.2 | 23.5 – 24.9 |
| 16-19 | 16.8 | | 2 398 | 17.5 | 16.9 – 18.1 |
| ≥ 20 | 10.2 | | 1 704 | 12.5 | 12.9 - 13.0 |
| | (13 589) | | (13 681) | | |
| Mean | 12.9 ± 5.4 | | | 13.2 ± 5.6 | |

(1) known from weight before and after pregnancy

Table 12. Tobacco use (sample of women in metropolitan France)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| Number of cigarettes before pregnancy | | | | | |
| 0 per day | 64.1 | <0.001 | 9 655 | 69.5 | 68.7 – 70.3 |
| 1-9 | 9.9 | | 1 510 | 10.9 | 10.4 – 11.4 |
| ≥ 10 | 26.0 | | 2 723 | 19.6 | 18.9 – 20.3 |
| | (13 172) | | (13 888) | | |
| Smoking cessation for pregnancy planning^(1,2) | | | | | |
| yes | - | | 362 | 5.9 | 5.3 – 6.3 |
| no | - | | 5 823 | 94.2 | 93.6 – 94.6 |
| | | | (6 185) | | |
| Number of cigarettes in the 3rd trimester | | | | | |
| 0 a day | 79.2 | <0.001 | 11 663 | 82.2 | 81.6 – 82.8 |
| 1-9 | 12.8 | | 1 721 | 12.1 | 11.7 – 12.6 |
| ≥ 10 | 8.0 | | 797 | 5.6 | 5.2 – 6.0 |
| | (13 143) | | (14 181) | | |
| Smoking cessation time during pregnancy | | | | | |
| 1st trimester | - | | 1471 | 81.2 | 79.4 – 81.8 |
| 2nd trimester | - | | 155 | 8.6 | 7.3 – 9.1 |
| 3rd trimester | - | | 29 | 1.6 | 1.0 – 1.8 |
| unknown | - | | 156 | 8.6 | 7.3 – 9.1 |
| | | | (1 811) | | |

(1) if non-smoker just before pregnancy

(2) 35.9% of non-smokers before pregnancy did not answer this question

Table 13. Cannabis and alcohol consumption during pregnancy (sample of women in metropolitan France)

| | 2003 | | 2010 | | |
|---|-------------|---|--------------------|------|-------------|
| | % | p | n | % | 95% CI |
| Cannabis consumption | | | | | |
| yes | - | | 158 | 1.2 | 1.0 – 1.4 |
| no | - | | 13 610 (13 768) | 98.9 | 98.7 – 99.1 |
| Cannabis consumption frequency⁽¹⁾ | | | | | |
| Less than once a month | - | | 64 | 49.6 | 41.0 – 50.4 |
| once or twice a month | - | | 22 | 17.1 | 10.6 – 17.7 |
| three times a month or more | - | | 43 (129) | 33.3 | 25.2 – 34.1 |
| Alcohol consumption | | | | | |
| never | - | | 10 644 | 77.2 | 76.5 – 77.9 |
| once a month or less | - | | 2 370 | 17.2 | 16.6 – 17.8 |
| two-four times a month | - | | 341 | 2.5 | 2.2 – 2.8 |
| before discovery of pregnancy | - | | 437 (13 792) | 3.2 | 2.9 – 3.5 |
| Usual number of drinks a day | | | | | |
| less than one | - | | 2 226 | 73.2 | 71.6 – 73.9 |
| one | - | | 610 | 20.1 | 18.7 – 20.8 |
| two or more | - | | 206 (3 042) | 6.8 | 5.9 – 7.2 |
| Consumption of three or more drinks at one event | | | | | |
| never | - | | 12 343 | 96.5 | 96.2 – 96.8 |
| less than once a month | - | | 284 | 2.2 | 1.9 – 2.4 |
| once a month and more | - | | 42 | 0.3 | 0.2 – 0.4 |
| before discovery of pregnancy | - | | 121 (12 790) | 1.0 | 0.8 – 1.2 |

(1) consumption frequency unknown for 18.5% of women who reported consuming cannabis during pregnancy

Table 14. Prenatal visits (sample of women in metropolitan France)

| | 2003 | | N | 2010 | |
|--|------------------|--------|-------------------|------|-------------|
| | % | p | | % | 95% CI |
| Medical certification of pregnancy for Social Security | | | | | |
| yes | 99.5 | NS | 14 153 | 99.5 | 99.4 – 99.6 |
| no | 0.5 (13 826) | | 68 (14 221) | 0.5 | 0.4 – 0.6 |
| Certification trimester | | | | | |
| 1 st trimester | 95.1 | <0.001 | 12 703 | 92.2 | 91.8 – 92.6 |
| 2 nd trimester | 4.3 | | 908 | 6.6 | 6.2 – 7.0 |
| 3 rd trimester | 0.6 (13 459) | | 164 (13 775) | 1.2 | 1.0 – 1.4 |
| Number of prenatal visits⁽¹⁾ | | | | | |
| 0 | 0.2 | <0.001 | 2 | 0.0 | 0.0 – 0.0 |
| 1-3 | 0.9 | | 151 | 1.1 | 0.9 – 1.3 |
| 4-6 | 8.1 | | 1 019 | 7.4 | 7.0 – 7.8 |
| 7 | 18.6 | | 1 831 | 13.3 | 12.7 – 13.9 |
| 8 | 21.3 | | 2 176 | 15.8 | 15.2 – 16.4 |
| 9 | 22.5 | | 2 372 | 17.3 | 16.7 – 17.9 |
| 10-11 | 15.9 | | 2 964 | 21.6 | 20.9 – 22.3 |
| ≥ 12 | 12.4 (13761) | | 3 235 (13 750) | 23.5 | 22.8 – 24.2 |
| Mean | 8.9 ± 2.8 | | | | 9.9 ± 3.7 |
| Number of visits with the maternity ward team^(1,2) | | | | | |
| 0 | 8.3 | <0.001 | 716 | 5.2 | 4.8 – 5.6 |
| 1-3 | 28.8 | | 3 541 | 25.8 | 25.1 – 26.5 |
| 4-6 | 22.4 | | 3 178 | 23.2 | 22.5 – 23.9 |
| 7 | 11.1 | | 1 329 | 9.7 | 9.2 – 10.2 |
| 8 | 10.6 | | 1 318 | 9.6 | 9.1 – 10.1 |
| 9 | 8.9 | | 1 178 | 8.6 | 8.1 – 9.1 |
| ≥ 10 | 9.9 (13 874) | | 2 459 (13 719) | 17.9 | 17.3 – 18.5 |
| Mean | 5.3 ± 3.7 | | | | 6.1 ± 4.0 |
| All visits with the maternity team | | | | | |
| yes | 33.4 | <0.001 | 4 887 | 35.6 | 34.8 – 36.4 |
| no | 66.6 (13 672) | | 8 828 (13 715) | 64.4 | 63.6 – 65.2 |

(1) including in 2010 visits to the emergency department

(2) visit at the maternity unit or visit with the obstetrician who delivered the baby

Table 15. Health-care providers for prenatal care (sample of women in metropolitan France)

| | % | p | 2010 | | |
|---|----------|--------|----------|------|-------------|
| | | | N | % | 95% CI |
| Certification of pregnancy by ⁽¹⁾ | | | | | |
| general practitioner | 24.3 | <0.001 | 3 020 | 22.4 | 21.8 – 23.2 |
| private obstetrician | 46.8 | | 6 414 | 47.6 | 46.8 – 48.4 |
| obstetrician at the maternity ward | 27.7 | | 3 570 | 26.5 | 25.8 – 27.2 |
| midwife at the maternity ward | 1.2 | | 481 | 3.6 | 3.2 – 3.8 |
| midwife in private practice | - | | 149 | 1.1 | 0.9 – 1.3 |
| midwife at MCH center ⁽²⁾ | - | | 88 | 0.6 | 0.5 – 0.7 |
| other | - | | 16 | 0.1 | 0.0 – 0.2 |
| | (13 415) | | (13 738) | | |
| Professionals visited after certification ⁽³⁾ | | | | | |
| General practitioner | | | | | |
| yes | 15.4 | <0.001 | 3 188 | 23.8 | 23.1 – 24.5 |
| no | 84.6 | | 10 220 | 76.2 | 75.5 – 76.9 |
| | (13 463) | | (13 408) | | |
| Private obstetrician | | | | | |
| in office | 44.7 | <0.001 | 6 430 | 47.0 | 46.2 – 47.8 |
| in MCH center ⁽²⁾ | 1.3 | | 158 | 1.2 | 1.0 – 1.4 |
| in office and MCH center ⁽²⁾ | 0.2 | | 48 | 0.4 | 0.3 – 0.5 |
| no | 54.0 | | 7 045 | 51.5 | 50.7 – 52.3 |
| | (13 561) | | (13 681) | | |
| Obstetrician in the maternity ward | | | | | |
| yes | 66.4 | <0.001 | 8 627 | 63.4 | 62.6 – 64.2 |
| no | 33.6 | | 4 972 | 36.6 | 35.8 – 37.4 |
| | (13 643) | | (13 599) | | |
| Midwife at the maternity ward | | | | | |
| yes | 26.9 | <0.001 | 5 320 | 39.5 | 38.7 – 40.3 |
| no | 73.1 | | 8 149 | 60.5 | 59.7 – 61.3 |
| | (13 487) | | (13 469) | | |
| Midwife not at the maternity ward | | | | | |
| in private practice | 3.5 | <0.001 | 2 068 | 15.4 | 14.8 – 16.0 |
| in MCH center ⁽²⁾ | 1.5 | | 495 | 3.7 | 3.4 – 4.0 |
| in private practice and at MCH center ⁽²⁾ | 0.0 | | 73 | 0.5 | 0.4 – 0.6 |
| no | 95.0 | | 10 765 | 80.3 | 79.6 – 81.0 |
| | (13 430) | | (13 401) | | |
| Prenatal care done by | | | | | |
| obstetrician essentially | - | | 9 209 | 66.8 | 66.0 – 67.6 |
| general practitioner essentially | - | | 644 | 4.7 | 4.3 – 5.0 |
| midwife essentially | - | | 1 613 | 11.7 | 11.2 – 12.2 |
| several professionals | - | | 2 317 | 16.8 | 16.2 – 17.4 |
| | | | (13 783) | | |
| Anaesthetist visit | | | | | |
| in the 3 rd trimester | - | | 12 975 | 93.2 | 92.8 – 93.6 |
| at delivery | - | | 475 | 3.4 | 3.1 – 3.7 |
| at another time | - | | 289 | 2.1 | 1.9 – 2.3 |
| never | - | | 188 | 1.4 | 1.2 – 1.6 |
| | | | (13 927) | | |

