



# **COLLABORATION WITH OECD: HOW TO IMPROVE DATA ON MORTALITY?**

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acknowledging OECD secretariat**

# EURO-PERISTAT Project

- ▶ *Aim: to develop a system for monitoring perinatal health in the EU*
- ▶ Collaboration with EUROSTAT
  - ▶ Improved data in the future, when population statistics and cause-of-death statistics start to collect more detailed data on stillbirth (on voluntarily based, though).
  - ▶ Vision: Micro data collection through EUROSTAT?
- ▶ Collaboration with OECD



# PILOT DATA COLLECTION ON INFANT MORTALITY : RESULTS AND PROPOSED NEXT STEPS

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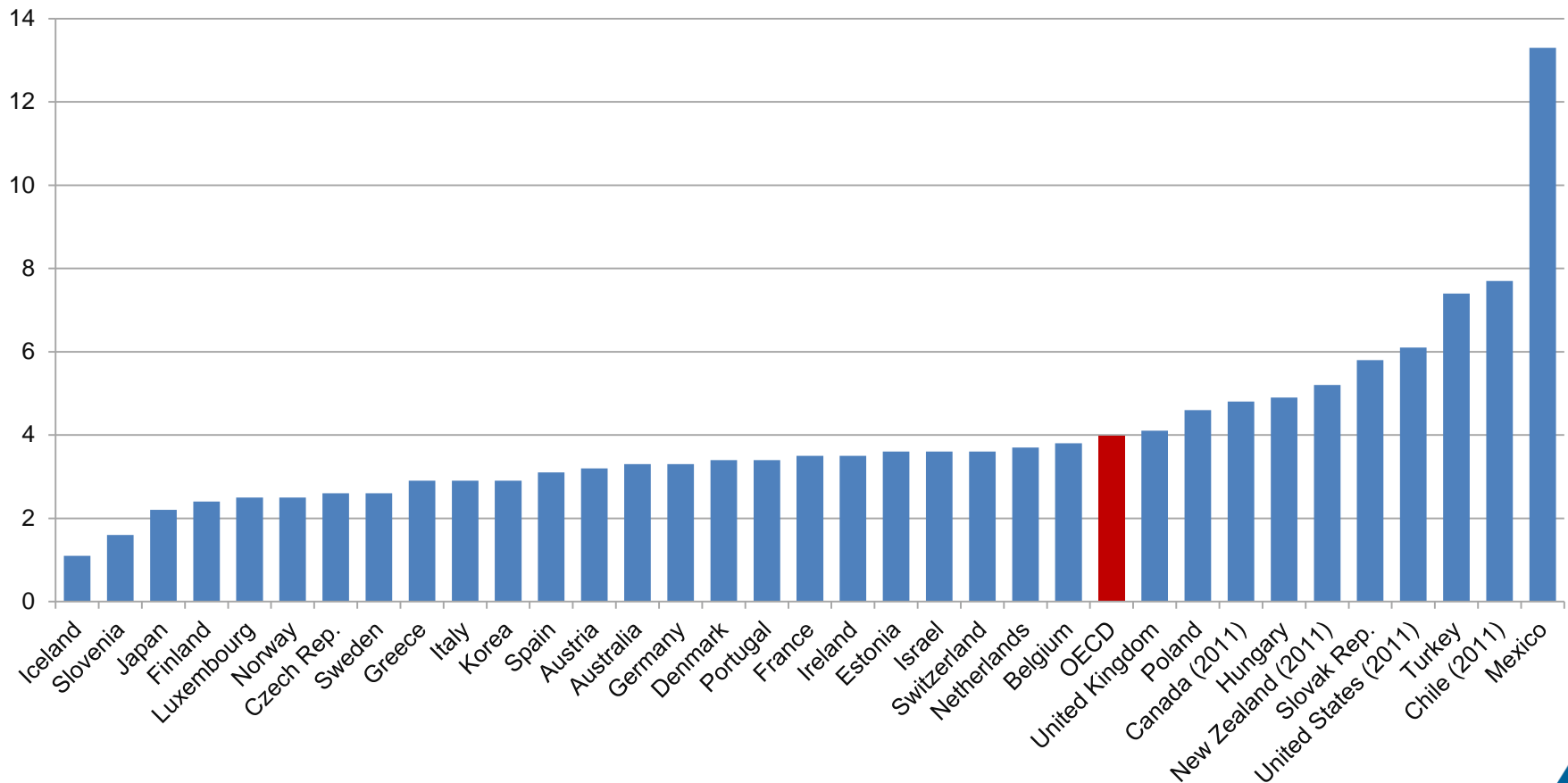
OECD Health Data National Correspondents

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# Current data collection


## Infant mortality rates, per 1 000 live births (2012 or nearest year)



Source: OECD Health Statistics 2014.



