Study: Low vaccination rate in Amish children linked to hospitalization
by Melissa Jenco, News Content Editor

Amish children were hospitalized for vaccine-preventable diseases (VPD) at significantly higher rates than other children, researchers found.


Researchers studied Penn State Children’s Hospital's medical records for children under 18 who were diagnosed with a VPD from 2005-'15. Children were classified as Plain (Amish and Mennonite) or non-Plain, although when looking at rates, researchers did not have enough data to include the Mennonite population.

Roughly 92% of the Plain children in the study were unvaccinated compared to 17% of the non-Plain children.

During the study period, 215 children were hospitalized with 221 VPDs. About 93% of these children were unvaccinated or immunocompromised, except for those with pneumococcal infections, according to the research.

While 81% of the hospitalized children were non-Plain, Amish children were hospitalized for VPD at more than twice their rate.

Plain children contracted both Haemophilus influenzae type b and tetanus more frequently than non-Plain children. Pneumococcal infections were most common among all children, but also an outlier in that 77% of children with these infections were vaccinated.

"This suggests that at least some of these cases were due to serotypes of S. pneumoniae not covered in the vaccine, such that some cases were not truly vaccine preventable," authors wrote.

Immunocompromised children made up about 68% of varicella cases, while in about 75% of cases of meningococcal disease, children were too young to have been vaccinated.

Authors concluded "interventions to increase vaccination among these (Plain) communities could decrease the number of VPDs admitted at our center."

Resources

- 2017 immunization schedule
- AAP News story “Do not stretch the immunization schedule”
- Information for parents from HealthyChildren.org on vaccines children need