(1) if certification of pregnancy done; statistical test excludes midwives in private practice, midwives at MCH center or others

(2) Maternal and Child Health centers

(3) if at least one prenatal visit

Table 16. Support during pregnancy: antenatal classes, home visits, medical booklet
(sample of women in metropolitan France)

| | 2003 | | 2010 | | |
|---|---------|--------|----------|------|-------------|
| | % | p | n | % | 95% CI |
| 4th month interview⁽¹⁾ | | | | | |
| no | - | | 10 481 | 75.8 | 75.1 – 76.5 |
| yes ⁽²⁾ | - | | 2960 | 21.4 | 20.7 – 22.1 |
| doesn't know | - | | 380 | 2.8 | 2.5 – 3.1 |
| | | | (13 821) | | |
| Interview conducted by | | | | | |
| midwife in the maternity ward | - | | 1 452 | 50.3 | 48.5 – 51.1 |
| midwife in MCH center ⁽³⁾ | - | | 279 | 9.7 | 8.6 – 10.2 |
| midwife in private practice | - | | 1 021 | 35.4 | 33.7 – 36.2 |
| Obstetrician | - | | 106 | 3.6 | 2.9 – 3.9 |
| Other | - | | 29 | 1.0 | 0.6 – 1.2 |
| | | | (2 887) | | |
| Gestational age at interview⁽⁴⁾ | | | | | |
| 1 st to 3 rd month (<14GA) | - | | 374 | 16.4 | 14.9 – 17.0 |
| 4 th month | - | | 694 | 30.4 | 28.5 – 31.2 |
| 5 th month | - | | 457 | 20.0 | 18.4 – 20.7 |
| 6 th month | - | | 352 | 15.4 | 13.9 – 16.0 |
| 7 to 9 th month | - | | 409 | 17.9 | 16.3 – 18.5 |
| | | | (2 286) | | |
| Antenatal classes | | | | | |
| Nulliparas | | | | | |
| Yes | 66.8 | <0.001 | 4 470 | 73.2 | 72.1 – 73.9 |
| No | 33.2 | | 1 634 | 26.7 | 25.6 – 27.4 |
| | (5940) | | (6 104) | | |
| Multiparas | | | | | |
| Yes | 25.1 | <0.001 | 2 247 | 28.5 | 27.5 – 29.2 |
| No | 74.9 | | 5 631 | 71.5 | 70.5 – 72.2 |
| | (7 729) | | (7 878) | | |
| Home visits by midwife | | | | | |
| No | - | | 11 744 | 85.3 | 84.7 – 85.9 |
| yes, midwife from MCH services | - | | 804 | 5.8 | 5.4 – 6.2 |
| yes, midwife in private practice | - | | 1 161 | 8.4 | 7.9 – 8.9 |
| yes, other ⁽⁵⁾ | - | | 64 | 0.5 | 0.4 – 0.6 |
| | | | (13 773) | | |

(1) appointment with a midwife or doctor, who would identify any problems and provide important prevention information

(2) women who answered yes: 30.7% of nulliparas women and 14.3% of multiparaous women

(3) Maternal and Child Health centers

(4) month unknown for 22.8% of women who reported a 4th month interview

(5) midwives of different status or unknown status

Table 17. Information and prevention: folic acid, infectious diseases (*sample of women in metropolitan France*)

| | 2010 | | |
|--|----------|------|-------------|
| | N | % | 95% CI |
| Information on perinatal health network | | | |
| no | 8 488 | 61.8 | 61.0 – 62.6 |
| yes | 4 352 | 31.7 | 30.9 – 32.5 |
| doesn't know | 905 | 6.6 | 6.2 – 7.0 |
| | (13 745) | | |
| Folic acid consumption | | | |
| no | 7 397 | 53.5 | 52.7 – 54.3 |
| yes | 5 565 | 40.3 | 39.5 – 41.1 |
| doesn't know | 866 | 6.3 | 5.9 – 6.7 |
| | (13 828) | | |
| Time of folic acid consumption beginning | | | |
| more than 3 months before pregnancy | 841 | 15.3 | 14.3 – 15.9 |
| 1 to 3 months before pregnancy | 1 040 | 18.9 | 17.9 – 19.5 |
| in the month before pregnancy | 1 502 | 27.2 | 26.0 – 27.9 |
| after the 1 st month of pregnancy | 2 031 | 36.8 | 35.5 – 37.6 |
| doesn't know | 94 | 1.7 | 1.4 – 1.9 |
| other | 8 | 0.2 | 0.1 – 0.3 |
| | (5 516) | | |
| Advice on the prevention of toxoplasmosis | | | |
| no, immunized women | 3 586 | 26.0 | 25.3 – 26.7 |
| no, other reason | 1 278 | 9.3 | 8.8 – 9.8 |
| yes | 8 492 | 61.6 | 60.8 – 62.4 |
| doesn't know | 420 | 3.1 | 2.8 – 3.4 |
| | (13 776) | | |
| Advice on rubella⁽¹⁾ | | | |
| no | 283 | 35.5 | 32.2 – 36.3 |
| yes | 465 | 58.3 | 54.9 – 59.1 |
| doesn't know | 50 | 6.3 | 4.6 – 6.7 |
| | (798) | | |
| Information on prevention of pertussis | | | |
| no | 12 247 | 89.0 | 88.5 – 89.5 |
| yes, vaccination of relatives | 803 | 5.8 | 5.4 – 6.2 |
| yes, other information | 514 | 3.7 | 3.4 – 4.0 |
| yes, unknown | 201 | 1.5 | 1.3 – 1.7 |
| | (13 765) | | |

(1) among women self-declared immunized

Table 18. Prenatal screening (*sample of women in metropolitan France*)

| | 2003 | | 2010 | | |
|--|-----------------------|--------|----------|-----------|-------------|
| | % | p | n | % | 95% CI |
| Number of ultrasound examinations | | | | | |
| 0 | 0.1 | <0.001 | 22 | 0.2 | 0.1 – 0.3 |
| 1 | 0.4 | | 51 | 0.4 | 0.3 – 0.5 |
| 2 | 2.1 | | 184 | 1.3 | 1.1 – 1.5 |
| 3 | 40.4 | | 4 415 | 31.2 | 30.4 – 32.0 |
| 4-5 | 35.5 | | 5 424 | 38.4 | 37.6 – 39.2 |
| ≥ 6 | 21.5 | | 4 044 | 28.6 | 27.9 – 29.3 |
| Mean | (13 940) 4.5 ± 2.2 | | (14 140) | 5.0 ± 2.5 | |
| Screening test for HIV during pregnancy⁽¹⁾ | | | | | |
| yes | 75.1 | <0.001 | 10 121 | 72.9 | 72.2 – 73.6 |
| no, not offered | 9.3 | | 1 181 | 8.5 | 8.0 – 9.0 |
| no, refused | 1.5 | | 143 | 1.0 | 0.8 – 1.2 |
| no, recent screening test | 7.8 | | 664 | 4.8 | 4.4 – 5.2 |
| no, other or unknown | 0.7 | | 675 | 4.9 | 4.5 – 5.3 |
| doesn't know | 5.6 | | 1 107 | 8.0 | 7.5 – 8.4 |
| | (13 797) | | (13 891) | | |
| Screening for diabetes | | | | | |
| no | - | | 1 711 | 12.3 | 11.8 – 12.8 |
| yes | - | | 11 935 | 85.9 | 85.3 – 86.5 |
| doesn't know | - | | 252 | 1.8 | 1.6- 2.0 |
| | | | (13 898) | | |
| Screening for cervical cancer | | | | | |
| no | - | | 8 446 | 61.0 | 60.2 – 61.8 |
| yes | - | | 3 951 | 28.5 | 27.7 – 29.2 |
| doesn't know | - | | 1 460 | 10.5 | 10.0 – 11.0 |
| | | | (13 857) | | |
| If no screening, cervical smear in the previous 2 years | | | | | |
| no | - | | 2 855 | 35.0 | 34.0 – 35.8 |
| yes | - | | 5 307 | 65.0 | 64.0 – 65.8 |
| | | | (8 162) | | |

(1) in 2003, one question as in the table; in 2010, question in two parts: screening test for HIV, and the reasons if no screening.

