



# Better Statistics for Better Health for Mothers and their Babies

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# Challenges to an optimal start for babies and families

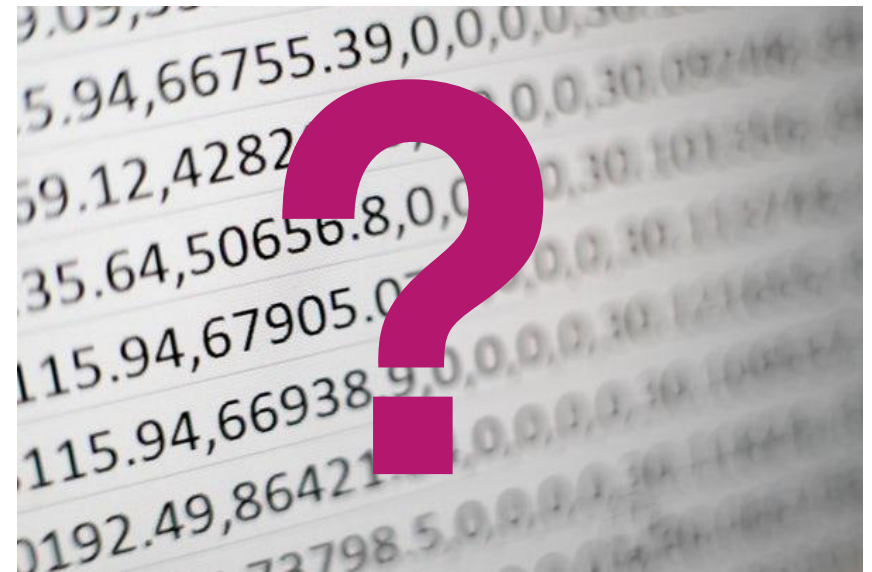
- 40,000 families in Europe experience the loss of a child, either a stillbirth or a neonatal death
- Poor success in prevention means 350,000 preterm births and 75,000 very preterm births every year
- Over half of maternal deaths are associated with sub-standard care; 1-2% of mothers experience severe morbidity
- Some risk factors are increasing: older age at childbirth, multiplicity, overweight and obesity
- Perinatal death and preterm birth more common among poor and socially disadvantaged families

# Maternal and newborn health viewed through a European lens

- Similar access to medical knowledge and universal insurance coverage for mothers and babies
  - European countries vary enormously in the care and support they provide during pregnancy and to newborn babies
  - We can benefit from European success stories and learn from each other through working collaboratively
- But to do so, we need to be able to compare health and care between countries

# Ignorance in the age of big data

- Data available in each country, but not compiled in international databases
  - Preterm birth
  - Multiple birth rate
- Data not available in every country
  - Smoking during pregnancy
  - Maternal body mass index (obesity)



# The EURO-PERISTAT Project

- Aim : to monitor perinatal health in the EU based on valid and reliable routinely collected indicators
- Scope : Maternal, fetal and infant health associated with pregnancy, delivery and the postpartum period
- Co-funded by the Public Health Programme
- InfAct Joint Action



Co-funded by  
the Health Programme  
of the European Union



# Supported by institutions and experts in 31 countries

Austria



Belgium



Bulgaria



Croatia



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Slovenia



Spain



Sweden



Switzerland



UK



[www.europeristat.com](http://www.europeristat.com)



# Key principles



- **Valid and comparable** indicators collected using a common protocol and by risk groups
- A limited number of **feasible** indicators
- **Population-based routine** data sources
- **Broad geographic coverage** to promote inclusiveness, equity and diversity
- **Network of specialists** to analyse resulting in >50 publications using Euro-Peristat data



# Indicators

- 10 Core
- 20 Recommended
- Four categories
  - Fetal/neonatal, child health
  - Maternal health
  - Population characteristics
  - Health services

Table 2.1

EURO-PERISTAT indicators (C=core, R=recommended)

