BETTER STATISTICS FOR BETTER HEALTH for Pregnant Women and Babies in Europe in 2015

New European Perinatal Health Report released by the Euro-Peristat project

The health of newborn babies and their mothers are key indicators of the health and wellbeing of populations. Although stillbirth and infant mortality rates have fallen substantially in recent decades, there are still major challenges to achieving the goal of providing an optimal start in life for all children and families. Looking at the health of newborn babies and their mothers through a European lens gives us insight into these challenges and possible ways of tackling them. One of the obstacles to making comparisons between European countries is that they collect their national statistics in different ways, so it is difficult to do valid comparisons.

The European Perinatal Health Report is the fourth report produced by the Euro-Peristat collaboration, which was established to deal with this problem. To produce the report, over 100 participating members in all the current EU member states and Iceland, Norway and Switzerland contributed data from their national statistical systems. Euro-Peristat is coordinated by Inserm, the French National Institute of Health and Medical Research.

Euro-Peristat has defined a set of 10 core and 20 recommended indicators and uses them to monitor perinatal health in Europe. This new report is based on data for over five million births in the year 2015 compiled from public national statistical systems to construct all 10 core indicators and two of the 20 recommended indicators. Euro-Peristat works to produce high quality, comparable indicators by using common inclusion criteria and categories, followed by extensive data checking with the active involvement of network members from all participating countries. Comparisons were made with data for births in 2010 from Euro-Peristat’s previous report.

REPORT HIGHLIGHTS

Stillbirth and neonatal mortality rates were lower compared with 2010 in Europe overall, but both the rates and the extent of the decrease varied widely between countries

Stillbirths
Usually only stillbirths after 28 or more weeks of pregnancy are included in international comparisons

- The median stillbirth rate at 28 weeks of gestation and over was 2.7 per 1000 total live and still births.
- Rates ranged from rates below 2.3 in in Cyprus, Iceland, Denmark, Finland, and the Netherlands to 3.5 or more in Slovakia, Romania, Hungary, and Bulgaria.
- Including stillbirths between 24 and 27 weeks of gestation, previously excluded from international comparisons, led to a median rate of 3.4 per 1000, 26% higher. The ranking of countries remained similar.
- Stillbirth rates in 2015 were 5% lower overall compared with 2010. But in some countries such as the Netherlands, Scotland, and Poland the rate fell to a greater extent. In many other countries, the stillbirth rate did not decrease.

Neonatal mortality
Neonatal deaths are deaths of babies before 28 days after live birth. Babies born before 22 weeks of pregnancy were excluded in line with international definitions

- The median neonatal mortality rate for birth at 22 weeks of gestation and over was 2.2 per 1000 live births.
- Rates ranged from 1.5 per 1000 live births or lower in Slovenia, Iceland, Finland, Norway, the Czech Republic, Estonia, and Sweden to over 3.5 in Northern Ireland, Malta, Romania, and Bulgaria. Some of this variation in neonatal mortality rates is related to differences in national policies about termination of pregnancy for fetal anomalies.
- Overall, neonatal mortality rates in 2015 were 10% lower than in 2010. In some countries, neonatal mortality rates were higher in 2015, however.

Infant mortality
Infant deaths are deaths of babies under a year after live birth. Babies born before 22 weeks of pregnancy were excluded in line with international definitions

- The median infant mortality rate was 3.1 per 1000 live births.
- Rates ranged widely with some countries reporting rates of 2 and lower, while other countries had rates of 5 per 1000 or more.

Rates of preterm birth and low birthweight did not change overall, but there were wide geographical variations

Low birth weight
Low birth weight is defined as a birth weight under 2500 grams

- Low birthweight babies accounted for less than 4.5% of all births in Iceland, Sweden, Finland, and Estonia and more than 8.0% in Spain, Hungary, Portugal, Greece, Bulgaria, and Cyprus.
- The percentage of low birthweight babies was significantly lower in 2015 compared with 2010 in some countries, such as Norway, Greece, and Austria and significantly higher in others such as Iceland, France, Ireland, Northern Ireland, and Portugal.

Preterm birth
Preterm birth is birth before 37 completed weeks of pregnancy
The median preterm birth rate was 7.3%.

Preterm birth rates ranged widely, from less than 6% in Finland, Latvia, Estonia, Sweden, and Lithuania to more than 8.0% in Belgium, Scotland, Romania, Germany, Hungary, Greece, and Cyprus.

Comparisons in the preterm birth rate in 2010 and 2015 differed widely between countries. It was significantly lower in 2015 in 7 countries, including the Netherlands, Austria, and the Czech Republic; and significantly higher in 8 countries: Portugal, England and Wales, Poland, Ireland, France, Cyprus and Scotland.

**Poor quality statistics continue to hamper European surveillance of maternal deaths**

Maternal death is the death of a woman while pregnant or within 42 days of the end of pregnancy for any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Most countries rely on routine cause of death statistics to count maternal deaths, despite well-known under-reporting, especially where death does not take place immediately or where the mother has other complicating conditions. In addition, as maternal deaths are now rare in high income countries, rates are based on small numbers of deaths. These factors make it difficult to detect differences between countries or over time in maternal mortality ratios.

Seven of the countries also use enhanced systems to carefully ascertain and analyse maternal deaths. Maternal mortality appears to have declined in countries that carefully count and analyse maternal deaths. Since many enhanced systems include audits and confidential enquiries, these systems may contribute to improving care for pregnant women and therefore the results from these countries may not apply more generally.