Table 19. Screening and diagnosis of Down syndrome (*sample of women in metropolitan France*)

| | 2003 | | 2010 | | |
|--|----------|--------|----------|------|-------------|
| | % | p | n | % | 95% CI |
| Nuchal translucency measurement⁽¹⁾ | | | | | |
| yes | 76.0 | <0.001 | 12 690 | 86.5 | 85.9 – 87.1 |
| no, visit too late | 3.0 | | 405 | 2.8 | 2.5 – 3.1 |
| no, other or unknown reason | 2.4 | | 256 | 1.8 | 1.6 – 2.0 |
| doesn't know | 18.6 | | 1 323 | 9.0 | 8.5 – 9.5 |
| | (13 768) | | (14 674) | | |
| Serum screening for Down syndrome⁽¹⁾ | | | | | |
| yes | 79.7 | <0.001 | 11 631 | 84.1 | 83.5 – 84.7 |
| no, not offered | 4.0 | | 260 | 1.9 | 1.7 – 2.1 |
| no, refused | 6.1 | | 758 | 5.5 | 5.1 – 5.9 |
| no, too late | 3.1 | | 390 | 2.8 | 2.5 – 3.1 |
| no, amniocentesis straightaway | 2.3 | | 164 | 1.2 | 1.0 – 1.4 |
| no, other or unknown reason | 1.5 | | 246 | 1.8 | 1.6 – 2.0 |
| doesn't know | 3.4 | | 377 | 2.7 | 2.4 – 3.0 |
| | (13 775) | | (13 826) | | |
| Diagnosis for Down syndrome | | | | | |
| amniocentesis | 10.8 | <0.001 | 1 119 | 8.8 | 8.3 – 9.3 |
| trophoblast biopsy | 0.4 | | 67 | 0.5 | 0.4 – 0.6 |
| sample of maternal blood | 0.2 | | 13 | 0.1 | 0.0 – 0.2 |
| none of these | 87.0 | | 11 190 | 88.5 | 87.9 – 89.0 |
| doesn't know | 1.6 | | 261 | 2.1 | 1.9 – 2.3 |
| | (13 465) | | (12 650) | | |
| Amniocentesis | | | | | |
| Women 38 years or older | 61.4 | <0.001 | 415 | 41.8 | 32.9 – 42.6 |
| | (876) | | (992) | | |
| Women 39 years or older | 67.2 | <0.001 | 315 | 46.4 | 42.6 – 47.2 |
| | (570) | | (679) | | |

(1) in 2003, one question as in the table ; in 2010, question in two parts : screening of Down syndrome, and the reasons if no screening

Table 20. A(H1N1) influenza : prevention and medical care (*sample of women in metropolitan France*)

| | 2010 | | |
|---|----------|------|-------------|
| | N | % | 95% CI |
| A(H1N1) influenza vaccination | | | |
| yes | 3 947 | 29.3 | 28.5 – 30.1 |
| no | 9 518 | 70.7 | 69.9 – 71.5 |
| | (13 465) | | |
| Reasons for no vaccination | | | |
| no, refused | 7 978 | 90.8 | 90.2 – 91.3 |
| no, not offered | 432 | 4.9 | 4.4 – 5.3 |
| other | 372 | 4.2 | 3.8 – 4.5 |
| | (8 782) | | |
| Influenza symptoms⁽¹⁾ | | | |
| yes | 1 082 | 8.0 | 7.5 – 8.4 |
| no | 12 396 | 92.0 | 91.5 – 92.4 |
| | (13 478) | | |
| A(H1N1) influenza confirmation by nasal swab | | | |
| yes | 163 | 15.6 | 13.4 – 16.2 |
| no | 883 | 84.4 | 82.2 – 85.0 |
| | (1 046) | | |
| Visit for symptoms of the woman or of her relatives | | | |
| yes | 1 671 | 12.6 | 12.0 – 13.1 |
| no | 11 568 | 87.4 | 86.8 – 87.9 |
| | (13 239) | | |
| Professional seen at this visit | | | |
| general practitioner | 1 244 | 76.1 | 74.0 – 76.8 |
| private obstetrician | 42 | 2.6 | 1.8 – 2.9 |
| obstetrician at the maternity ward | 151 | 9.3 | 7.9 – 9.8 |
| other | 198 | 12.1 | 10.5 – 12.6 |
| | (1 635) | | |
| Tamiflu[®] prescription | | | |
| yes | 521 | 32.2 | 29.9 – 33.0 |
| no | 1 096 | 67.8 | 65.5 – 68.6 |
| | (1 617) | | |
| Hospitalisation for influenza symptoms⁽¹⁾ | | | |
| yes | 74 | 7.3 | 5.7 – 7.7 |
| no | 939 | 92.7 | 91.1 – 93.1 |
| | (1 013) | | |

(1) sudden fever or aches, with cough or breathing difficulties

Table 21. Obstetric history (*sample of women in metropolitan France*)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| Number of induced abortions⁽¹⁾ | | | | | |
| 0 | 87.9 | <0.001 | 11 429 | 84.5 | 83.9 – 85.1 |
| 1 | 9.8 | | 1693 | 12.5 | 11.9 – 13.0 |
| 2 | 1.7 | | 310 | 2.3 | 2.0 – 2.5 |
| ≥3 | 0.6 | | 100 | 0.7 | 0.6 – 0.8 |
| | (13 809) | | (13 532) | | |
| At least one induced abortion using drugs only | | | | | |
| yes | - | | 835 | 40.4 | 38.3 – 41.2 |
| no | - | | 1 230 | 59.6 | 57.5 – 60.4 |
| | | | (2 065) | | |
| Obstetric history⁽²⁾ | | | | | |
| stillborn, neonatal death, preterm birth or small for gestational age newborn | | | | | |
| yes | 11.2 | NS | 906 | 11.3 | 10.6 – 11.8 |
| no | 88.8 | | 7 136 | 88.7 | 88.0 – 89.2 |
| | (7 953) | | (8 042) | | |
| stillborn | | | | | |
| yes | 3.3 | NS | 265 | 3.3 | 2.9 – 3.6 |
| no | 96.7 | | 7 761 | 96.7 | 96.3 – 97.0 |
| | (7 872) | | (8 026) | | |
| neonatal death | | | | | |
| yes | 1.4 | NS | 100 | 1.3 | 1.1 – 1.5 |
| no | 98.6 | | 7 918 | 98.8 | 98.6 – 99.0 |
| | (7 805) | | (8 018) | | |
| preterm birth | | | | | |
| yes | 5.3 | 0.005 | 500 | 6.2 | 5.7 – 6.6 |
| no | 94.7 | | 7 507 | 93.8 | 93.3 – 94.2 |
| | (7 893) | | (8 007) | | |
| small for gestational age | | | | | |
| yes | 4.2 | NS | 405 | 5.1 | 4.6 – 5.5 |
| no | 95.8 | | 7 594 | 94.9 | 94.4 – 95.3 |
| | (7 859) | | (7 999) | | |
| caesarean section | | | | | |
| yes | 16.4 | <0.001 | 1 513 | 18.9 | 18.0 – 19.5 |
| no | 83.6 | | 6 498 | 81.2 | 80.3 – 81.8 |
| | (7 967) | | (8 011) | | |

(1) Information from medical record in 2003 and from women's interview in 2010

(2) Multiparous women

Table 22. Prenatal admissions and medical complications – part 1 (sample of women in metropolitan France)

| | 2003 | | 2010 | | |
|--|------------|--------|----------|------|-------------|
| | % | p | n | % | 95% CI |
| Hospitalisation⁽¹⁾ | | | | | |
| yes | 18.6 | NS | 2 680 | 18.8 | 18.2 – 19.4 |
| no | 81.4 | | 11 602 | 81.2 | 80.6 – 81.8 |
| | (13 969) | | (14 282) | | |
| Duration of hospitalisation (days) | | | | | |
| 1 | 22.7 | 0.02 | 523 | 19.9 | 18.4 – 20.6 |
| 2 | 14.5 | | 405 | 15.4 | 14.0 – 16.0 |
| 3-7 | 39.0 | | 1 106 | 42.0 | 40.1 – 42.8 |
| 8-14 | 11.0 | | 306 | 11.6 | 10.4 – 12.1 |
| ≥ 15 | 12.8 | | 295 | 11.2 | 10.0 – 11.7 |
| mean | 7.1 ± 11.7 | | | | 6.4 ± 9.3 |
| | (2 538) | | (2 635) | | |
| In utero transfer⁽²⁾ | | | | | |
| transfer during pregnancy | 1.3 | <0.001 | 120 | 0.8 | 0.7 – 0.9 |
| transfer just before delivery | 0.8 | | 111 | 0.8 | 0.7 – 0.9 |
| transfer unknown | - | | 10 | 0.1 | 0.0 – 0.2 |
| no transfer | 98.0 | | 14 027 | 98.3 | 98.2 – 98.6 |
| | (14 339) | | (14 268) | | |
| Gestational age at transfer | | | | | |
| 28 weeks or less | - | | 56 | 24.2 | 18.7 – 24.9 |
| 29 - 31 | - | | 45 | 19.5 | 14.4 – 20.2 |
| 32 -36 | - | | 85 | 36.8 | 30.6 – 37.6 |
| 37 weeks and more | - | | 45 | 19.5 | 14.4 – 20.2 |
| | | | (231) | | |
| High blood pressure before pregnancy | | | | | |
| no | - | | 14 190 | 97.9 | 97.7 – 98.1 |
| chronic high blood pressure | - | | 149 | 1.0 | 0.8 – 1.2 |
| high blood pressure during a previous pregnancy only | - | | 157 | 1.1 | 0.9 – 1.3 |
| | | | (14 496) | | |
| High blood pressure⁽³⁾ during pregnancy | | | | | |
| no | 96.3 | <0.001 | 13 816 | 95.2 | 94.8 – 95.6 |
| yes with proteinuria | 1.2 | | 303 | 2.1 | 1.9 – 2.3 |
| yes without proteinuria | 2.5 | | 401 | 2.8 | 2.5 – 3.1 |
| | (14 190) | | (14 520) | | |
| Gestational age at diagnosis⁽⁴⁾ | | | | | |
| 28 weeks or less | - | | 53 | 17.5 | 13.2 – 18.1 |
| 29 - 31 | - | | 419 | 6.3 | 3.6 – 6.7 |
| 32 - 36 | - | | 102 | 33.7 | 28.4 – 34.5 |
| 37 weeks and more | - | | 129 | 42.6 | 37.0 – 43.4 |
| | | | (303) | | |
| Hospitalisation for high blood pressure⁽⁴⁾ | | | | | |
| yes | - | | 209 | 71.8 | 66.6 – 72.5 |
| no | - | | 82 | 28.2 | 27.5 – 28.9 |
| | | | (291) | | |