## FETAL, NEONATAL, AND CHILD HEALTH

- C1: Fetal mortality rate by gestational age, birth weight, and plurality
- C2: Neonatal mortality rate by gestational age, birth weight, and plurality
- C3: Infant mortality rate by gestational age, birth weight, and plurality
- C4: Distribution of birth weight by vital status, gestational age, and plurality
- C5: Distribution of gestational age by vital status and plurality
- R1: Prevalence of selected congenital anomalies
- R2: Distribution of Apgar scores at 5 minutes
- R3: Fetal and neonatal deaths due to congenital anomalies
- R4: Prevalence of cerebral palsy

## MATERNAL HEALTH

- C6: Maternal mortality ratio
- R5: Maternal mortality by cause of death
- R6: Incidence of severe maternal morbidity
- F7: Incidence of tears to the perineum

## POPULATION CHARACTERISTICS/RISK FACTORS

- C7: Multiple birth rate by number of fetuses
- C8: Distribution of maternal age
- C9: Distribution of parity
- R8: Percentage of women who smoked during pregnancy
- R9: Distribution of mothers' educational level
- R10: Distribution of parents' occupational classification
- R11: Distribution of mothers' country of birth
- R12: Distribution of mothers' prepregnancy body mass index (BMI)

## HEALTHCARE SERVICES

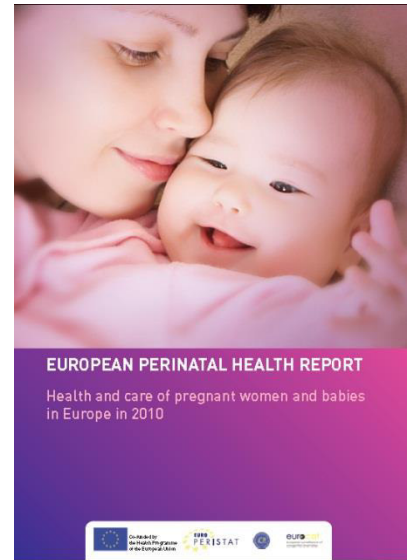
- C10: Mode of delivery by parity, plurality, presentation, previous caesarean section, and gestational age
- R13: Percentage of all pregnancies following treatment for subfertility
- R14: Distribution of timing of first antenatal visit
- R15: Distribution of births by mode of onset of labour
- R16: Distribution of place of birth by volume of deliveries
- R17: Percentage of very preterm babies delivered in units without a neonatal intensive care unit (NICU)
- R18: Episiotomy rate
- R19: Births without obstetric intervention
- R20: Percentage of infants breast fed at birth



# Euro-Peristat Reports and publications

- For the year 2000
  - *the European Journal of Obstetrics and Gynecology*, Vol 111, Supp 1, 28 November 2003
- For the year 2004
  - European Perinatal Health Report (2008)
- For the year 2010
  - European Perinatal Health Report (2013)
- More than 60 publications using Euro-Peristat data

*Data available on our website: [www.europeristat.com](http://www.europeristat.com)*



# European Perinatal Health Report in 2015

26 November 2018



## EUROPEAN PERINATAL HEALTH REPORT

Core indicators of the health and care of pregnant women and babies in Europe in 2015



