

Unprotected People: #100 Measles

Measles Not Worth the Risk by John Lawrence Kiely, PhD

The Immunization Action Coalition (IAC) publishes Unprotected People Reports about people who have suffered or died from vaccine-preventable diseases. This is the 100th in our series.

In parts of the world where measles is still endemic and vaccine is lacking, measles is an all too common cause of death in children. In the developed world, where measles vaccine is readily available, mortality from measles infection is a rare event. In the past year, measles outbreaks in the United States are being reported in numbers not seen in the past decade. The author relates his personal experience with measles and reminds us that vigilance in maintaining high levels of vaccination coverage is necessary to prevent measles and other vaccine-preventable diseases from making a comeback.

John Kiely, PhD, a retired research epidemiologist for the CDC's National Center for Health Statistics, is American editor of the medical journal Paediatric and Perinatal Epidemiology. The following opinion piece, first published in the Atlanta Journal Constitution on October 9, 2008, is reprinted here with permission of the author.

I'm in a hospital bed, gasping for breath. Through the clear plastic of an oxygen tent, I see my Mom. Her face is red and she's crying and crying. I feel hot. Every few hours a nurse opens the oxygen tent and gives me a shot. It hurts.

It's 1959. I'm in second grade. I'd caught the measles, just like my brothers and sisters and friends. Except unlike them, my measles didn't go away. It got worse and turned into something I'd never heard of: pneumonia. I spent a month in the hospital, survived, and spent a few more months recovering at home. But more than four million children got measles in the United States in that year and 385 died.

Most Americans don't remember those days. Why? Because four years after I got sick, the Centers for Disease Control and Prevention began a mass measles immunization program. By 2000, the number of reported cases of measles had decreased to 86 and the number of deaths to one.

So it is distressing to see that this year measles is on the upswing.

As of July, there were 131 measles cases reported to CDC, the highest number since any comparable period since 1996. Most pediatricians and public health officials believe that's because fewer parents are bringing their young children in to get vaccinated.

And why is that? Because since 1998 the idea that the measles-mumps-rubella (MMR) vaccine causes autism has scared them away.

This is not just shameful. It's scandalous. The entire phenomenon was spawned by a few studies by one research team with results that nobody else has been able to replicate and publish in the peer-reviewed medical literature.

Meanwhile, more than 20 epidemiologic studies have reported no association between the MMR vaccine and autism spectrum disorders, including one published last month.

Meanwhile, allowing your child to skip the vaccine may be a risky decision. Measles is not just a charming appearance of red spots on a two-year old's stomach.

Recent reviews from Health Canada and Canada's National Advisory Committee on Immunization compared the effects of measles to the side effects of the MMR vaccine.

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Along with the pneumonia I had as a kid (1 to 6 percent of measles cases), the risks of measles include severe encephalitis (one per 1,000 cases) — about a third of which result in mental retardation. They also include one to 10 deaths for every 10,000 measles cases. Another risk is subacute sclerosing panencephalitis, a rare fatal illness (one per 100,000 measles cases) caused by an ongoing measles virus infection of the brain, in which symptoms of brain damage usually begin seven to 10 years after infection.

And the side effects of MMR? Fever, malaise, a mild rash, swollen glands and a stiff neck in about 5 percent of the patients, febrile seizures in about three out of 10,000, and temporary low platelet count in about three per 100,000 patients. About one in 1 million have an easily treated anaphylactic reaction. And no deaths. Not one.

Because of the relationship of the measles virus to encephalitis, vaccine safety experts have had an ongoing concern that the MMR vaccine might be a rare cause of this disease. Fortunately, all studies with controls have found no association between the MMR vaccine and encephalitis.

In the scientific community, the controversy over whether the MMR vaccine causes autism essentially ended by 2001. Much to their credit, local and state public health officials have consistently been

editorializing in local newspapers throughout the country about the safety of vaccines and their importance for child health.

But despite the evidence, federal public health officials have remained almost completely silent on this issue.

Meanwhile, the modern anti-vaccination movement, which has become a hobby of upper-middle-class activists and Hollywood celebrities with no time to learn the basic tenets of epidemiologic methods (or even of the scientific process), has used pseudoscience and misinformation to gain far too much influence on our public discourse on child health.

It's time for Washington to step forward. No other collection of agencies has the power to get the public's attention.

It's time for them to speak, run public service ads, alert reporters, and aggressively rebut the spurious idea about MMR.

My mother wasn't wrong to be crying, back in 1959. The risks of measles are real.

Americans were right to be elated when the measles vaccine became available.

The MMR vaccine doesn't hurt kids. Letting them go without it will.