(1) including day care hospitalisations

(2) transfer from another maternity unit for hospitalisation or delivery

(3) Systolic Blood Pressure ≥ 140 or Diastolic Blood Pressure ≥ 90

(4) if high blood pressure and proteinuria

Table 22bis. Prenatal admissions and medical complications – part 2 (sample of women in metropolitan France)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| Diabetes before pregnancy | | | | | |
| no | - | | 14 287 | 98.5 | 98.3 – 98.7 |
| insulin-dependent diabetes | - | | 45 | 0.3 | 0.2 – 0.4 |
| no insulin-dependent diabetes | - | | 25 | 0.2 | 0.1 – 0.3 |
| gestational diabetes in a previous pregnancy | - | | 143 | 1.0 | 0.8 – 1.2 |
| | | | (14 500) | | |
| Gestational diabetes | | | | | |
| no | - | | 13 293 | 92.8 | 92.3 – 93.1 |
| yes, insulin treatment | - | | 237 | 1.7 | 1.5 – 1.9 |
| yes, diet | - | | 735 | 5.1 | 4.8 – 5.5 |
| yes, treatment unknown | - | | 53 | 0.4 | 0.3 – 0.5 |
| | | | (14 318) | | |
| Threatened Preterm Delivery (TPD) | | | | | |
| no | - | | 13 154 | 91.2 | 90.7 – 91.7 |
| yes with hospitalisation | - | | 933 | 6.5 | 6.1 – 6.9 |
| yes without hospitalisation | - | | 344 | 2.4 | 2.2 – 2.7 |
| | | | (14 431) | | |
| Gestational age at TPD hospitalisation | | | | | |
| 20 - 23 weeks | - | | 29 | 3.4 | 2.2 – 3.7 |
| 24 - 27 weeks | - | | 150 | 17.7 | 15.1 – 18.3 |
| 28 - 31 weeks | - | | 225 | 26.6 | 23.6 – 27.3 |
| 32 - 36 weeks | - | | 442 | 52.3 | 48.9 – 53.1 |
| | | | (846) | | |
| Corticosteroid therapy for fetal lung maturation | | | | | |
| yes | 3.8 | <0.001 | 750 | 5.2 | 4.8 – 5.6 |
| no | 96.2 | | 13 575 | 94.8 | 94.4 – 95.2 |
| | (14 233) | | (14 335) | | |
| Gestational age at 1st course of corticosteroids | | | | | |
| 25 weeks and more | 11.6 | <0.001 | 31 | 4.4 | 2.9 – 4.7 |
| 26 - 33 | 72.8 | | 537 | 73.8 | 70.6 – 74.5 |
| 34 - 36 | 15.1 | | 139 | 19.3 | 16.4 – 20.0 |
| 37 weeks and more | 0.4 | | 20 | 2.6 | 1.4 – 2.9 |
| | (542) | | (727) | | |
| Number of courses of corticosteroids | | | | | |
| 1 | 69.7 | <0.001 | 590 | 80.9 | 78.1 – 81.5 |
| 2 and more | 30.3 | | 139 | 19.1 | 16.3 – 19.7 |
| | (521) | | (729) | | |

Table 22ter. Prenatal admissions and medical complications – part 3 (*sample of women in metropolitan France*)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| Severe haemorrhage in 2-3rd trimester | | | | | |
| placenta praevia | 0.5 | <0.001 | 72 | 0.5 | 0.4 -0.6 |
| abruptio placentae | 0.2 | | 29 | 0.2 | 0.1 – 0.3 |
| other severe haemorrhage | 0.2 | | 134 | 1.0 | 0.8 – 1.2 |
| no | 99.0 | | 13 918 | 98.3 | 98.1 – 98.5 |
| | (14 296) | | (14 153) | | |
| Suspected Intra-Uterine Growth anomaly⁽¹⁾ | | | | | |
| no | - | | 13 496 | 92.1 | 91.7 – 92.5 |
| yes, IUGR | - | | 600 | 4.1 | 3.8 – 4.4 |
| yes, macrosomia | - | | 553 | 3.8 | 3.5 – 4.1 |
| | | | (14 649) | | |
| Premature Rupture of Membranes (PROM)⁽²⁾ | | | | | |
| yes | 8.2 | <0.001 | 1 525 | 10.5 | 10.0 – 11.0 |
| no | 91.8 | | 13 013 | 89.5 | 89.0 – 90.0 |
| | (14 319) | | (14 538) | | |
| Length of time between PROM and delivery | | | | | |
| 1 day or less | - | | 1 086 | 75.3 | 73.1 – 76.0 |
| 2 – 4 days | - | | 291 | 20.2 | 18.1 – 20.9 |
| more than 4 days | - | | 65 | 4.5 | 3.4 – 4.9 |
| | | | (1 442) | | |

(1) estimated from all children

(2) at least 12 hours before labour

Table 23. Place of birth (sample of women in metropolitan France)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| Maternity unit status⁽¹⁾ | | | | | |
| public (regional hospital, university hospital) | 14.6 | <0.001 | 2 648 | 18.1 | 17.5 – 18.7 |
| other public | 46.6 | | 6 805 | 46.4 | 45.6 – 47.2 |
| PSPH ⁽²⁾ | 5.0 | | 1 084 | 7.4 | 7.0 – 7.8 |
| other private | 33.8 | | 4 135 | 28.2 | 27.5 – 28.9 |
| | (14 471) | | (14 672) | | |
| Level⁽¹⁾ | | | | | |
| I | 36.3 | <0.001 | 4 425 | 30.2 | 29.5 – 31.0 |
| II A | 25.9 | | 3 872 | 26.4 | 25.7 – 27.1 |
| II B | 18.5 | | 2 993 | 20.4 | 19.7 – 21.1 |
| III | 19.3 | | 3 382 | 23.1 | 22.4 – 23.8 |
| | (14 471) | | (14 672) | | |
| Maternity unit size⁽¹⁾ | | | | | |
| < 300 annual deliveries | 1.2 | <0.001 | 41 | 0.3 | 0.2 – 0.4 |
| 300-499 | 3.4 | | 320 | 2.2 | 2.0 – 2.4 |
| 500-999 | 20.7 | | 2 186 | 14.9 | 14.4 – 15.6 |
| 1 000 - 1 499 | 22.7 | | 3 023 | 20.6 | 19.9 – 21.3 |
| 1 500 - 1 999 | 16.3 | | 2 049 | 14.0 | 13.4 – 14.6 |
| 2 000 – 2 999 | 27.8 | | 4 285 | 29.2 | 28.5 – 30.0 |
| ≥ 3 000 | 8.0 | | 2 767 | 18.8 | 18.2 – 19.4 |
| | (14 471) | | (14 671) | | |
| Transport time to maternity unit | | | | | |
| ≤ 30 mn | 90.1 | NS | 12 257 | 89.2 | 88.7 – 89.7 |
| 31-60 mn | 9.2 | | 1 356 | 9.9 | 9.4 – 10.4 |
| > 60 mn | 0.7 | | 130 | 1.0 | 0.8 – 1.2 |
| | (13 641) | | (13 743) | | |

(1) data from the questionnaire describing the maternity unit, or from the French Annual Statistics of Health Services if the questionnaire was missing – in 2010, 9 women were interviewed after transfer from maternity unit, so status and level of the maternity unit of delivery were unknown

