

Practicing pediatric medicine has changed a lot in the past hundred years. Overall children are much healthier, allowing myself as a doctor, not only to focus on curing illnesses but also on the whole well-being of a child. We now discuss issues with parents such as accident prevention and safety, mental health, and sleep concerns to name a few. We as a society can thank many advances in the medical field to improved child health including better maternal care during pregnancy, improved nutrition, and public health programs such as lead screening. However, the number one public health success over the past century in pediatrics has been the development of immunizations against contagious diseases. Unfortunately, over the past decade or so there has been an unjustified backlash over vaccine safety with serious potential health concerns as more parents choose not to vaccinate their children.

Vaccines have become a victim of their own success. A century ago it was routine for an average family to have one, two, or even three children die in infancy or early childhood due to a contagious disease such as diphtheria, bacterial meningitis, whooping cough, or polio. Because of active immunization against these and other childhood infections over the past fifty years, these diseases are unknown to many young parents. Due to these successful vaccination programs, some infectious diseases are no longer seen at all. We discontinued routine smallpox immunization in the 1970s, as smallpox disease no longer developed in the community. We are very close to closing the door on polio, as fewer cases are seen worldwide thanks to vaccination. Because of routine H. influenza vaccination, which began in the early 1990s, meningitis and epiglottitis due to this germ are almost never seen, just fifteen years later.

Instead of focusing on the disease and prevention there has been a shift to a focus on perceived side effects of vaccines. There have been concerns raised on the safety of vaccination and its link to problems such as autism. With the advent of the internet as an information source many unsuspecting parents have been fed misinformation by fringe groups pushing their own agenda.

Due to this backlash, the medical community has looked very carefully into vaccine safety over the past five years. Multiple medical research studies done in multiple different countries have repeatedly shown that there is no link between immunizations and autism or other developmental disabilities. While it is true that rates of autism appear to be rising, there is no evidence that vaccines are at fault. Many specialists believe that autism rates are not increasing but that cases are simply being better recognized than in the past. The medical community has been at the forefront on vaccine safety removing thimerosal from vaccines over four years ago. Thimerosal, a preservative related to mercury, has been a target of anti-vaccine groups. It was removed not because it had been shown to cause problems but simply because alternative preservatives had been developed. Thimerosal had been used for over three decades without issues of safety. It was in the vaccines that you and I received as children. If anything, because of improved technology, vaccines are safer than ever with fewer foreign antigens needed in each vaccine than those initially developed.

There is evidence that the vaccine backlash already has had negative health effects for our children. In Philadelphia in the late 90s, a measles epidemic resulting in mass hospitalizations and several deaths started when a group of parents refused to vaccinate due to concerns of safety. This allowed the measles virus to spread through the community. What people need to understand is that most of these infectious diseases are not extinct like the smallpox virus, but are hiding in the environment waiting for a susceptible host to show up. These infections are still capable of causing disease and death at anytime.

With the development of new vaccines over the past five years, our children are safer then ever. We are now able to protect against pneumococcal pneumonia and meningitis, meningococcal meningitis, and for the first time have a vaccine against cancer. Cervical cancer is caused by human papilloma virus infection. By vaccinating young teens with the Gardasil vaccine, we are hopeful that the rate of this devastating cancer will greatly drop over the next ten to twenty years.

If you as a parent have any concerns about vaccines, I encourage you to seek objective information from a reliable source. Your doctor, the American Academy of Pediatrics (www.AAP.org), and the Center for Disease Control (www.cdc.gov) are all excellent resources. Without a doubt, the benefits of routine vaccination far outweigh the risks.