

## Vaccine Stories

Real Stories from IDSA members about individuals harmed by vaccine-preventable illnesses



**Tina Tan, MD, FIDSA**  
Northwestern University  
Feinberg School of  
Medicine  
Chicago, Illinois

IDSA represents over 11,000 infectious diseases physicians and scientists devoted to patient care, disease prevention, public health, education, and research in the area of infectious diseases. Our members care for patients of all ages with serious infections, including meningitis, pneumonia, tuberculosis, HIV/AIDS, antibiotic-resistant bacterial infections such as those caused by methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant enterococci (VRE), and Gram-negative bacterial infections such as *Acinetobacter baumannii*, *Klebsiella pneumoniae*, and *Pseudomonas aeruginosa*, emerging infections such as Middle East respiratory syndrome coronavirus (MERS-CoV), Enterovirus D68, and Ebola, and bacteria containing novel resistance mechanisms such as the New Delhi metallo-beta-lactamase (NDM) enzymes and others that make them resistant to a broad range of antibacterial drugs, including one of our most powerful classes of antibiotics, the carbapenems (carbapenem-resistant Enterobacteriaceae, or CRE).



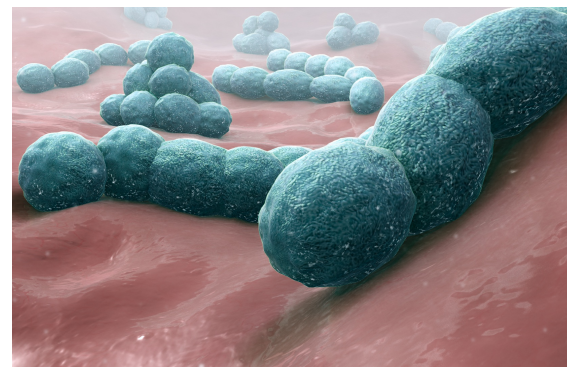
### 7-month-old infant infected with *H. influenzae* type b meningitis: permanently deaf with seizure disorder



Two parents opted not to vaccinate their 7-month-old infant with the recommended childhood vaccines. The family then took a six-week trip to visit relatives in the Middle East, traveling through urban areas and rural areas. Upon the family's return, the child began to exhibit symptoms including fever, vomiting, and lethargy. These symptoms worsened over the next few days, at which time the mother consulted the baby's pediatrician who immediately referred them to the hospital.

The infant was diagnosed with *H. influenzae* type b meningitis, a bacterial infection of the membranes covering the brain and spinal cord. This infection can be deadly if not treated very quickly; this infection is also vaccine-preventable. The Hib vaccine is recommended by the Centers for Disease Control (CDC) for all children under 5 years of age, with the first dose administered at two months of age. In this case, the child did not receive the vaccine and, as a result, contracted an infection rarely seen in the United States. As a result of this vaccine-preventable illness, the child is now permanently deaf and has a seizure disorder.

### Toddler with heart transplant falls ill with severe and life-threatening *Streptococcus pneumoniae* sepsis



A toddler received a heart transplant because he had hypoplastic left heart syndrome with heterotaxy, a congenital heart defect that severely affects normal blood flow through the heart. This also left the child without a spleen, compromising immunity. In addition, the child was prescribed immune-suppressant medication in preparation for and after the heart transplant procedure. Against medical advice, the child's parents declined all CDC recommended vaccinations.

When the child was 5 years old, he became severely ill and was brought to the hospital and diagnosed with *Streptococcus pneumoniae* sepsis, a severe and life-threatening infection. CDC recommends vaccination against *Streptococcus pneumoniae* for all children by their second birthday, with the first dose administered at two months of age. The child was placed in intensive care to receive dialysis due to kidney failure, intubation to allow him to breathe, and medications to maintain blood pressure and circulation.

Have a story to share? Contact Colin McGoodwin at [cmcgoodwin@idsociety.org](mailto:cmcgoodwin@idsociety.org)