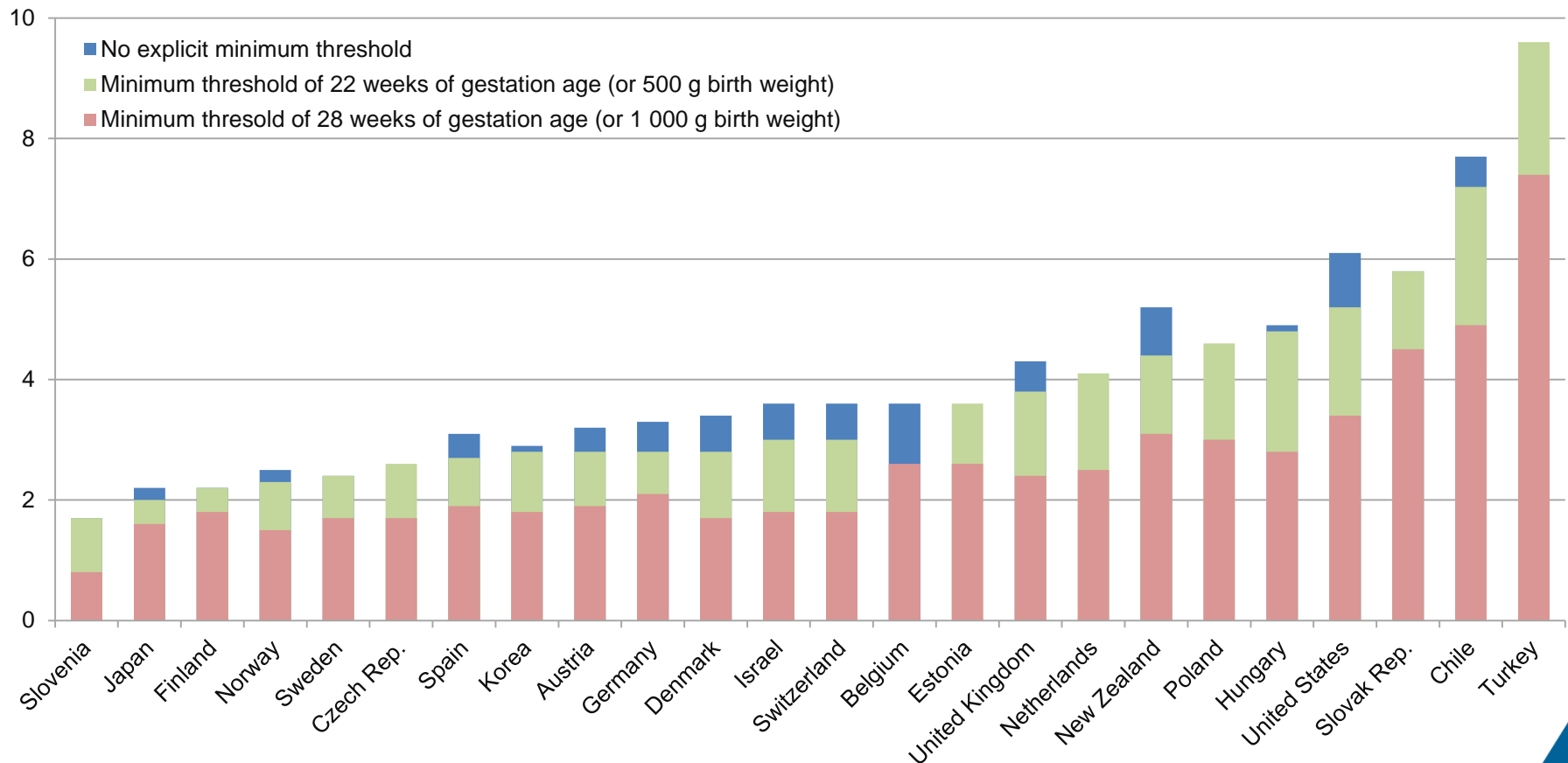
# Issue on data comparability

- No minimum threshold used in current OECD definition.
  - Variations across countries in registering births/deaths of extremely preterm babies at the borderline of viability.
  - May affect both the rates and the country ranking.
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- Pilot data collection based on different minimum thresholds:
    - No explicit minimum threshold
    - Minimum threshold of 22 weeks of gestation age (or 500 grams birth weight)
    - Minimum threshold of 24 weeks of gestation age
    - Minimum threshold of 28 weeks of gestation age (or 1 000 grams birth weight)



# Results from the pilot data collection

## Infant mortality rates, per 1 000 live births (2012 or nearest year)



Note: Countries are ranked according to a minimum threshold of 22 weeks of gestation age (or 500g birth weight).