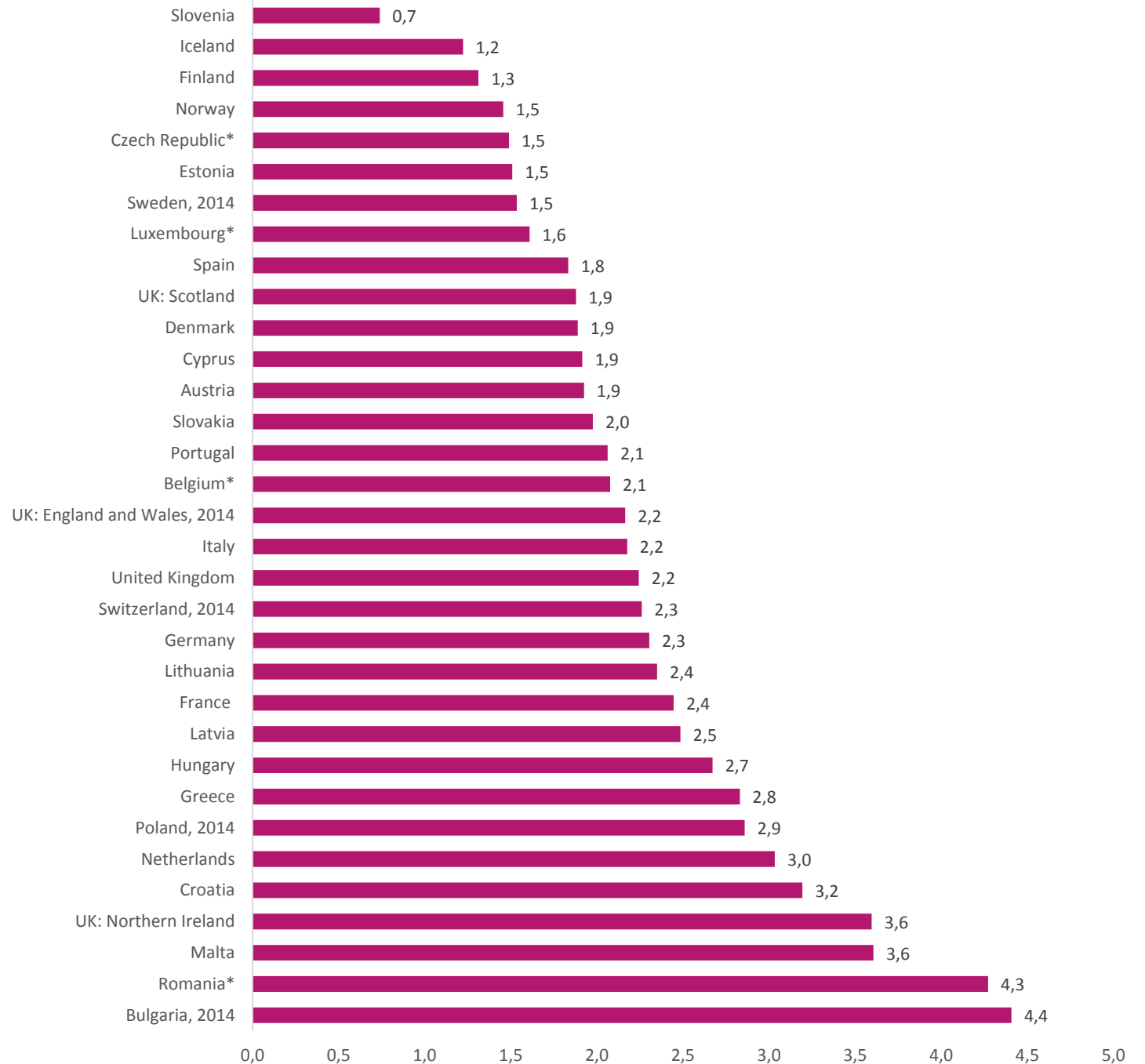
Co-funded by  
the Health Programme of  
the European Union



