Measles outbreak: Why do some parents choose not to vaccinate?

by Amanda Paulson

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Why do some parents choose not to vaccinate?

It's a question that's being asked with increased intensity— and often hostility—lately, in the wake of a measles outbreak at Disneyland in California. Calls have increased for an end to the granting of exemptions that allow parents in some states to deviate from the prescribed Centers for Disease Control immunization schedule.

According to the latest CDC statistics, there were 102 confirmed measles cases last month—about twice as many cases as in all of 2012, and a stark contrast with 2000, when the disease was officially declared eliminated in the United States.

The outbreak has led to a wave of righteous anger directed at parents who decide not to vaccinate their children or to follow a delayed or selective schedule. Parents who are concerned about the number of vaccines in the current schedule cite complex reasons that often have little to do with discounted autism fears or ignorance of the concept of "herd immunity."

At least some experts believe the vitriolic tone of the current debate will only further alienate these parents.

"High levels of vaccine compliance are highly dependent on parents' goodwill," said Mark Largent, a historian at Michigan State University in East Lansing and the author of *Vaccine: The Debate in Modern America*. "The way to maintain that goodwill is to listen to their concerns and engage in meaningful dialogue."

Most parents who make a conscious choice to deviate from the CDC schedule aren't "anti-vaccine" but rather "vaccine-anxious," Largent noted.

"If you want to increase the number of kids who are vaccinated against communicable diseases, you have to admit that ultimately parents get to make this decision," he said. For public health officials, the issue is clear-cut: Vaccinations, they say, are responsible for largely eradicating what used to be common diseases such as measles, polio, chicken pox, and whooping cough. They also say that to work, about 92 percent of a population needs to be vaccinated and that herd immunity largely protects the few who can't be vaccinated for medical reasons or are too young, or for whom the vaccine isn't effective. Moreover, a widely publicized study linking the vaccine for measles, mumps, and rubella to autism has been discredited.

Parents who choose not to vaccinate their children, public health advocates say, are engaging in irresponsible behavior that puts the most vulnerable members of society at risk. Vaccine skeptics claim their rights as parents to make the decisions they believe are best for their children.

All states allow for medical exemptions to vaccinations, and all but West Virginia and Mississippi allow for religious exemptions. But a significant number of states—about 20— also allow for "personal belief" exemption, and increasingly, the anger has been turned on those parents. That's particularly true when they cluster in communities—pockets of Marin or Orange Counties in California, or Boulder, Colo., or Ashland, Ore.—thus lowering the rates of vaccinations.

The vaccine-questioners in those communities tend to be affluent, educated, focused on a natural lifestyle, and suspicious of mainstream medicine and pharmaceutical companies. For many, their skepticism comes down to a gut intuition, as well as a resistance to simply accepting what government officials dictate. Others are highly informed, and they see the CDC schedule as a one-sizefits-all policy dictate that isn't best for all children.

"They're used to thinking about health as a series of lifestyle choices," said Brendan Nyhan, a government professor at Dartmouth College in Hanover, N.H., who has studied parents who resist vaccines. "Even though the vaccine schedule is based on a tremendous amount of science, people are interested in customizing it in various ways, denying this vaccine, delaying another one."

These skeptics are just one subset of vaccine-refusers, who also include the Amish and enclaves of the Orthodox Jewish in New York, Nyhan emphasized, but those "personal belief" skeptics receive substantial attention because of their visibility. (Many Christian Science families also seek religious exemptions from vaccines.) Many in these communities emphasize that their reasons for not vaccinating on schedule are complex—and they resent the implication that they're taking their cues from the autism study or from Jenny McCarthy, the prominent vaccination critic.

"People say there's only two camps, the pro-vaccination camp and the antivaccination camp, and anyone who's anti-vaccination isn't that smart," said Meghan Van Vleet, a former naturopath and a parent of two in Boulder. "But there's not two camps; there's like 50 camps."