# Change in international ranking based on different minimum thresholds

No explicit  
minimum  
threshold

Slovenia  
Japan  
Finland  
Sweden  
Norway  
Czech Rep.  
Korea  
Spain  
Austria  
Germany  
Denmark  
Israel  
Switzerland  
Belgium  
Estonia  
Netherlands  
United Kingdom  
Poland  
Hungary  
New Zealand  
Slovak Rep.  
United States  
Chile  
Turkey

Minimum  
threshold of 22  
weeks (or 500g)

Slovenia  
Japan  
Finland  
Norway  
Sweden  
Czech Rep.  
Spain  
Korea  
Austria  
Germany  
Denmark  
Israel  
Switzerland  
Belgium  
Estonia  
United Kingdom  
Netherlands  
New Zealand  
Poland  
Hungary  
United States  
Slovak Rep.  
Chile  
Turkey

No explicit  
minimum  
threshold

Slovenia  
Japan  
Finland  
Sweden  
Norway  
Czech Rep.  
Korea  
Spain  
Austria  
Germany  
Denmark  
Israel  
Switzerland  
Belgium  
Estonia  
Netherlands  
United Kingdom  
Poland  
Hungary  
New Zealand  
Slovak Rep.  
United States  
Chile  
Turkey

Minimum  
threshold of 28  
weeks (or 1000g)

Slovenia  
Norway  
Japan  
Sweden  
Czech Rep.  
Denmark  
Finland  
Korea  
Israel  
Switzerland  
Spain  
Austria  
Germany  
United Kingdom  
Netherlands  
Belgium  
Estonia  
Hungary  
Poland  
New Zealand  
United States  
Slovak Rep.  
Chile  
Turkey



# Recommendations and practical issues

- Introduce a minimum threshold of 22 weeks of gestation age (or birth weight of 500 g) in OECD definition.

To improve data comparability

By excluding extremely small babies who are registered in different ways

While continuing to capture most preterm babies whose life may be saved nowadays

## Practical issues

- May have to start collecting data directly from European countries (rather than extracting them from Eurostat Database)
- If no data available: « No minimum threshold » used as a proxy + footnote.



# DISCUSSION

- National correspondents are invited to comment on:
  - the desirability to introduce a minimum threshold of 22 weeks of gestation age (or 500 g birth weight) in the definition.
  - the practical issues related to this change of definition.

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# Indicators of fetal, neonatal and infant mortality

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- ▶ Differences between countries in recording of births and deaths at borderline viability
- ▶ These births are a small proportion of total births
- ▶ The majority of these births are either fetal deaths or live births followed by a neonatal death
- ▶ **They have a significant impact on mortality statistics**
- ▶ Valid comparisons of fetal and neonatal mortality rates across countries thus require common inclusion limits



# Recording of live births

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- ▶ WHO definition of a live birth is based on signs of life irrespective of gestational age or birthweight
- ▶ But practical difficulties in interpreting true signs of life
- ▶ Recording of live births affected by:
  - ▶ Criteria for recording of fetal deaths
  - ▶ Rules governing maternity and other pregnancy benefits
  - ▶ Rules governing burial
  - ▶ Medical practices related to intervention at the limits of survival



# Euro-Peristat recommendations

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- ▶ Collect data on all births starting at 22 weeks of gestational age (or if gestational age is missing, 500 g)
  - ▶ terminations of pregnancy
  - ▶ stillbirths
  - ▶ live births
- ▶ Collect data by individual weeks of gestational and birth weight categories (in 500 g intervals) and for multiples and singleton births



