This story is so sad, and what makes it worse is that it was preventable.

The Centers for Disease Control has put out an alert : in Minnesota in 2008, there were five confirmed cases of Haemophilus influenzae type b (or Hib) among children younger than five years old. Of these five cases, three of the children were unvaccinated, one had started the series of vaccines but did not complete the series due to shortages, and the fifth -- who had been fully vaccinated -- had an immune deficiency.

Five cases may not sound like a lot... until you learn that one of the unvaccinated children died. This was a baby, just a seven-month-old infant.

I can barely type that sentence out; my heart is aching so. I can only imagine what the parents are feeling. I literally have nightmares about such things.

There are several things to note about this incidence of Hib:

1) It's the largest number of cases in one year since 1992 in Minnesota, when 10 cases were reported . In the intervening years, between 0 and 4 cases were reported per year (1994 saw four cases, the average is about 2). These are small number statistics, so 5 cases may just be a normal statistical fluctuation. But the stakes are very, very high here.

2) We do not know why three of the five children were unvaccinated. It may be due to the antivax crowd, or it may be due to any number of other factors; the report doesn't say (however, see (5) below)

3) Out of three unvaccinated children, *one died*. The historical rate of death from Hib, once infected, is about 1 in 20, so this is something of a fluke. But 1 in 20 is still way, way too high... and of the ones who *do* survive the infection, 1 in 5 will suffer deafness, blindness, or severe, permanent brain damage. Russian roulette has

better odds than 1 in 5; do you want to play that with your baby? If that sounds harsh, **good.**
We're dealing with babies' lives here.
The best thing you can do is make sure they don't get the disease in the first place.

4) Getting a vaccine does not guarantee *not* getting the disease. We don't know how many babies were vaccinated, and how many weren't that didn't get the disease. But with 1 in 20 odds, I know which way I fall.

5) There is a shortage of Hib vaccines right now, and it's expected to last for a few more months. However, according to the CDC report, there are adequate supplies to have infants inoculated and complete the primary three-dose infant series.

Data were reviewed for 25,699 children born between November 1, 2007 and March 31, 2008... Among children aged 7 months, 3-dose primary Hib series coverage was 46.5%, which is lower than the age-appropriate coverage for children who had received pneumococcal conjugate or diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccination. In contrast, data from the 2007 National Immunization Survey, conducted prior to the shortage, showed that Hib vaccination coverage among children in Minnesota aged 19 months to 35 months was high and did not differ from the national average, suggesting that coverage has declined as a result of the shortage.

So there has been a decline in coverage due to the shortage, with roughly half the children in the survey being vaccinated.

Putting this all together is difficult, with so many unknowns. But to belabor the obvious, we do know one thing: of the three unvaccinated children who got Hib, one died. The doctors from the CDC add this editorial comment:

Before development of Hib conjugate vaccines, Hib was the most common cause of bacterial meningitis in children aged <5 years. Since implementation of the Hib conjugate vaccine immunization program in the United States in the early 1990s, the incidence of Hib disease has declined from a peak of 41 cases per 100,000 children aged <5 years in 1987 to approximately 0.11 cases per 100,000 in 2007.

In other words, *the infection rate among infants dropped by a factor of nearly **400** after the Hib vaccination was developed.*
This recent increase may reflect a loss of herd immunity, meaning
too many kids are not getting vaccinated
.

Folks. Please. Vaccinate your children. The science is in, the tests have been done, the results are solid: vaccinations do not cause autism . What vaccines do is save the lives of thousands of children who would otherwise be suffering the effects of preventable diseases... and one of these effects can be death.

Save your kids' lives. Take them to a doctor and get his or her advice on this. And if they recommend vaccinations, *then do it*.

My thanks to Dr. Joe Albietz for providing me with some of the numbers in this article.