

# INTRODUCTION TO HEALTH AND MEDICINE\*

OpenStax College

This work is produced by OpenStax-CNX and licensed under the  
Creative Commons Attribution License 3.0†



**Figure 1:** Vaccinations can slow or halt the spread of disease, but some families refuse them. (Photo courtesy of USACE Europe District/flickr)

---

In 2010, a pertussis (whooping cough) outbreak in California sickened 9,143 people and resulted in 10 infant deaths: the worst outbreak in 63 years (Centers for Disease Control 2011b). Researchers, suspecting that the primary cause of the outbreak was the waning strength of pertussis vaccines in older children, recommended a booster vaccination for 11–12-year-olds and also for pregnant women (Zacharyczuk 2011). Pertussis is most serious for babies; one in five needs to be hospitalized, and since they are too young for the vaccine themselves, it is crucial that people around them be immunized (Centers for Disease Control

---

\*Version 1.2: May 18, 2012 2:46 pm -0500

†<http://creativecommons.org/licenses/by/3.0/>

2011b). Several states, including California, have been requiring the pertussis booster for older children in recent years with the hope of staving off another outbreak.

But what of people who do not want their children to have this vaccine, or any other? That question is at the heart of a debate that has been simmering for years. Vaccines are biological preparations that improve immunity against a certain disease. Vaccines have contributed to the eradication and weakening of numerous infectious diseases, including smallpox, polio, mumps, chicken pox, and meningitis.

However, many people express concern about potential negative side effects from vaccines. These concerns range from fears about overloading the child's immune system to controversial reports about devastating side effects of the vaccines. One misapprehension is that the vaccine itself might cause the disease it is supposed to be immunizing against. Another commonly circulated concern is that vaccinations, specifically the MMR vaccine (MMR stands for measles, mumps, and rubella), are linked to autism. The autism connection has been particularly controversial. In 1998, a British physician named Andrew Wakefield published a study in Great Britain's *Lancet* magazine that linked the MMR vaccine to autism. The report received a lot of media attention, resulting in British immunization rates decreasing from 91 percent in 1997 to almost 80 percent by 2003, accompanied by a subsequent rise in measles cases (Devlin 2008). A prolonged investigation by the British Medical Journal proved that not only was the link in the study nonexistent, but that Dr. Wakefield had falsified data in order to support his claims (CNN 2011). Dr. Wakefield was discredited and stripped of his license, but the doubt still lingers in many parents' minds.

In the United States, many parents still believe in the now discredited MMR-autism link and refuse to vaccinate their children. Other parents choose not to vaccinate for various reasons like religious or health beliefs. In one instance, a boy whose parents opted not to vaccinate returned home to the U.S. after a trip abroad; no one yet knew he was infected with measles. The boy exposed 839 people to the disease and caused 11 additional cases of measles, all in other unvaccinated children, including one infant who had to be hospitalized. According to a study published in *Pediatrics* (2010), the outbreak cost the public sector \$10,376 per diagnosed case. The study further showed that the intentional non-vaccination of those infected occurred in students from private schools, public charter schools, and public schools in upper-socioeconomic areas (Sugerman et al. 2010).

Should parents be forced to immunize their children? What might sociologists make of the fact that most of the families who chose not to vaccinate were of a higher socioeconomic group? How does this story of vaccines in a high-income region compare to that in a low-income region, like sub-Saharan Africa, where populations are often eagerly seeking vaccines rather than refusing them?

The sociology of health encompasses social epidemiology, disease, mental health, disability, and medicalization. The way that we perceive health and illness is in constant evolution. As we learn to control existing diseases, new diseases develop. As our society evolves to be more global, the way that diseases spread evolves with it.

What does "health" mean to you? Do you believe that there are too many people taking medications in American society? Are you skeptical about people claiming they are "addicted" to gambling or "addicted" to sex? Can you think of anything that was historically considered a disease, but is now considered within a range of normality? Or anything that has recently become known as a disease, whereas before it was considered evidence of laziness or other character flaws? Do you believe all children should receive vaccinations? These are questions examined in the sociology of health.

Sociologists may also understand these issues more fully by considering them through one of the main theoretical perspectives of the discipline. The functionalist perspective is a macroanalytical perspective that looks at the big picture, focusing on the way that all aspects of society are integral to the continued health and viability of the whole. For those working within the functionalist perspective, the focus is on how healthy individuals have the most to contribute to the stability of society. Functionalists might study the most efficient way to restore "sick" individuals to a healthy state. The conflict perspective is another macroanalytical perspective that focuses on the creation and reproduction of inequality. Someone applying the conflict perspective might focus on inequalities within the health system itself, looking at disparities in race, ethnicity, gender, and age. Someone applying the interactionist perspective to health might focus on how people understand their health, and how their health affects their relationships with the people in their

lives.

## 1 References

Centers for Disease Control. 2011b. "Pertussis." The Centers for Disease Control and Prevention. Retrieved December 15, 2011 (<http://www.cdc.gov/pertussis/outbreaks.html><sup>1</sup>).

Conrad, Peter and Kristin Barker. 2010. "The Social Construction of Illness: Key Insights and Policy Implications." *Journal of Health and Social Behavior* 51:67–79.

CNN. 2011. "Retracted Autism Study an 'Elaborate Fraud,' British Journal Finds." *CNN*, January 5. Retrieved December 16, 2011 (<http://www.cnn.com/2011/HEALTH/01/05/autism.vaccines/index.html><sup>2</sup>).

Devlin, Kate. 2008. "Measles worry MMR as vaccination rates stall." *The Telegraph*, September 24. Retrieved January 19, 2012 (<http://www.telegraph.co.uk/news/uknews/3074023/Measles-worries-as-MMR-vaccination-rates-stall.html><sup>3</sup>).

Sugerman, David E., Albert E. Barskey, Maryann G. Delea, Ismael R. Ortega-Sanchez, Daoling Bi, Kimberly J. Ralston, Paul A. Rota, Karen Waters-Montijo, and Charles W. LeBaron. 2010. "Measles Outbreak in a Highly Vaccinated Population, San Diego, 2008: Role of the Intentionally Undervaccinated." *Pediatrics* 125(4):747–755. Retrieved December 16, 2011 (<http://www.pediatricsdigest.mobi/content/125/4/747.full><sup>4</sup>).

Zacharyczuk, Colleen. 2011. "Myriad causes contributed to California pertussis outbreak." Thorofar, NJ: Pediatric Supersite. Retrieved December 16, 2011 (<http://www.pediatricsupersite.com/view.aspx?rid=90516><sup>5</sup>).

---

<sup>1</sup><http://www.cdc.gov/pertussis/outbreaks.html>

<sup>2</sup><http://www.cnn.com/2011/HEALTH/01/05/autism.vaccines/index.html>

<sup>3</sup><http://www.telegraph.co.uk/news/uknews/3074023/Measles-worries-as-MMR-vaccination-rates-stall.html>

<sup>4</sup><http://www.pediatricsdigest.mobi/content/125/4/747.full>

<sup>5</sup><http://www.pediatricsupersite.com/view.aspx?rid=90516>