

Vaccination: A Community Concern

An editorial by Victoria Hulett

For over two hundred years, vaccines and immunizations have helped protect the public by containing and preventing dangerous epidemics. Beginning with smallpox in 1796, scientists and healthcare providers have used vaccination to give individuals lifelong protection against certain diseases and build widespread immunity in their communities. Deemed necessary to public health by the U.S. Supreme Court in 1905, vaccinations normally begin in early childhood to guard children against chicken pox, measles and pneumococcal diseases and continue into adulthood to prevent common adolescent and adult illnesses like influenza and hepatitis.

However, many new American parents have disregarded the historic benefit of immunization and are refusing to vaccinate their children. According to the American Journal of Public Health, a staggering 5.5% of American children are unvaccinated, a statistic that has led to disconcerting outbreaks of previously eradicated diseases. In 2014, over a hundred unvaccinated visitors at California's Disneyland contracted measles, a disease the United States declared eradicated in 2000.

The anti-vaccinationist movement stemmed in large part from a 1998 paper by British gastroenterologist Andrew Wakefield that propounded a link between

the Measles, Mumps and Rubella (MMR) vaccine and autism spectrum disorder (ASD). The study described children who began exhibiting symptoms of ASD in the four weeks after their MMR inoculation. Wakefield, whose work on the subject has since been discredited in numerous studies, argued that the MMR vaccine induced inflammation in the children studied and impacted their neurological development. The article sparked outrage amongst concerned parents and led to widespread skepticism of the general safety, effectiveness and morality of mandated vaccinations.

Today, an opinionated fragment of the wealthy, white, well-educated population is claiming philosophical exemption from compulsory inoculation and sending their children to public schools unvaccinated. This is a problem. Based on the generally accepted concept of “herd immunity,” the health of children and adults who, for documented medical reasons, cannot be vaccinated is dependent on the immunity on the majority of their community. Epidemiologists confirm that the decision not to vaccinate is far from a matter of personal choice; if too many community members fail to fulfill their social responsibility to vaccinate, previously eradicated diseases could take root in non-immune populations and spark frightening epidemics.

Faced with an alarming resurgence of measles and mumps in 2014, the Center for Disease Control (CDC) has taken many steps to quell these fears and

address the misconceptions behind them. Like all medical interventions, vaccines do have their risks, but autism is not one of them. The CDC summarizes their extensive research on the topic in a “Parent’s Guide to Childhood Immunizations” that debunks harmful vaccine myths and asserts that the rare side effects of vaccines are scarcely more serious than a sore leg, mild fever or small rash. Parents have voiced concerns about whether the benefits of vaccination are worth the potential side effects, but the CDC creatively compares the chance of a serious adverse reaction to a single word in the million that comprise the entire *Harry Potter* series. The World Health Organization estimates that 1.5 million children die each year from lack of immunization. In the face of such staggering statistics, opting out of vaccination is clearly the riskier choice.

Vaccination is an undoubtedly public concern. When the health of millions of people is in question, there is no room for social irresponsibility. Parents, protect your herd—we’re all depending on you.