Other European countries should consider establishing enhanced systems so that they can also provide reliable statistics on maternal deaths.

**Differences in mode of delivery have widened, with caesarean section rates rising to over 40% in some countries**

The median caesarean section rate was 27.0%.

A quarter of countries had rates below 21%. Iceland, Finland, Norway, and the Netherlands had the lowest rates, under 18%.

In contrast, Italy, Hungary, Poland, Bulgaria, Romania, and Cyprus had rates over 35%.

Overall, caesarean birth rates were 4% higher in 2015 compared with 2010.

Much greater increases occurred in countries such as Romania, rising from 36.9% to 46.9%, Poland, rising from 34.0% to 42.2%, Hungary rising from 32.3% to 39%, and Scotland rising from 27.8% to 32.5%.

In other countries, caesarean section rates decreased: Lithuania, Latvia, Portugal, Estonia, Italy, and Norway.
For babies in a breech (feet first) presentation, the median caesarean rate was 89%, with a range from 64.3% to 100%. In 4 countries, Norway, Latvia, Finland, and France, 25% or more breech babies were born vaginally.

Ten countries only had data overall rates, so no data were available about subgroups, such as babies in a breech presentation. Unfortunately, many of these countries are those with high rates of caesarean births, where evaluating current practices is particularly important.

There has been an increase since 2010 in the relative size of many subgroups of childbearing women at higher risk of adverse outcome and this presents a common challenge.

Multiple births
- The median multiple pregnancy rate was 16.7 per 1000 women delivering a live or stillbirth.
- The multiple birth rate ranged from over 19 per 1000 women in Ireland, Germany, Slovenia, Spain, and Cyprus to under 14 per 1000 women in Romania, Slovakia, Poland, Greece, Finland, and Lithuania.

Age at childbirth
- The median percentage of women having babies at 35 years of age or older was 20.8%.
- Percentages exceeded 29% in Portugal, Greece, Ireland, Italy, and Spain and were less than 15% in Bulgaria, Romania, and Poland.
- There is a common trend toward later age at childbirth. Overall the percentage of mothers aged 35 years or older increased by 16% between 2010 and 2015, with the biggest increases in Cyprus, Hungary, the Czech Republic, and Portugal.
- Teenage pregnancy is increasingly uncommon in Europe; in 21 countries, fewer than 3% of women were under 20 years of age at the birth of their child. This percentage exceeded 6% in several countries, however: Slovakia, Hungary, Romania, and Bulgaria.

Obesity
- Although obesity is known to be increasing among women in childbearing age, only 12 of the 31 countries participating in Euro-Peristat could provide this information.
- The median prevalence of obesity before pregnancy, as defined by a maternal body mass index of 30 or greater, was 13.2% in these countries.
- The percentage ranged from 7.8 to 25.6. In 7 of the 9 countries that also had data for 2010, percentages were higher in 2015.

Smoking in pregnancy
- Only 19 countries had data on smoking in pregnancy but these had good news to report. Overall, the percentage of women smoking during pregnancy in 2015 was 13% lower than in 2010.
- Further improvement is needed, however. In a quarter of the 19 countries with data, more than 12.5% of women smoked, with percentages highest in Valencia in Spain (18.3), Wales (17.3), France (16.3), and Northern Ireland (14.3). In contrast, in Norway, Sweden, and Lithuania, fewer than 5% of women smoked during pregnancy.
Europe needs continuous and more complete monitoring

This report illustrates the extent to which it is feasible to compile comparable data about the health of mothers and babies and the importance of doing so. The set of Euro-Peristat indicators should represent minimum standards for national reporting, but many countries do not have all the data required. Data availability overall is good for the core indicators, but tabulations by subgroup are not available for all indicators. Many countries were unable to provide data on maternal smoking or prepregnancy body mass index, although these are needed to evaluate policies to improve population health.

This report includes data for 2015 for all 10 Euro-Peristat core indicators, but only two of the 20 recommended indicators. In the absence of funding for a full data collection exercise, the network decided to collect core indicators to be able to update essential basic information related to the health of babies and their mothers. We hope that in the future, sustainable funding for data collection will make it possible to compile the full set of Euro-Peristat indicators related to the wider set of health and healthcare factors as well as social determinants of health, such as maternal education and country of birth. These data are needed to address the high priority questions of health inequalities on a European scale.

Finally, this report is based on data for two single years five years apart and therefore suffers from a lack of continuous time series data. We cannot accurately describe trends in the indicators without annual data. Many of the participating countries have relatively small populations and rates fluctuate from year to year. A goal for current health information initiatives should be to create a sustainable structure and a funding stream to support collection, data cleaning and validation, and analysis of data from routine statistical systems in European countries on an annual basis.

NOTES TO EDITORS:


- Euro-Peristat is coordinated by the Institut national de la santé et de la recherche médicale (INSERM) in Paris

- Funding: Support for the coordination of Euro-Peristat comes from the European Health Programme through the Information for Action (InfAct) Joint Action, as well as the BRIDGE Health project. Support is also provided by the participating institutions that provide routine statistical data to the Euro-Peristat coordination team and by our network of experts who contribute their time and expertise.

- The names and affiliations of all the collaborators from each participating country and their contact details is listed in the Appendix 1 of the report and available on our website:
Recent Euro-Peristat publication on stillbirths in the Lancet