# Neonatal mortality at 22 weeks of gestation or more per 1000 total births in 2015

➤ Differences are  
over twofold

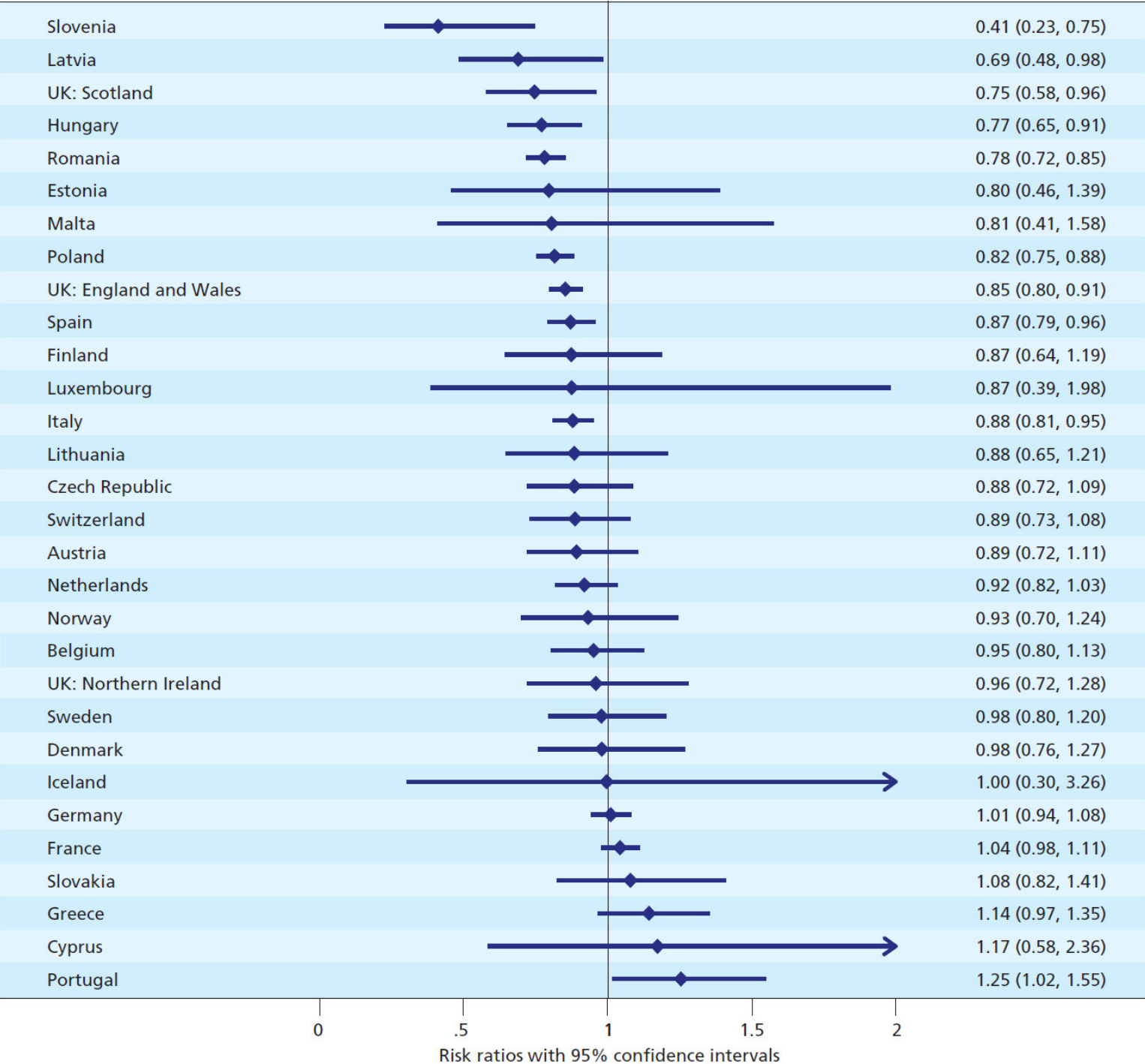
Lows of 1.5 per  
1000 to highs of  
3.0 per 1000 And  
over