(2) PSPH: private non-profit maternity units

Table 24. Labour and delivery – part 1 (*sample of women and births in metropolitan France*)

| | 2003 | | 2010 | | |
|---|----------|--------|----------|------|-------------|
| | % | p | n | % | 95% CI |
| Presentation⁽¹⁾ | | | | | |
| vertex | 94.0 | NS | 14 031 | 94.7 | 94.3 – 95.1 |
| breech | 5.4 | | 690 | 4.7 | 4.3 – 5.1 |
| other | 0.6 | | 94 | 0.6 | 0.5 – 0.7 |
| | (14 655) | | (14 815) | | |
| Onset of labour⁽²⁾ | | | | | |
| spontaneous | 67.8 | <0.001 | 9 720 | 66.5 | 65.7 – 67.3 |
| induced | 19.7 | | 3 312 | 22.7 | 22.0 – 23.4 |
| caesarean | 12.5 | | 1 592 | 10.9 | 10.4 – 11.4 |
| | (14 446) | | (14 624) | | |
| Artificial rupture of membranes^(2,3) | | | | | |
| yes | - | | 4 906 | 51.0 | 50.0 – 51.8 |
| no | - | | 4 713 | 49.0 | 48.0 – 49.8 |
| | | | (9 619) | | |
| Augmentation during labour^(2,4) | | | | | |
| yes | - | | 8 192 | 63.9 | 63.1 – 64.7 |
| no | - | | 4 633 | 36.1 | 35.3 – 36.9 |
| | | | (12 825) | | |
| Mode of delivery⁽¹⁾ | | | | | |
| spontaneous vaginal delivery | 68.7 | <0.001 | 9 857 | 66.9 | 66.1 – 67.7 |
| forceps | } 7.8 | | 580 | 3.9 | 3.6 – 4.2 |
| spatulas | | | 421 | 2.9 | 2.6 – 3.2 |
| ventouse | | | 782 | 5.3 | 4.9 – 5.7 |
| caesarean | 20.2 | | 3 089 | 21.0 | 20.3 – 21.7 |
| | (14 696) | | (14 729) | | |
| Delivery by^(1,5) | | | | | |
| obstetrician | 51.3 | <0.001 | 6 003 | 42.2 | 41.4 – 43.0 |
| midwife | 47.5 | | 7 732 | 55.8 | 55.0 – 56.6 |
| other | 1.2 | | 288 | 2.1 | 1.9 – 2.3 |
| | (14 598) | | (14 023) | | |
| If spontaneous vaginal delivery, delivery by^(1,5) | | | | | |
| obstetrician | 29.7 | <0.001 | 1 653 | 17.8 | 17.0 – 18.4 |
| midwife | 69.1 | | 7 394 | 79.7 | 78.9 – 80.4 |
| other | 1.2 | | 235 | 2.5 | 2.2 – 2.8 |
| | (10 002) | | (9 282) | | |

(1) among births

(2) among women

(3) if spontaneous onset of labour

(4) if spontaneous or induced onset of labour

(5) information from medical record in 2003 and from interview in 2010

Table 24bis. Labour and delivery – part 2 (sample of women and births in metropolitan France)

| | 2003 | | 2010 | | |
|---|-----------|--------|----------|------|-------------|
| | % | p | n | % | 95% CI |
| Preventive injection of oxytocics | | | | | |
| no | - | | 2 398 | 16.8 | 16.2 – 17.4 |
| yes, before delivery | - | | 6 508 | 45.6 | 44.8 – 46.4 |
| yes, after delivery | - | | 2 600 | 18.2 | 17.6 – 18.8 |
| yes, before and after delivery | - | | 2 762 | 19.4 | 18.8 – 20.1 |
| | | | (14 268) | | |
| Episiotomy^(1,2) | | | | | |
| Nulliparas | | | | | |
| | Year 1998 | | | | |
| no | 28.7 | <0.001 | 2 681 | 55.5 | 54.1 – 56.3 |
| mediolateral | 66.4 | | 1 751 | 36.3 | 34.9 – 37.1 |
| median | 4.9 | | 46 | 1.0 | 0.7 – 1.2 |
| yes, unknown | 0.0 | | 348 | 7.2 | 6.5 – 7.6 |
| | (4 591) | | (4 826) | | |
| Multiparas | | | | | |
| no | 63.8 | <0.001 | 5 712 | 85.9 | 85.1 – 86.5 |
| mediolateral | 32.7 | | 730 | 11.0 | 10.2 – 11.5 |
| median | 3.5 | | 33 | 0.5 | 0.3 – 0.6 |
| yes, unknown | 0.0 | | 176 | 2.7 | 2.3 – 3.0 |
| | (6 393) | | (6 651) | | |
| Trauma of the perineum⁽¹⁾ | | | | | |
| no | - | | 6 503 | 57.4 | 56.5 – 58.2 |
| 1st or 2nd degree tears | - | | 4 742 | 41.8 | 40.9 – 42.6 |
| 3rd or 4th degree tears | - | | 88 | 0.8 | 0.6 – 0.9 |
| | | | (11 333) | | |

(1) among births by vaginal delivery

(2) available information in 2003

Table 25. Analgesia and anaesthesia (*sample of women in metropolitan France*)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| Analgesia during labour⁽¹⁾ | | | | | |
| none | - | | 2 439 | 18.9 | 18.2 – 19.5 |
| epidural | - | | 10 050 | 77.8 | 77.1 – 78.5 |
| spinal analgesia | - | | 193 | 1.5 | 1.3 – 1.7 |
| parenteral analgesia | - | | 88 | 0.7 | 0.6 – 0.8 |
| other | - | | 143 | 1.1 | 0.9 – 1.3 |
| | | | (12 913) | | |
| Patient Controlled Epidural Analgesia (PCEA) if epidural⁽²⁾ | | | | | |
| yes | - | | 3 153 | 36.0 | 35.0 – 36.8 |
| no | - | | 5 600 | 64.0 | 63.0 – 64.8 |
| | | | (8 753) | | |
| Anaesthesia for caesarean | | | | | |
| epidural | - | | 1 058 | 36.3 | 34.6 – 37.1 |
| spinal anaesthesia | - | | 1 684 | 57.9 | 56.1 – 58.7 |
| general anaesthesia | - | | 170 | 5.8 | 5.0 – 6.2 |
| | | | (2 912) | | |
| Anaesthesia for operative delivery | | | | | |
| none | - | | 15 | 1.2 | 0.6 – 1.4 |
| epidural | - | | 1 248 | 95.6 | 94.5 – 95.9 |
| spinal anaesthesia | - | | 9 | 0.7 | 0.2 – 0.8 |
| general anaesthesia | - | | 8 | 0.6 | 0.2 – 0.7 |
| other | - | | 25 | 1.9 | 1.2 – 2.1 |
| | | | (1305) | | |
| Anaesthesia or analgesia⁽³⁾ | | | | | |
| none | 22.5 | <0.001 | 2 282 | 15.7 | 15.1 – 16.3 |
| epidural | 62.6 | | 10 186 | 70.0 | 69.3 – 70.8 |
| spinal anaesthesia | 12.3 | | 1 666 | 11.5 | 11.0 – 12.0 |
| general anaesthesia | 1.7 | | 179 | 1.2 | 1.0 – 1.4 |
| other analgesia | 0.9 | | 226 | 1.6 | 1.4 – 1.8 |
| | (14 411) | | (14 549) | | |
| Effectiveness of epidural⁽⁴⁾ | | | | | |
| very effective | - | | 6 563 | 69.5 | 68.6 – 70.3 |
| fairly effective | - | | 1 890 | 20.0 | 19.2 – 20.7 |
| not very effective | - | | 666 | 7.1 | 6.6 – 7.5 |
| not effective | - | | 323 | 3.4 | 3.0 – 3.7 |
| | | | (9 442) | | |

(1) no labour/elective caesarean sections were excluded

(2) 12.9% of missing data for women who had an epidural

(3) classification favouring the anaesthesia over the analgesia, if several methods

(4) question asked of women who had epidural or spinal anaesthesia

Table 26. Trends in CS rates according to parity and obstetric history (sample of births in metropolitan France)

| | 2003 | | n | 2010 | |
|--|------------------|----|-------------------|------|-------------|
| | % | p | | % | 95% CI |
| Nulliparas | 23.0 (6 264) | NS | 1 472 (6 340) | 23.2 | 21.4 – 23.2 |
| Multiparas without previous caesarean section | 8.8 (6 750) | NS | 538 (6 515) | 8.3 | 7.6 – 8.8 |
| Multiparas with previous caesarean section | 64.4 (1 333) | NS | 976 (1 525) | 64.0 | 61.6 – 64.8 |
| All births⁽¹⁾ | 20.2 (14 347) | NS | 2 986 (14 380) | 20.8 | 20.1 – 21.5 |

