

Vaccines *really* are safe.

Most of us remember the anthrax scare of 2001 that caused the unfortunate deaths of 5 people. The intense media scrutiny of this case and the public fear that accompanied it lasted for several months. Now imagine what would happen if a disease caused *1.4 million* deaths here in the United States. Well, this is what happened in 2002 in the rest of the world, where the World Health Organization estimated that 1.4 million people died of vaccine preventable diseases.

We are very fortunate that we live in a country with a health system that allows for easy access to routine immunizations so that we do not have to think about this nightmare scenario. In fact, vaccines have been so successful in eradicating these life-threatening diseases that some in the general population have questioned their continued usefulness and safety.

The considerable focus on vaccines and their safety in our information-overloaded society is not surprising. There is a surplus of articles in magazines, books, parenting guides, the Internet, and stories on radio and television. While these occasionally highlight the benefits of immunization, "No One Got Sick or Died from a Vaccine-Preventable Disease Today" is not a very exciting story.

More often, the emphasis is on speculation that a vaccine caused a health problem. Further, the widespread availability of litigation and liberal tort in the US has encouraged lawsuits claiming harm from vaccines. It is human nature to assume cause-and-effect when something bad happens, and vaccinations are an attractive target because they are administered to such a large part of the population.

A column in this paper suggested that a recent government case brought before the "vaccine court" showed a relationship between thimerosal (a mercury-containing compound used as a preservative in some vaccines up until 1999) and autism. A careful look at the actual case proceedings shows that this is simply **not** true.

Shortly after receiving several immunizations in July of 2000 when she was 18 months old, Hannah Poling developed high fever and started to show signs of developmental regression. After further medical evaluation it was found that Hannah suffered from an extremely rare disorder involving her mitochondria, the energy factories of our cells. This disorder can often cause problems with brain functioning especially following an infection or high fever and can lead to delays in development. Government health officials conceded that the vaccines may have exacerbated an underlying condition and that she should be paid from the federal vaccine-injury fund. Director of the US Centers for Disease Control and Prevention (CDC), Julie Gerberding, MD said: "The government has made absolutely no statement indicating the vaccines are a cause of autism... This does not represent anything other than a very special situation." Even Hannah's father, Jon Poling, stated: "I want to make it clear I am not anti-vaccine. Vaccines are one of the most important, if not the most important advance, in medicine in at least the past 100 years." All children deserve protection against infectious diseases, and even children

with these rare disorders may be at risk of neurological problems if they contract one of the diseases that vaccines protect against.

Further, it is important to understand that the relationship between autism and vaccines or thimerosal in vaccines has been very well studied. Dozens of large-scale studies have found no relationship between vaccines and autism. The Institute of Medicine, the American Academy of Pediatrics, and the CDC all maintain that there is no link between childhood vaccines and autism. Finally, the incidence of autism continues to rise in the US even though thimerosal was removed from childhood vaccines in 1999.

Vaccinating your child is an extremely important decision for both your child and for the children around him or her. If vaccination rates begin to drop in the United States, then not only are the children who are not vaccinated at risk, but so are those who have been vaccinated. Even the best vaccines are not 100% effective, which is why it is so important to immunize everyone to prevent the spread of these diseases that are only a plane ride away. Just ask the 1.4 million people (mostly children) who died in 2002 from vaccine-preventable diseases.

Physicians and the government take vaccine safety very seriously. Vaccines are licensed by the US Federal Drug Administration (FDA) only when proven to be safe and effective. Recommendations for use are promulgated by committees of scientific experts composed of academics, clinicians and other caregivers who are passionately devoted to our citizens' health and safety.

As a pediatrician I have spent years studying the risks and benefits of vaccines. I do this not only because it is my responsibility to my patients to be the most informed individual on this subject, but also because I am a father of two daughters. I would never recommend anything to my patients that I would not do for my own family (and yes; both of my daughters are fully immunized). I certainly would never tell anyone that vaccines are risk free— there is risk with anything we do to our children, whether it is taking a prescription, herbal, or homeopathic medicine, or just getting in the car every day. It is important to sit down with your medical doctor and discuss any questions you have regarding vaccines and the health of your child.

Brent Cardwell, M.D., is a board certified pediatrician who practices at Cedar Park Pediatrics and Family Medicine. Please check out his website if you would like further information regarding vaccines or other health issues regarding your children or family at [www. Cedarparkdoctors.com](http://www.Cedarparkdoctors.com). Special thanks to Dr. Richard Judelsohn, M.D., who is a clinical associate professor for the University of Buffalo School of Medicine, for his help in preparing this article.