# Comparison of neonatal mortality rates in 2015 with 2010

Overall, there is a 10% decline

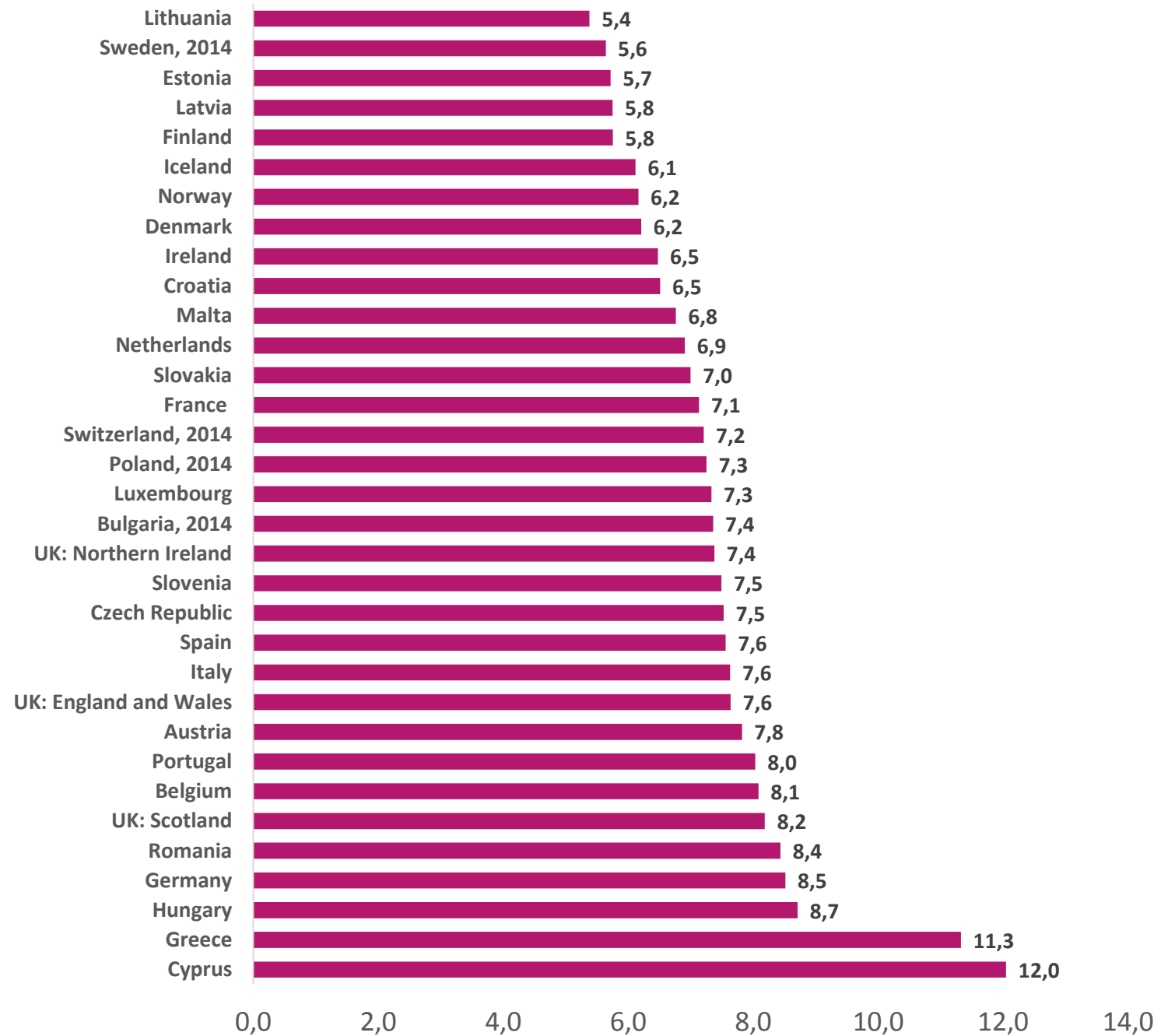
But with high heterogeneity