(1) if parity and previous caesarean section known

Table 27. Onset of labour and mode of delivery by gestational age and birthweight in 2010
(sample of live births in metropolitan France)

| | Onset of labour | | | | n | Mode of delivery | | | |
|------------------------|-----------------|------------------|---------|----------------|----------|------------------------------|----------------------------|----------------|----------|
| | | Spon- taneous | Induced | Caesa- rean | | Spont vaginal delivery | Oper- ative delivery | Caesa- rean | n |
| Gestational age | | | | | | | | | |
| ≤ 34 weeks | % | 50.6 | 9.1 | 40.3 | (330) | 39.9 | 4.9 | 55.2 | (328) |
| 35-36 | % | 52.7 | 22.2 | 25.2 | (632) | 55.6 | 8.2 | 36.1 | (631) |
| 37 | % | 58.8 | 22.4 | 18.9 | (992) | 61.1 | 9.9 | 29.0 | (987) |
| 38 | % | 58.6 | 21.8 | 19.6 | (2 445) | 62.7 | 9.8 | 27.5 | (2 417) |
| 39 | % | 71.2 | 16.6 | 12.2 | (3 597) | 69.6 | 11.0 | 19.4 | (3 567) |
| 40 | % | 81.2 | 15.5 | 3.3 | (3 984) | 73.1 | 14.0 | 12.9 | (3 957) |
| 41 | % | 54.1 | 41.0 | 4.9 | (2 635) | 64.9 | 16.1 | 18.9 | (2 614) |
| ≥ 42 | % | 14.3 | 85.7 | 0.0 | (49) | 59.2 | 14.3 | 26.5 | (49) |
| N | | | | | (14 664) | | | | (14 550) |
| Birthweight | | | | | | | | | |
| < 1 500 g | % | 38.4 | 5.4 | 56.3 | (112) | 32.4 | 3.6 | 64.0 | (111) |
| 1 500 - 1999 | % | 38.3 | 19.2 | 42.6 | (188) | 34.2 | 3.7 | 62.0 | (187) |
| 2 000 - 2 499 | % | 51.1 | 25.7 | 23.2 | (634) | 51.7 | 8.6 | 39.8 | (631) |
| 2 500 - 2 999 | % | 67.6 | 20.3 | 12.1 | (2 884) | 67.6 | 11.2 | 21.2 | (2 858) |
| 3 000 - 3 499 | % | 69.8 | 20.9 | 9.4 | (5 980) | 69.5 | 13.3 | 17.2 | (5 940) |
| 3 500 - 3999 | % | 67.7 | 23.9 | 8.4 | (3 843) | 69.0 | 12.3 | 18.8 | (3 804) |
| ≥ 4 000 | % | 58.6 | 29.5 | 12.0 | (1 038) | 60.4 | 13.1 | 26.6 | (1 034) |
| N | | | | | (14 679) | | | | (14 565) |

Table 28. Newborn characteristics (sample of live births in metropolitan France)

| | 2003 | | 2010 | | |
|---|------------|--------|----------|------------|-------------|
| | % | p | n | % | 95% CI |
| Vital status | | | | | |
| live born | 98.9 | NS | 14 761 | 99.1 | 98.9 – 99.3 |
| stillborn no labour | 0.5 | | 72 | 0.5 | 0.4 – 0.6 |
| stillborn in labour | 0.1 | | 12 | 0.1 | 0.0 – 0.2 |
| TOP ⁽¹⁾ | 0.4 | | 53 | 0.4 | 0.3 – 0.5 |
| | (14 729) | | (14 898) | | |
| Sex | | | | | |
| male | 51.2 | NS | 7 771 | 52.3 | 51.5 – 53.1 |
| female | 48.8 | | 7 098 | 47.7 | 46.9 – 48.5 |
| | (14 647) | | (14 869) | | |
| Birth | | | | | |
| singleton | 96.6 | NS | 14 460 | 97.0 | 96.7 – 97.3 |
| twin | 3.4 | | 440 | 3.1 | 2.8 – 3.4 |
| triplet | 0.0 | | 3 | 0.0 | 0.0 – 0.0 |
| | (14 737) | | (14 903) | | |
| Child height | | | | | |
| ≤ 47 cm | 19.5 | NS | 2 708 | 19.3 | 18.6 – 20.0 |
| 48-49 | 30.1 | | 4 213 | 30.0 | 29.2 – 30.8 |
| 50-51 | 35.6 | | 5 046 | 35.9 | 35.1 – 36.7 |
| ≥ 52 | 14.9 | | 2 072 | 14.8 | 14.2 – 15.4 |
| | (13 930) | | (14 039) | | |
| mean | 49.2 ± 2.6 | | | 49.2 ± 2.7 | |
| Head circumference | | | | | |
| ≤ 32 cm | 11.4 | NS | 1 522 | 10.9 | 10.4 – 11.4 |
| 33 | 17.6 | | 2 385 | 17.1 | 16.5 – 17.7 |
| 34 | 27.2 | | 3 799 | 27.2 | 26.5 – 27.9 |
| 35 | 23.5 | | 3 432 | 24.6 | 23.9 – 25.3 |
| ≥ 36 cm | 20.3 | | 2 840 | 20.3 | 19.6 – 21.0 |
| | (13 746) | | (13 978) | | |
| mean | 34.3 ± 1.9 | | | 34.3 ± 1.9 | |
| Breastfeeding attempt in the first two hours⁽²⁾ | | | | | |
| yes | - | | 8 531 | 60.7 | 59.9 – 61.5 |
| no | - | | 5 509 | 39.3 | 38.5 – 40.1 |
| | | | (14 040) | | |
| Feeding during hospital stay⁽²⁾ | | | | | |
| Breast | 55.4 | <0.001 | 8 535 | 60.2 | 59.4 – 61.0 |
| Breast and bottle | 6.9 | | 1 198 | 8.5 | 8.0 – 9.0 |
| Bottle | 37.7 | | 4 443 | 31.3 | 30.5 – 32.1 |
| | (13 821) | | (14 176) | | |

(1) termination of pregnancy

(2) for live born children

Table 29. Apgar scores and resuscitation (sample of live births in metropolitan France)

| | 2003 | | n | 2010 | |
|---|----------|--------|----------|------|-------------|
| | % | p | | % | 95% CI |
| 1-min Apgar score | | | | | |
| ≤ 5 | 2.7 | <0.001 | 543 | 3.7 | 3.4 – 4.0 |
| 6-7 | 3.3 | | 499 | 3.4 | 3.1 – 3.7 |
| 8-9 | 18.7 | | 3 028 | 20.7 | 20.0 – 21.4 |
| 10 | 75.4 | | 10 541 | 72.2 | 71.5 – 72.9 |
| 5-min Apgar score | (14 477) | | (14 611) | | |
| ≤ 5 | 0.4 | <0.001 | 72 | 0.5 | 0.4 – 0.6 |
| 6-7 | 0.7 | | 168 | 1.2 | 1.0 – 1.4 |
| 8-9 | 4.6 | | 823 | 5.6 | 5.2 – 6.0 |
| 10 | 94.3 | | 13 539 | 92.7 | 92.3 – 93.1 |
| | (14 471) | | (14 602) | | |
| Neonatal intensive care performed | | | | | |
| Mechanical ventilation | | | | | |
| yes using a balloon | - | | 454 | 3.2 | 2.9 – 3.5 |
| yes using Neopuff | - | | 325 | 2.3 | 2.1 – 2.5 |
| no | - | | 13 511 | 94.6 | 94.2 – 95.0 |
| | | | (14 290) | | |
| Nasal CPAP (continuous positive airway pressure) | | | | | |
| yes | - | | 189 | 1.3 | 1.1 – 1.5 |
| no | - | | 13 893 | 98.7 | 98.5 – 98.9 |
| | | | (14 082) | | |
| Intubation | | | | | |
| yes | - | | 155 | 1.1 | 0.9 – 1.3 |
| no | - | | 13 937 | 98.9 | 98.7 – 99.1 |
| | | | (14 092) | | |
| Surfactant | | | | | |
| yes | - | | 28 | 0.2 | 0.1 – 0.3 |
| no | - | | 14 055 | 99.8 | 99.7 – 99.9 |
| | | | (14 083) | | |
| Venous catheter | | | | | |
| yes | - | | 185 | 1.3 | 1.1 – 1.5 |
| no | - | | 13 863 | 98.7 | 98.5 – 98.9 |
| | | | (14 048) | | |
| Professional who performed neonatal intensive care⁽¹⁾ | | | | | |
| Paediatrician | | | | | |
| yes | - | | 578 | 68.3 | 65.2 – 69.1 |
| no | - | | 268 | 31.7 | 28.6 – 32.5 |
| Midwife | | | (846) | | |
| yes | - | | 529 | 64.4 | 61.1 – 65.2 |
| no | - | | 292 | 35.6 | 32.3 – 36.4 |
| Anaesthetist | | | (821) | | |
| yes | - | | 41 | 5.1 | 3.6 – 5.5 |
| no | - | | 761 | 94.9 | 93.4 – 95.3 |
| Other professional | | | (802) | | |
| yes | - | | 63 | 7.9 | 6.0 – 8.3 |
| no | - | | 731 | 92.1 | 90.2 – 92.5 |
| | | | (794) | | |

(1) for live born children requiring neonatal intensive care

Table 30. Hospitalisation of newborns (*sample of births in metropolitan France*)

| | 2003 | | n | 2010 | |
|---|----------|--------|--------------------|------|--------------|
| | % | p | | % | 95% CI |
| Neonatal transfer⁽¹⁾ | | | | | |
| no | 91.9 | <0.001 | 13 239 | 93.4 | 93.0 – 93.8 |
| yes same unit | 1.1 | | 387 | 2.7 | 2.4 – 3.0 |
| yes same site | 5.2 | | 417 | 2.9 | 2.6 – 3.2 |
| yes other site | 1.9 | | 138 | 1.0 | 0.8 – 1.2 |
| | (14 353) | | (14 181) | | |
| Transfer reasons⁽²⁾ | | | | | |
| preterm birth or SGA | - | | 456 (921) | 49.5 | 46.3 – 50.3 |
| respiratory distress | - | | 258 (921) | 28.0 | 25.1 – 28.7 |
| suspicion of infection | - | | 175 (921) | 19.0 | 16.5 – 19.6 |
| congenital anomaly | - | | 49 (921) | 5.3 | 3.9 – 5.7 |
| other | - | | 203 (921) | 22.0 | 19.3 – 22.7 |
| Deaths in maternity unit⁽³⁾ | | | | | |
| yes | - | | 14 | 0.1 | 0.0 – 0.2 |
| no | - | | 14 446 (14 460) | 99.9 | 99.8 – 100.0 |
| Shared medical record⁽⁴⁾ | | | | | |
| no | - | | 7 871 | 70.6 | 69.8 – 71.4 |
| shared paper medical record | - | | 2 924 | 26.2 | 25.4 – 26.9 |
| shared electronic medical record | - | | 354 (11 149) | 3.2 | 2.9 – 3.5 |

