



# Babies With HBV-Positive Mothers May Have Better Immune Systems

April 16, 2015

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A surprising new study out of Singapore has discovered that babies born to mothers with the hepatitis B virus (HBV) may actually have developed better immune systems against bacterial infections than those born to healthy mothers, [SciDev.Net reports](#).

The study, published in Nature Communications, indicates that babies exposed to hepatitis B in the womb do not become immune intolerant to the virus, and therefore unresponsive to treatment, which is what doctors around the world previously believed.

For the study, research teams at the Duke-National University of Singapore's Medical School looked at the umbilical cord blood taken from newborns with HBV-positive mothers. They found that exposure to hep B during birth induced an immune response in babies, a phenomena called "trained immunity" in which their immune cells adapted to respond better to bacterial adversaries.

Researchers were careful to note that the findings do not support the idea that HBV exposure is "desirable" from a public health perspective, but that the data may support the idea that children who contract hep B during birth can and should be treated for the virus much earlier than is currently recommended. That's because they seem to already have a protective immune response against the virus that may just need a boost to get it going.

It's also important to note that hep B vaccines are still effective in infants born to HBV-positive mothers. This recent study may challenge current hypotheses on how hep B is passed on, but researchers say it doesn't lessen the importance of universal vaccination programs and hopes for eventually eradicating the disease.

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