**Percentages of  
preterm birth, <37  
weeks of  
gestation in 2015**

**Lows <6% to  
highs >8%**

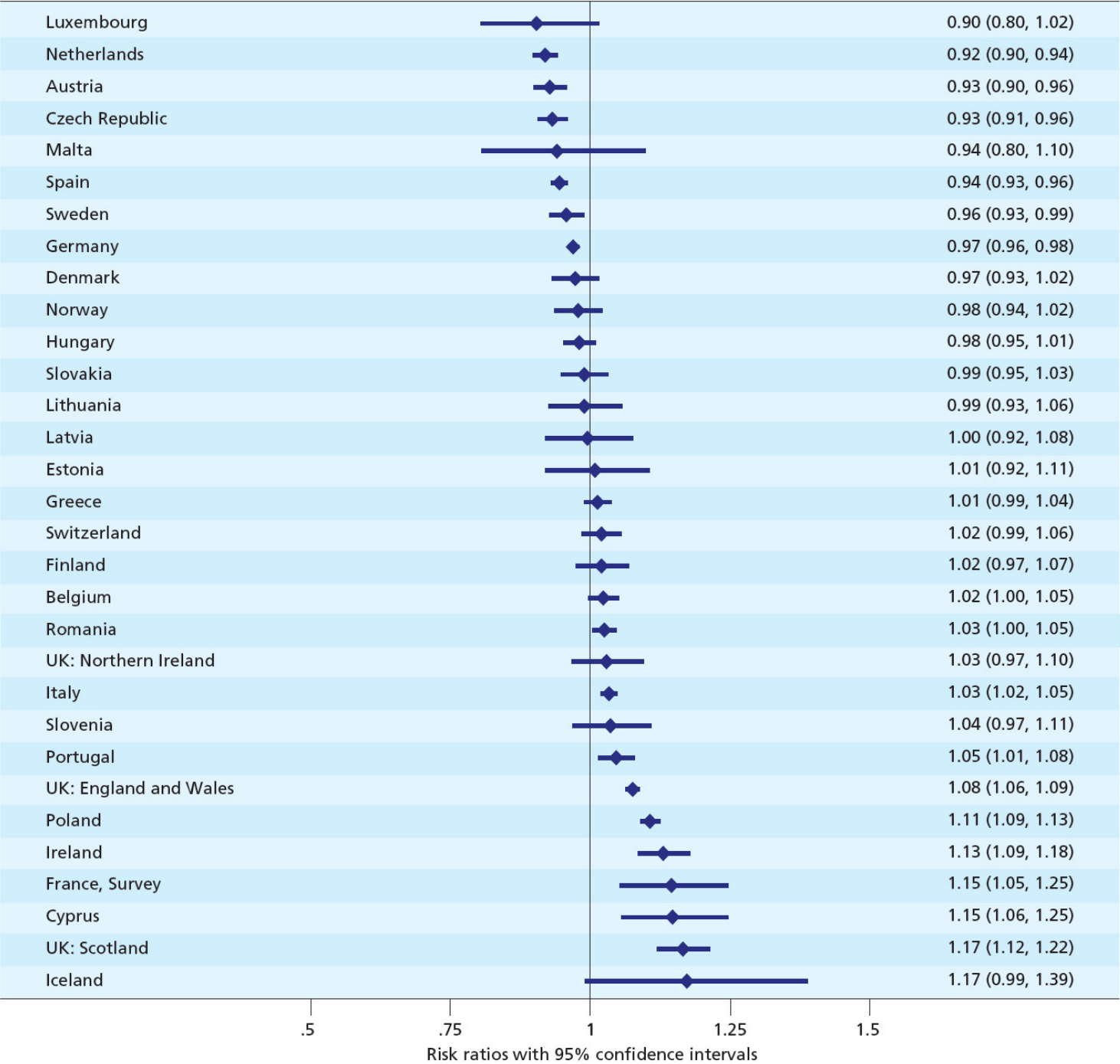
**2% of preterm  
births in Europe  
= 100,000 babies**