(1) live born children. Transfers for no medical reasons were excluded

(2) two reasons could be given for the same transfer

(3) live born children

(4) if prenatal care partially done out of the maternity unit

Table 31. Mother's hospitalisation (*sample of women in metropolitan France*)

| | 2003 | | n | 2010 | |
|---|----------|----|----------|-----------|-------------|
| | % | p | | % | 95% CI |
| Duration of mother's hospitalisation after birth | | | | | |
| < 3 days | - | | 597 | 4.2 | 3.9 – 4.5 |
| 3 | - | | 2 901 | 20.3 | 19.6 – 21.0 |
| 4 | - | | 5 890 | 41.2 | 40.4 – 42.0 |
| 5 | - | | 2 788 | 19.5 | 18.9 – 20.2 |
| ≥ 6 | - | | 2 128 | 14.9 | 14.3 – 15.5 |
| | | | (14 304) | | |
| mean | | | | 4.4 ± 2.1 | |
| If vaginal delivery | | | | | |
| <3 days | - | | 537 | 4.8 | 4.4 – 5.2 |
| 3 | - | | 2 782 | 24.7 | 23.9 – 25.4 |
| 4 | - | | 5 472 | 48.5 | 47.6 – 49.3 |
| 5 | - | | 1 700 | 15.1 | 14.4 – 15.7 |
| ≥ 6 | - | | 793 | 7.0 | 6.5 – 7.4 |
| | | | (11 284) | | |
| mean | | | | 4.0 ± 2.0 | |
| Mother's transfer or hospitalisation | | | | | |
| no | 99.6 | NS | 14 097 | 99.4 | 99.3 – 99.5 |
| in resuscitation or intensive care unit | | | | | |
| more than 24 h | 0.4 | | 66 | 0.5 | 0.4 – 0.6 |
| in other department for medical | | | | | |
| reasons | 0.1 | | 21 | 0.2 | 0.1 – 0.3 |
| | (14 069) | | (14 184) | | |

Table 32. Gestational age and birthweight (*sample of births in metropolitan France*)

| | 2003 | | 2010 | | |
|---|-----------------|--------|-----------------|----------|-------------|
| | % | p | n | % | 95% CI |
| Gestational age | | | | | |
| ≤ 21 weeks | 0.0 | <0.001 | 0 | 0.0 | 0.0 – 0.0 |
| 22-27 | 0.9 | | 97 | 0.7 | 0.6 – 0.8 |
| 28-31 | 0.8 | | 122 | 0.8 | 0.7 – 0.9 |
| 32 | 0.3 | | 58 | 0.4 | 0.3 – 0.5 |
| 33 | 0.5 | | 56 | 0.4 | 0.3 – 0.5 |
| 34 | 0.8 | | 117 | 0.8 | 0.7 – 0.9 |
| 35 | 1.3 | | 224 | 1.5 | 1.3 – 1.7 |
| 36 | 2.7 | | 418 | 2.8 | 2.5 – 3.1 |
| 37 | 6.4 | | 995 | 6.7 | 6.3 – 7.1 |
| 38 | 14.5 | | 2 448 | 16.5 | 15.9 – 17.1 |
| 39 | 24.4 | | 3 606 | 24.3 | 23.6 – 25.0 |
| 40 | 26.8 | | 3 999 | 27.0 | 26.3 – 27.7 |
| 41 | 19.7 | | 2 643 | 17.8 | 17.2 – 18.4 |
| ≥ 42 | 1.0 | | 49 | 0.3 | 0.2 – 0.4 |
| | (14 669) | | | (14 832) | |
| Preterm birth (GA < 37 weeks) | | | | | |
| yes | 7.2 | NS | 1 092 | 7.4 | 7.0 – 7.8 |
| no | 92.8 | | 13 740 | 92.6 | 92.2 – 93.0 |
| | (14 669) | | (14 832) | | |
| Birthweight | | | | | |
| ≤ 499 grams | 0.1 | 0.006 | 21 | 0.1 | 0.0 – 0.2 |
| 500 - 999 | 0.8 | | 83 | 0.6 | 0.5 – 0.7 |
| 1 000 - 1 499 | 0.6 | | 102 | 0.7 | 0.6 – 0.8 |
| 1 500 - 1 999 | 1.5 | | 200 | 1.4 | 1.2 – 1.6 |
| 2 000 - 2 499 | 5.0 | | 648 | 4.4 | 4.1 – 4.7 |
| 2 500 - 2 999 | 20.4 | | 2 897 | 19.5 | 18.9 – 20.2 |
| 3 000 - 3 499 | 39.6 | | 5 999 | 40.4 | 39.6 – 41.2 |
| 3 500 - 3 999 | 25.4 | | 3 856 | 26.0 | 25.3 – 26.7 |
| 4 000 - 4 499 | 5.7 | | 932 | 6.3 | 5.9 – 6.7 |
| ≥ 4 500 | 0.9 | | 109 | 0.7 | 0.6 – 0.8 |
| | (14 683) | | | (14 844) | |
| mean | 3 231.5 ± 584.3 | | 3 254.0 ± 567.7 | | |
| Birthweight < 2 500 grams | | | | | |
| yes | 8.0 | 0.004 | 1 052 | 7.1 | 6.7 – 7.5 |
| no | 92.0 | | 13 790 | 92.9 | 92.5 – 93.3 |
| | (14 683) | | (14 844) | | |

Table 33. Birthweight according to gestational age (*sample of live births in metropolitan France*)

| Gestational age (weeks) | Birthweight (grams) | | | | | | | | Total | |
|----------------------------|---------------------|----------------|----------------|----------------|----------------|----------------|----------------------|-------|------------------|-------|
| | 500 1 499 | 1 500 1 999 | 2 000 2 499 | 2 500 2 999 | 3 000 3 499 | 3 500 3 999 | 4 000 and more | n | % ⁽¹⁾ | |
| unknown | % 0.0 | 0.0 | 5.9 | 17.7 | 49.0 | 23.5 | 3.9 | 51 | 0.4 | |
| 22-27 | % 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25 | 0.2 | |
| 28-31 | % 63.1 | 35.7 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 84 | 0.6 | |
| 32-33 | % 22.9 | 45.7 | 30.5 | 1.0 | 0.0 | 0.0 | 0.0 | 105 | 0.7 | |
| 34-35 | % 2.5 | 17.7 | 42.7 | 32.5 | 3.1 | 1.2 | 0.3 | 323 | 2.2 | |
| 36 | % 0.2 | 6.5 | 28.5 | 42.0 | 18.8 | 3.4 | 0.5 | 414 | 2.8 | |
| 37 | % 0.0 | 1.4 | 13.7 | 44.4 | 31.3 | 7.8 | 1.3 | 990 | 6.7 | |
| 38 | % 0.0 | 0.3 | 4.3 | 31.3 | 46.3 | 14.9 | 2.9 | 2 444 | 16.6 | |
| 39 | % 0.1 | 0.1 | 1.7 | 19.6 | 49.0 | 25.0 | 4.5 | 3 601 | 24.5 | |
| 40 | % 0.0 | 0.0 | 0.7 | 11.8 | 43.4 | 34.7 | 9.4 | 3 992 | 27.1 | |
| 41 | % 0.0 | 0.0 | 0.5 | 8.2 | 35.1 | 41.0 | 15.2 | 2 638 | 17.9 | |
| ≥ 42 | % 0.0 | 0.0 | 0.0 | 6.1 | 32.7 | 32.7 | 28.6 | 49 | 0.3 | |
| Total | n | 113 | 188 | 637 | 2 889 | 5 996 | 3 853 | 1040 | 14 716 | |
| | % | 0.8 | 1.3 | 4.3 | 19.6 | 40.7 | 26.2 | 7.1 | | 100.0 |

(1) distribution of births by gestational age

Table 34. Preterm birth and low birthweight by vital status and number of newborns (*sample of births in metropolitan France*)

| | 2003 | | n | 2010 | |
|--------------------------------------|-----------------|-------|-------------------|------|-------------|
| | % | p | | % | 95% CI |
| Preterm birth (< 37 weeks) | | | | | |
| All births | | | | | |
| All ⁽¹⁾ | 7.2 (14 669) | 0.485 | 1 092 (14 832) | 7.4 | 7.0 – 7.8 |
| singletons | 5.8 (14 160) | 0.094 | 901 (14 389) | 6.3 | 5.9 – 6.7 |
| twins | 44.9 (506) | 0.429 | 188 (440) | 42.7 | 38.0 – 43.4 |
| Live births | | | | | |
| All ⁽¹⁾ | 6.3 (14508) | NS | 965 (14 696) | 6.6 | 6.2 – 7.0 |
| singletons | 5.0 (14 009) | 0.051 | 782 (14 261) | 5.5 | 5.1 – 5.9 |
| twins | 44.0 (496) | 0.403 | 180 (432) | 41.7 | 37.0 – 42.4 |
| Birthweight < 2 500 grams | | | | | |
| All births | | | | | |
| All ⁽¹⁾ | 8.0 (14 683) | 0.004 | 1054 (14 844) | 7.1 | 6.7 – 7.5 |
| singletons | 6.2 (14 181) | 0.094 | 834 (14 408) | 5.8 | 5.4 – 6.2 |
| twins | 56.3 (499) | 0.048 | 217 (433) | 50.1 | 45.4 – 50.9 |
| Live births | | | | | |
| All ⁽¹⁾ | 7.2 (14 534) | 0.004 | 938 (14 716) | 6.4 | 6.0 – 6.8 |
| singletons | 5.5 (14 039) | 0.102 | 723 (14 285) | 5.1 | 4.7 – 5.5 |
| twins | 55.9 (492) | 0.044 | 212 (428) | 49.5 | 44.8 – 50.3 |

