

Measles outbreak raises patient safety challenge for pediatricians

As measles cases increase across the country, some physicians are adopting a hardline stance against unvaccinated patients

Fifteen years ago, the United States declared that measles had been eliminated. The number of cases had shrunk to just 86, the lowest it had ever been.

But 2015 statistics have already outpaced that number just within the first month of the year. The CDC reported 121 confirmed cases in 17 states and Washington, D.C., from January 1 to February 6. Most of those cases (103) have been linked to Disneyland, which has been identified as the source of the outbreak. This follows a significant spike in cases last year (more than 600) that has caused alarm for medical professionals and public health officials alike.

The outbreak has also ignited a fiery discussion about vaccination rates. Statistics show a steady decline in MMR (measles, mumps, and rubella) vaccination rates since 2000. In California, for example, rates have dropped from 95.4% to 92.6% statewide. The drop has been fueled by an anti-vaccination movement among parents that believe the vaccine is dangerous.

But pediatricians that have previously attempted to present scientific facts and studies to persuade parents to vaccinate their children are lashing back. In the wake of the outbreak, some pediatricians are no longer accepting patients that are not vaccinated without a valid medical reason.

Unvaccinated children pose a significant risk to other patients in the waiting room, says **Amesh Adalja, MD, FACP**, a senior associate at the Center for Health Security at the University of Pittsburgh Medical Center and a member of the Infectious Disease Society of America's (IDSA) Public Health Committee. Infants younger than 12 months old are not allowed to get the vaccine, so they rely on herd immunity, in which a critical portion of the community is immunized from the disease. Immunocompromised children that cannot be vaccinated also rely on herd immunity.

"If you're going to have a practice that is full of individuals that are not vaccinated against contagious infectious diseases by choice, you really pose a risk that one of

them may bring a disease, like measles, into the waiting room," Adalja says. "Measles is one of the most contagious diseases known to man, and you could cause harm to those other individuals in your waiting room."

Measles can spread through coughing or sneezing and live for up to two hours on a surface or in the airspace where the infected person coughed or sneezed, according to the CDC. If one person has measles, 90% of those around that person that are not immune will become infected.

A measles infection is difficult to diagnose since the initial symptoms are similar to the common cold, but its complications are severe. One in every 20 children with measles will develop pneumonia, and one or two out of every 1,000 will die, according to the CDC.

These factors—the contagiousness of the disease and the serious complications it can cause—have driven some doctors to take a hardline approach to unvaccinated patients. In January, Los Angeles pediatrician Charles Goodman, MD, announced on his practice's Facebook page that his office would "no longer accept new patients who have decided not to immunize their children." Other physicians in northern California and Chicago have long-standing strict vaccination policies, citing the need to protect other patients with weakened immune systems, according to BuzzFeed News.

Adalja understands how this can be a difficult balancing act, but it's ultimately one that physicians approach as a patient safety concern, particularly now that more cases are popping up across the country.

"If you have an unvaccinated population that is always in your waiting room, you really get to thinking, especially in the context that we had over 600 measles cases last year in the U.S., does that patient have measles and if so, how safe are those individuals sitting in my waiting room?" he says.

AAP's position

The American Academy of Pediatrics' (AAP) official

policy regarding unvaccinated patients is not for physicians to dismiss them from their practice, but to work with parents to make the right decision about immunizations. However, **Mark Sawyer, MD, FAAP**, a pediatric infectious disease specialist at the University of California San Diego School of Medicine and a member of the AAP Committee on Infectious Diseases, says that he sympathizes with physicians that have reached the end of their rope.

“It really puts them in a big dilemma to have patients that refuse vaccinations on a couple of levels,” he says. First is the increased risk of spreading a contagious and dangerous illness to unvaccinated patients. The more complex issue, though, is that parents that refuse the vaccine are challenging the doctor-patient relationship.

“[Physicians] can’t really provide adequate care if the family is not letting them provide what they think is an essential preventive measure for children,” Sawyer says. “And so they may be better served with a physician whose advice they trust overall, rather than just selecting what advice they want to pay attention to.”

Vicki Allen, MSN, RN, CIC, infection prevention coordinator at Beaufort Memorial Hospital in Beaufort, South Carolina, and vice chair of the Association for Professionals in Infection Control and Epidemiology Communications Committee, says she has not encountered any physicians who refuse to see unvaccinated patients in South Carolina—a state that hasn’t had a confirmed case of measles since 1999—but she can understand how patient safety concerns might lead pediatricians to take that position.

Typically, pediatrician’s offices manage infectious illnesses by separating kids into a sick side and a well side to prevent the spread of communicable diseases. But because measles symptoms are so innocuous, this approach might not be effective.

“When you come in with something that is so highly contagious, there’s no way to protect that well side,” says Allen. “You could very well have someone on the well side with measles because maybe they are at a point where they aren’t symptomatic.”

Sawyer, who testified in front of a Senate committee hearing in February about the efficacy of vaccines, adds that pediatricians are getting frustrated with devoting “many hours a day” to advising patients on the safety and efficacy of immunizations, only to have them decline

vaccines and potentially put other patients at risk.

“It is frustrating when the science is completely clear cut on the issue and yet parents are not accepting the science for whatever reason—either they don’t understand it or they don’t believe it—and so pediatricians feel like they are running around in circles a little bit,” he says.

Implementing screening procedures

Regardless of their stance on how to manage unvaccinated patients, all physicians and hospitals should have screening procedures in place to immediately isolate patients that present with symptoms of measles.

This screening process is not unlike what many hospitals experienced during the Ebola outbreak, Adalja says. However, staff may need some form of reeducation to recognize and diagnose the signs and symptoms of measles. Many physicians have never seen a measles case because there were so few outbreaks prior to 2014.

Hospitals, clinics, and physician offices should develop screening procedures and policies to segregate patients with a cough, cold, red eyes, or a fever until a physician can rule out measles—even if there haven’t been any cases of the disease in the local community.

“You have to really emphasize and be clear when they are asking patients, ‘Have you or have you not been vaccinated against measles?’” Adalja says. “That needs to be part of the intake if this outbreak continues because the symptoms of measles will be nonspecific at the beginning, so you’ll have to find some ability to discriminate amongst patients.”

Physician offices have the added benefit of scheduling appointments over the phone, so ideally they will be screening people before they even walk in the door, Sawyer says. In addition to asking for the patient’s vaccination status, screeners should also ask about any international travel—with the exception of the Disney outbreak, many measles cases are brought from overseas.

While hospitals and physician’s offices may have been less prepared for this kind of outbreak in the past, Allen says previous infectious disease outbreaks—H1N1 and Ebola, specifically—have changed the way providers approach this issue.

“I think the awareness is much better than it was and the whole Ebola situation helped prepare for any kind of communicable disease or disease transmission,” she says. 