Van Vleet ultimately vaccinated her children, but on a very delayed schedule, and when she was practicing naturopathy, she would help her patients sift through the information so they could determine what was right for each child. All sorts of factors—whether a mother was breast-feeding, whether a child was in day care or had an older sibling, whether they planned to travel—could play into that decision, Van Vleet said.

She cites multiple reasons to do a more selective vaccination schedule, including the lack of information about what's causing higher rates of autoimmune diseases and attention-deficit disorders in young people, fears about a reaction to multiple shots at a time, and concerns over the increased number of vaccinations. The immunization schedule has grown immensely, with some three dozen shots now required by the time a child is 6.

It bothers her that public health officials will so quickly dismiss parents' concerns rather than respond to them or engage in a productive way.

"There is so much fear out there, and the CDC isn't responding to it," Van Vleet said. "All they're doing is upping their campaign."

Nationally, nearly 95 percent of children are vaccinated against measles, according to the CDC. But states' rates vary from less than 82 percent in Colorado to nearly 100 percent in Mississippi.

Communities can show even more variance. A recent study of Kaiser data in northern California published in the journal *Pediatrics* found five main clusters of under-immunization (any child who doesn't strictly follow the CDC schedule) and non-immunization. Under-immunization ranged from 18 to 23 percent in those five clusters, compared with 11 percent outside those clusters in northern California. "Noncompliance is communicable," said Largent of Michigan State University. "People spend a lot of time looking over their shoulder at what their neighbor is doing."

He said reasons for that noncompliance can cross party lines, with those on the left more likely to talk about Big Pharma and a natural lifestyle and those on the right more likely to invoke libertarian principles.

Nyhan, the Dartmouth professor, worries that any attempt to find a middle ground on the debate risks sounding like the science isn't settled.

"Trying to appease parents who are anti-vaccine with this hedging language about balance," he said, "can be misleading to parents."

Delaying vaccines means more time that children are at risk, and therefore a rethinking of the recommended vaccination schedule "is a terrible idea from a policy perspective," he said.

When Meredith Larrabee, a psychologist in Portland, Ore., had her first child, she and her husband opted for a delayed schedule, seeing it as the most moderate, thoughtful choice. When their son was 18 months old, he was diagnosed with pneumococcal meningitis—for which he was supposed to have received a shot but which they had delayed—and he nearly died.

When they had a second child shortly after that experience, Larrabee vaccinated on schedule.

"I wasn't ready for all that responsibility, and it was so much easier to let the CDC or doctor tell me what to do," Larrabee said.

She encourages parents to take responsibility for their choices and says that until her son became ill, she had no idea of the potential dangers. But she also longs for a more measured tone in the current conversation that avoids hostility and respects parents' choices.

"As human beings, we don't like to be in the gray," Larrabee said. "The reality is it's complicated."

The recent measles epidemic has some parents rethinking their choices. "Heather," a Boulder parent of two who chose to use a pseudonym because the rhetoric has gotten so heated, has largely refused vaccinations for her two daughters. Among her community of friends, her choice is hardly unusual. And she goes to a respected local doctor who supported that choice, but who recently e-mailed his patients to say that he is now recommending the MMR vaccine and will be giving it to his own children. Heather is considering getting the vaccine, at least for her older daughter, and is thinking about the risks to other members of the community.

"We're going to sit down with a couple of moms with newborns and have a discussion: As your friend, what do you want me to do?" Heather said.

She has a background as a research scientist and has spent endless hours dissecting studies and reports about side effects from vaccines.

"It's not the mercury, it's not the autism," she said, describing where her resistance comes from. "A lot for me is autoimmunity. It's hard to take your perfectly well child and inject them with something that's going to make them sick at a low level or potentially a higher level."

A friend's child had a dramatic negative reaction to the MMR vaccine, Heather added, and even though she knows that no scientific studies link the vaccine to negative results, she hates seeing those individual experiences marginalized and discounted.

And she doesn't understand the anger she currently sees in the debate.

"Everybody intensely wants what's best for their child," she said.