(1) including triplets

Table 35. Medical care and pregnancy outcome for mothers of singletons and twins (sample of women in metropolitan France)

| | Mothers of | | p |
|--|------------|-------|---------|
| | singletons | twins | |
| | % | % | |
| Prenatal visits | | | |
| < 7 | 8.5 | 8.3 | < 0.001 |
| 7-8 | 29.3 | 17.7 | |
| 9-10 | 32.5 | 23.0 | |
| ≥ 11 | 29.6 | 51.0 | |
| | (13 545) | (204) | |
| Number of visits with the maternity ward team⁽¹⁾ | | | |
| 0 | 5.2 | 3.9 | < 0.001 |
| 1-3 | 26.0 | 16.2 | |
| 4-5 | 15.6 | 6.9 | |
| ≥ 6 | 53.2 | 73.0 | |
| | (13 514) | (204) | |
| Hospitalisation during pregnancy | | | |
| yes | 18.2 | 55.4 | < 0.001 |
| no | 81.8 | 44.7 | |
| | (14 066) | (215) | |
| Maternity unit status | | | |
| public (regional hospital, university hospital) | 17.8 | 32.7 | < 0.001 |
| other public | 46.5 | 39.6 | |
| PSPH | 7.5 | 5.0 | |
| other private | 28.3 | 22.7 | |
| | (14 460) | (220) | |
| Maternity unit size | | | |
| < 500 annual deliveries | 2.5 | 1.8 | < 0.001 |
| 500-999 | 15.0 | 8.2 | |
| 1 000-1 499 | 20.7 | 15.9 | |
| ≥ 1 500 | 61.8 | 74.1 | |
| | (14 459) | (220) | |
| Level | | | |
| I | 30.4 | 16.4 | < 0.001 |
| II A | 26.4 | 23.2 | |
| II B | 20.4 | 17.7 | |
| III | 22.7 | 42.7 | |
| | (14 451) | (220) | |
| Onset of labour | | | |
| spontaneous | 66.9 | 39.1 | < 0.001 |
| induced | 22.6 | 26.8 | |
| caesarean | 10.5 | 34.1 | |
| | (14 403) | (220) | |
| Mode of delivery⁽²⁾ | | | |
| spont vaginal delivery | 67.8 | 38.4 | < 0.001 |
| operative delivery | 12.3 | 6.9 | |
| caesarean | 19.9 | 54.8 | |
| | (14 288) | (438) | |
| Mother in resuscitation or intensive care > 24 h | | | |
| yes | 0.5 | 1.0 | NS |
| no | 99.5 | 99.0 | |
| | (13 974) | (209) | |

(1) maternity ward delivery team

(2) sample of births

Table 36. Newborn characteristics of singletons and twins (sample of births in metropolitan France)

| | Children | | p |
|--|-----------------|------------|---------|
| | singletons % | twins % | |
| Gestational age | | | |
| ≤ 31 weeks | 1.3 | 8.4 | < 0.001 |
| 32-33 | 0.6 | 5.5 | |
| 34 | 0.7 | 4.1 | |
| 35 | 1.3 | 7.7 | |
| 36 | 2.4 | 17.1 | |
| 37 | 6.1 | 27.1 | |
| 38 | 16.3 | 25.0 | |
| 39 | 24.9 | 3.9 | |
| ≥ 40 | 46.5 | 1.4 | |
| | (14 389) | (440) | |
| Birthweight | | | |
| < 1 000 grams | 0.7 | 1.6 | < 0.001 |
| 1 000-1 499 | 0.5 | 6.5 | |
| 1 500-1 999 | 1.0 | 12.7 | |
| 2 000-2 499 | 3.6 | 29.3 | |
| 2 500-2 999 | 18.9 | 39.5 | |
| 3 000-3 499 | 41.3 | 10.2 | |
| 3 500-3 999 | 26.8 | 0.2 | |
| ≥ 4 000 | 7.2 | 0.0 | |
| | (14 408) | (433) | |
| Vital status | | | |
| live born | 99.1 | 98.2 | 0.04 |
| stillborn or TOP | 0.9 | 1.8 | |
| | (14 455) | (440) | |
| Twin pregnancy | | | |
| monochorionic | - | 16.4 | (440) |
| bichorial | - | 77.2 | |
| unknown | - | 6.4 | |
| | | | |
| 1-min Apgar score⁽¹⁾ | | | |
| ≤ 5 | 3.6 | 8.6 | < 0.001 |
| 6-7 | 3.4 | 4.3 | |
| 8-9 | 20.5 | 28.6 | |
| 10 | 72.6 | 58.6 | |
| | (14 188) | (420) | |
| 5-min Apgar score⁽¹⁾ | | | |
| ≤ 5 | 0.4 | 2.2 | < 0.001 |
| 6-7 | 1.2 | 1.2 | |
| 8-9 | 5.5 | 11.7 | |
| 10 | 93.0 | 85.0 | |
| | (14 180) | (419) | |
| Neonatal transfer⁽¹⁾ | | | |
| yes same unit | 2.5 | 11.2 | < 0.001 |
| yes same site | 2.5 | 17.8 | |
| yes other site | 0.9 | 4.8 | |
| no | 94.2 | 66.2 | |
| | (13 785) | (393) | |

(1) live born children

Table 37. Medical care and pregnancy outcome by household income⁽¹⁾ (sample of women in metropolitan France)

| | Income from work⁽²⁾ | Other resources or none | |
|--|---------------------------------------|--------------------------------|----------|
| | % | % | p |
| Number of prenatal visits | | | |
| < 7 | 7.0 | 20.2 | <0.001 |
| 7-8 | 29.2 | 29.7 | |
| > 8 | 63.8 | 50.1 | |
| | (12 318) | (1 241) | |
| Prenatal hospitalisation | | | |
| yes | 18.0 | 24.0 | <0.001 |
| no | 82.0 | 76.0 | |
| | (12 435) | (1 283) | |
| Gestational age⁽³⁾ | | | |
| < 37 weeks | 6.3 | 8.5 | 0.003 |
| ≥ 37 | 93.7 | 91.5 | |
| | (12 640) | (1 296) | |
| Birthweight⁽³⁾ | | | |
| < 2 500 g | 5.9 | 9.6 | <0.001 |
| ≥ 2 500 g | 94.1 | 90.4 | |
| | (12 642) | (1 304) | |
| Neonatal transfer⁽⁴⁾ | | | |
| yes | 8.1 | 11.8 | <0.001 |
| no | 91.9 | 88.2 | |
| | (12 475) | (1 291) | |

(1) household income or woman's income for single mother

(2) income from work; benefits related to unemployment were not included

(3) sample of births

(4) sample of live born children : transfer or special hospitalisation in the maternity unit

Table 38. Social characteristics and prenatal care by existence of financial hardship⁽¹⁾ (sample of women in metropolitan France)

| | Financial hardship | | p |
|--|--------------------|----------|--------|
| | no % | yes % | |
| Live with partner | | | |
| yes | 93.3 | 83.3 | <0.001 |
| no | 6.7 | 16.7 | |
| | (13 215) | (611) | |
| Nationality | | | |
| French | 88.1 | 69.1 | <0.001 |
| other | 11.9 | 30.1 | |
| | (13 226) | (611) | |
| Educational level | | | |
| primary or none | 1.9 | 6.3 | <0.001 |
| secondary: general | 7.7 | 15.0 | |
| secondary: technical | 17.5 | 22.6 | |
| high school: general | 9.1 | 13.9 | |
| high school: technical | 10.6 | 9.9 | |
| some college | 21.9 | 12.9 | |
| college | 18.0 | 12.4 | |
| post-graduate | 13.3 | 6.9 | |
| | (13 182) | (605) | |
| Household income | | | |
| income from work | 91.5 | 73.3 | <0.001 |
| benefits, other financial support or none | 8.5 | 26.7 | |
| | (13 108) | (595) | |
| Social Security at the beginning of pregnancy | | | |
| yes | 99.3 | 93.8 | <0.001 |
| no | 0.7 | 6.3 | |
| | (13 210) | (608) | |
| Number of prenatal visits | | | |
| < 7 | 7.7 | 19.0 | <0.001 |
| 7-8 | 29.4 | 24.6 | |
| > 8 | 62.9 | 56.4 | |
| | (13 055) | (589) | |
| Number of ultrasound examinations | | | |
| ≤ 3 | 31.9 | 37.6 | 0.004 |
| > 3 | 68.1 | 62.4 | |
| | (13 103) | (601) | |

(1) women who have not had visits or examinations, including dental care, for financial reasons

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