Overview of ECDC’s existing guidelines and activities to prevent mother-to-child transmission of hepatitis B and C

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Viral Hepatitis B and C Prevention Board Meeting
Vienna, May 2017
ECDC activities relating to MTCT

1. Collection of data:
   - Notification based surveillance data
   - Estimates of prevalence among pregnant women
2. Two surveys which included issues related to antenatal screening in EU/EEA countries (2009, 2013)
3. Publication of scientific advice relating to antenatal screening, 2017
4. Future plans
Collection of data: notification data

- ECDC collects data on newly diagnosed cases of acute and chronic HBV and HCV across EU/EEA countries
- Countries requested to report data on most likely route of transmission
- Completeness of 2015 data on reported route of transmission was low:
  - HBV – 30% acute; 9% chronic
  - HCV – 67% acute; 26% chronic
- Among cases with known route of transmission in 2015, cases attributed to MTCT:
  - HBV: <1% acute; 65% chronic
  - HCV: 0% acute; 1% chronic
Collection of data: prevalence estimates

- Systematic review conducted for estimates of prevalence for HBV and HCV in EU/EEA countries published between 2005 and 2015 in general population and key risk groups
- 32 eligible studies among pregnant women identified: 8 countries with high quality estimates for HBV; 4 for HCV
- Estimates among pregnant women higher than those in general population

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<tr>
<th>HBsAg in pregnant women: Prevalence estimates and CIs from studies with a low risk of bias</th>
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<tbody>
<tr>
<td>Denmark 0.3% (0.2-0.3) N=201353 pooled</td>
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<tr>
<td>France 0.8% (0.6-0.7) N=N/R</td>
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<tr>
<td>Greece 2.9% (2.4-3.5) N=3384</td>
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<td>Italy 0.8% (0.7-1.0) N=26951 pooled</td>
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<tr>
<td>Netherlands 0.3% (0.3-0.4) N=582218 pooled</td>
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<tr>
<td>Norway 0.1% (0.0-0.3) N=1668</td>
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<tr>
<td>Spain 0.1% (0.0-0.5) N=1534</td>
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<tr>
<td>United Kingdom 0.5% (0.4-0.5) N=167398 pooled</td>
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<th>Anti-HCV in pregnant women: Prevalence estimates and CIs from studies with a low risk of bias</th>
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<tr>
<td>Slovenia 0.1% (0.1-0.2) N=24919</td>
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<tr>
<td>Spain 0.2% (0.1-0.3) N=8555</td>
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<tr>
<td>Italy 0.4% (0.3-0.5) N=9977</td>
</tr>
<tr>
<td>Norway 0.9% (0.5-1.5) N=1568</td>
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Source: Systematic review on hepatitis B and C prevalence in the EU/EEA, ECDC, 2016
Survey of hepatitis B and C screening and prevention programmes in EU/EEA countries, 2009

- Survey of HBV/HCV surveillance and prevention programmes in EU/EEA countries undertaken in 2009
- 24/29 responding countries reported ANS programme for HBV
  - In one country the programme was not implemented at national level
- 2/29 responding countries reported ANS for HCV
  - One of these programmes was reported to be ‘selective’
Survey of antenatal screening for HIV, hepatitis B, syphilis and rubella in EU/EEA countries, 2013

- Survey undertaken in 2013 of antenatal screening programmes for HIV, HBV, syphilis and rubella in EU/EEA countries

- Survey had the following objectives:
  1. To describe current practice and map existing policies for antenatal screening;
  2. To define the effectiveness of screening in terms of proportion screened, positive results and prevention measures
  3. To identify vulnerable populations
  4. To understand the challenges to effective screening.
Survey of antenatal screening for HIV, hepatitis B, syphilis and rubella in EU/EEA countries, 2013

- 23/26 responding countries reported a national HBV ANS programme
- Differences in the reported screening strategies, timing of testing and the tests used for mother and baby
  - 2 countries reported opt-in strategy for screening
  - Screening recommended in different trimesters (14/20 1\textsuperscript{st} trimester, 1/20 2\textsuperscript{nd} trimester 5/20 3\textsuperscript{rd} trimester)
  - Variety of different serological and molecular tests used for testing for mother
  - Variation in number of tests for children born to HBV infected mothers and the age at which tests are undertaken

Source: Antenatal screening for HIV, hepatitis B, syphilis and rubella susceptibility in the EU/EEA. ECDC 2016

*ANS coverage data based on collected data or survey responder estimate
ECDC survey of EU/EEA countries: key results

- 8 countries reported collecting national data on HBV ANS programme; 7 had performed programme evaluations.
- Coverage of screening ranged from 50 -100% (>95% in 8/13 countries*).
- Strategies for the prevention of HBV MTCT:
  - Vaccination and HBIG in 18/21 countries; vaccine only in 3/21 countries.
  - ART to pregnant women in specific circumstances reported by 2 countries.
- No data collected on follow up of babies born to HBV infected mothers (vaccinated/tested/results).
- Populations most at risk of HBV MTCT: migrant women; PWID; women ‘reached late’ for antenatal care.
- Key challenges for effective screening included: a lack of data; insufficient capacity to reach at risk populations; lack of resources.

Source: Antenatal screening for HIV, hepatitis B, syphilis and rubella susceptibility in the EU/EEA. ECDC 2016
*ANS coverage data based on collected data or survey responder estimate.
Scientific advice on antenatal screening programmes

- ECDC published scientific advice in 2017 to help strengthen ANS programmes for HIV, HBV, syphilis and rubella
- Guidance focused on general population and vulnerable populations considered at high risk of HIV, HBV, syphilis or rubella, and hard to reach:
  i. Migrant populations
  ii. Women engaging in high-risk behaviour
  iii. Women belonging to minority groups refusing vaccination
- Guidance developed based on the survey results and review of the evidence base by a multi-disciplinary expert panel
Scientific advice on antenatal screening programmes

General considerations for the effective implementation of national antenatal screening programmes covered the following areas:

- Overall organisation of the programmes
- The testing of pregnant women (timing, repeat testing, refusals to testing)
- Evaluation of the programme including the collection of data
- More effective targeting of vulnerable populations
  - Raising awareness
  - Increasing access through outreach and informal networks
  - Addressing communication barriers
Future plans

1. Project to obtain better estimates of MTCT for HBV/HCV

2. Development of scientific advice for the organisation of a HBV MTCT prevention programme identified by the European Hepatitis B and C Network as a priority for ECDC

3. Development of a monitoring system to support EU/EEA MS in evaluating their responses to hepatitis B and C
   - Possible adaption of the existing platform for monitoring the Dublin Declaration for HIV
   - Discussions around monitoring to be held with Think Tank and Civil Society forum in June 2017
   - Meeting planned for December to kick off discussions with an expert panel