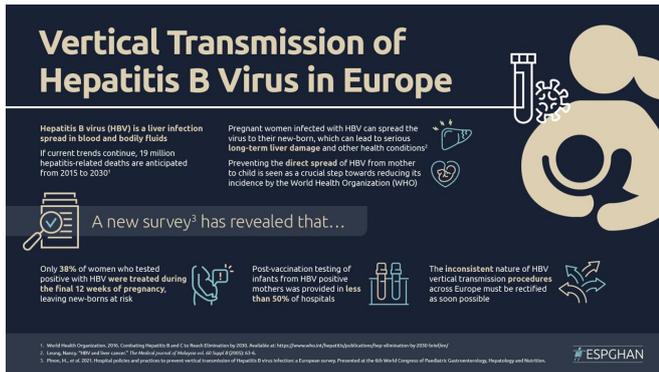


# Mothers transmitting hepatitis B to children as broken hospital procedures plague Europe

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ESPGHAN's Hepatitis B Virus infographic. Credit: European Society for Paediatric Gastroenterology Hepatology and Nutrition

Procedures to prevent the direct transmission of hepatitis B virus (HBV) from mother to child, particularly during and after pregnancy, have significant fragmentation and gaps, a new survey presented at the 6th World Congress of Paediatric Gastroenterology, Hepatology and Nutrition has shown.

The results, based on 76 delivery hospitals from ten major European countries, identified significant variances in maternal HBV screening frequency during pregnancy: 53% in the first trimester, 1% in the second trimester and 46% in the third trimester. Alarmingly, only 38% of those women who tested positive with high HBV-DNA levels were treated during the final 12 weeks of pregnancy despite the vast majority of centres (88%) having written protocols for preventing mother-to-child transmission of HBV infection.

The prevention of direct transmission of HBV infection from mother to child is seen as a crucial

step towards reducing its incidence as part of the World Health Organization (WHO) global health sector strategy for eliminating viral hepatitis as a major public health threat by 2030. If [current trends](#) continue, 19 million hepatitis-related deaths are anticipated from 2015 to 2030.<sup>2</sup> By identifying the barriers and challenges, this research represents a key step in preventing this outcome and towards full adherence to international guidelines across European countries.

The new survey also discovered that post-vaccination testing of infants from HBV positive mothers is provided in less than half of centres, even though 10-20% of vaccinated infants still acquire HBV when their mothers had high levels of the virus. This means that infected children, despite being immunised, may not be diagnosed. This is particularly significant in cases where the determination of HBV status occurs in the third trimester, which may be too late to start antiviral therapy in women with high HBV-DNA levels. To compound this concerning revelation further, inconsistency has been reported across all centres on the timing of the HBV vaccine schedule.

Lead author on the research, Michele Pinon from the University of Turin, commented: "This survey provides a strong indication that significant variance and gaps exist in hospital policies and procedures to prevent direct mother-to-child transmission of HBV across Europe. There is a clear need to implement a multidisciplinary clinical pathway involving obstetricians, neonatologists, and hepatologists, with a stronger connection between the phases before, during and after birth."

The web-based survey, supported by Penta Foundation and distributed by INCIPIT (Italian Network for Paediatric Clinical Trials), was focused on the prevention strategies adopted before, at,

and after birth. A single response was provided in response to the survey by the most experienced physician(s) from each of the 76 participating hospitals.

Speaking on the survey, Chair of the ESPGHAN Hepatology Committee, Giuseppe Indolfi, who was also involved in the research, stated, "The disjointed and inconsistent nature of practices for prevention of HBV vertical transmission across Europe revealed by this survey is a considerable cause for concern. Procedures must be rectified as soon as possible as we build towards achieving the WHO goal to eradicate the threat of viral hepatitis by 2030."

Provided by European Society for Paediatric Gastroenterology Hepatology and Nutrition

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