# Comparison of preterm birth rates in 2015 with 2010

On average, rates were stable

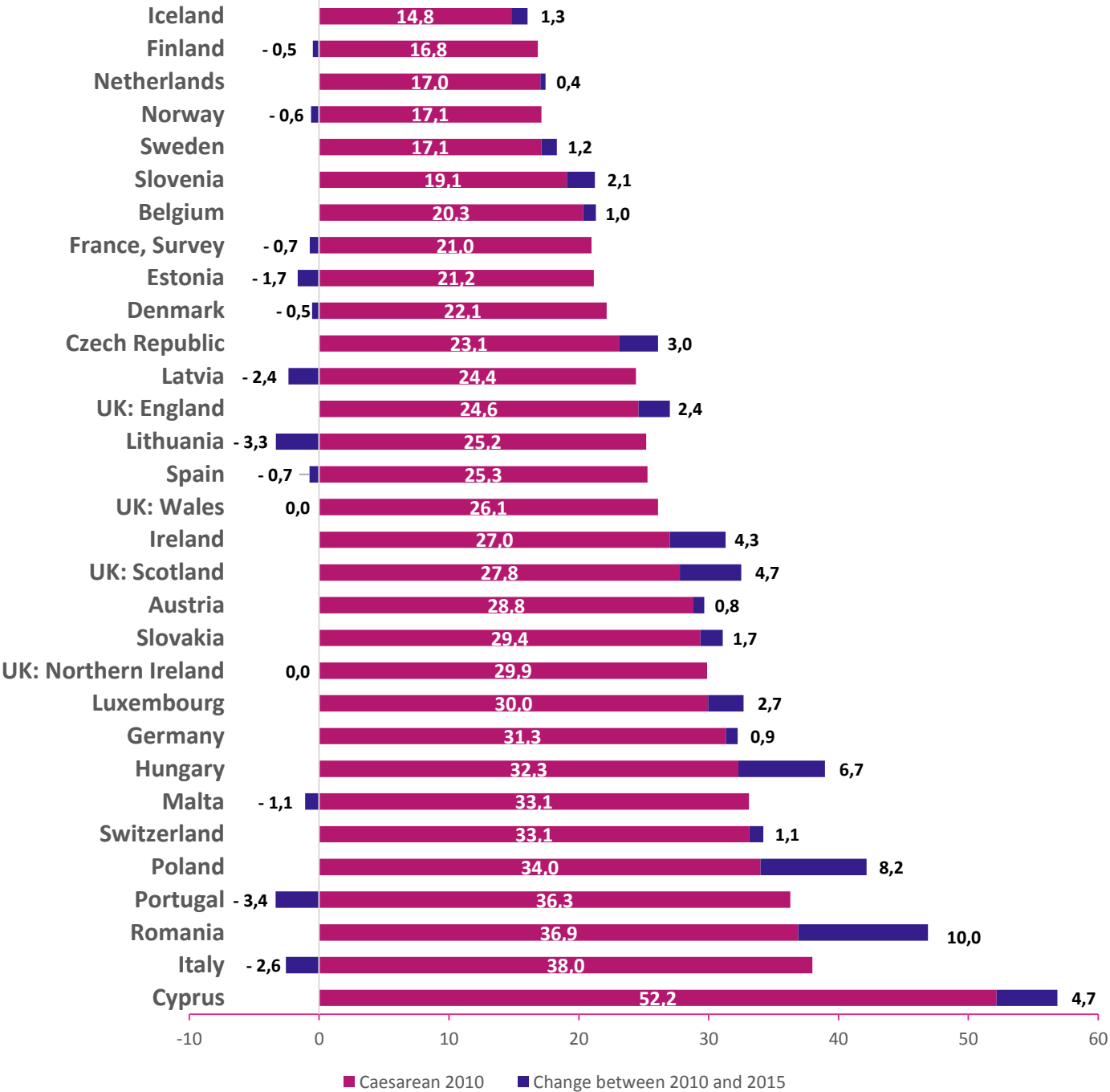
But some countries experience increases & others decreases





# Caesarean section rate in 2010 and difference between 2010 and 2015

Widening disparities with over 40% rates in some countries





# Summary

- Europe has strong models for care for pregnant women and newborns (low mortality, low preterm birth, low intervention rates)
- However, large disparities persist between European countries, showing that improvements are possible
- Changes over time are very different in terms of mortality risks, risk factors and caesarean section
- Investigation of high performing countries (not always the same ones!) is needed to promote and to share best practices
- Tell your national public health institutes in *InfAct Joint Action* that it is important to ensure sustainable, annual reporting for maternal and newborn health

Thank you