# Euro-Peristat recommendations

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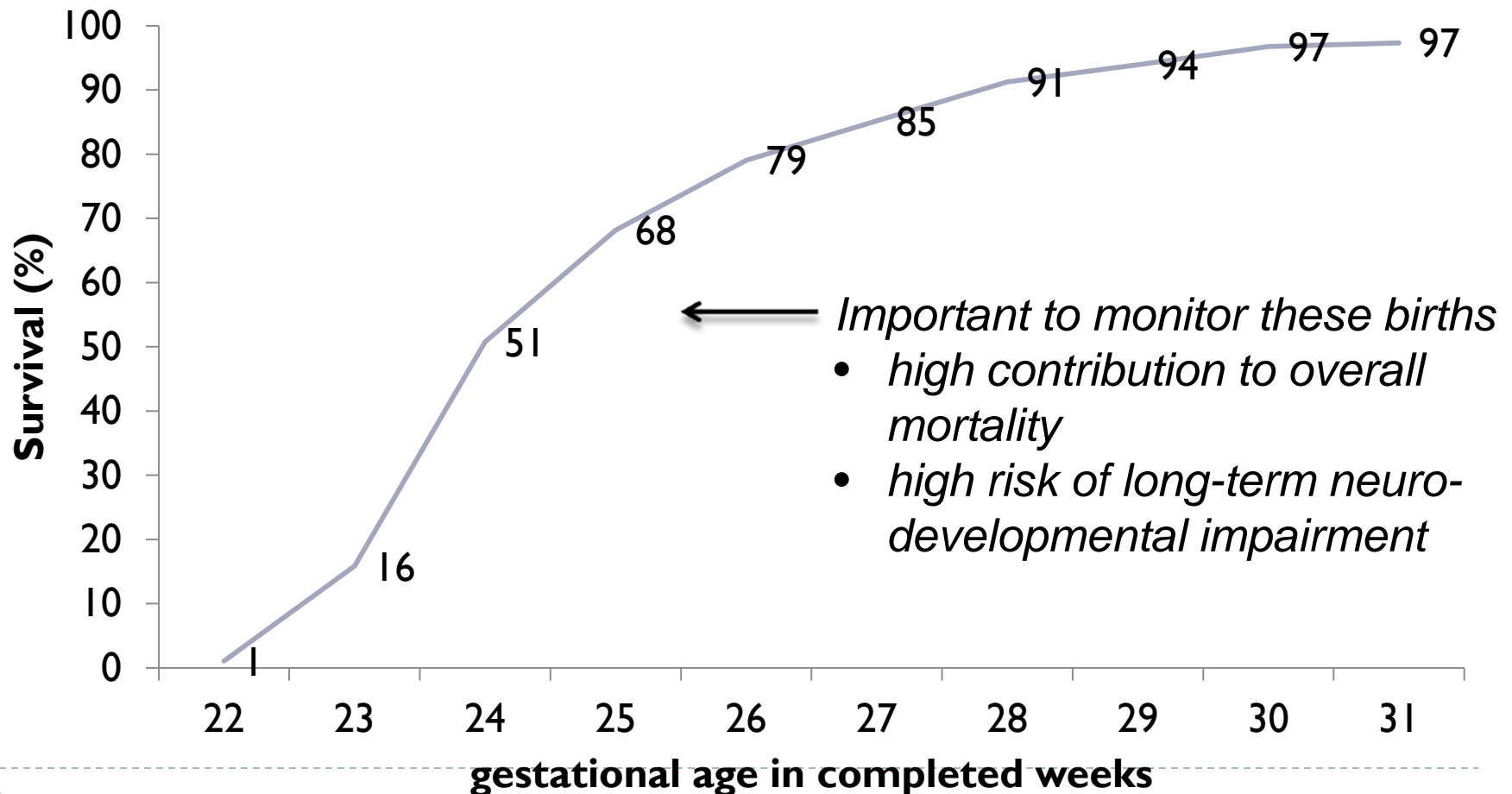
## ► Justification:

- No survival below 22 weeks (at 22 weeks, extremely rare)
- Having common guidelines for stillbirths and live births improves data quality and interpretation
- 22 weeks is most common cutoff for stillbirth registration in Europe
- Monitor highest risk births
- Provide high quality, targeted perinatal health indicators on high risk sub-groups



# Survival to discharge home after live birth

EPICE cohort of 7900 very preterm births from 19 European regions in 2011/12



# Perinatal mortality and stillbirth

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- ▶ More comprehensive measure of pregnancy outcomes
- ▶ More comparable measure of deaths during or immediately after delivery
- ▶ Better assessment of obstetric care
- ▶ High burden of disease



# Feasibility and next steps

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- ▶ High-income countries collect data on births and deaths by gestational age and birthweight and can follow these guidelines (for fetal, neonatal and infant mortality)
- ▶ Euro-Peristat collects data on mortality by gestational age and birthweight in order to produce rates using a number of thresholds
- ▶ Too complex for an international database covering a wide range of health topics
- ▶ Collaboration Euro-Peristat – OECD for next Euro-Peristat report

