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Anti-vaccination stronghold in N.C. hit with state's worst chickenpox outbreak in 2 decades



Mother taking care of a girl with chickenpox disease. (iStock) (Mixmike/iStock)

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Chickenpox has taken hold of a school in North Carolina where many families claim religious exemption from vaccines.

Cases of chickenpox have been multiplying at the [Asheville Waldorf School](#), which serves children from nursery school to sixth grade in Asheville, N.C. About a dozen infections grew to 28 at the beginning of the month. By Friday, there were 36, the Asheville Citizen-Times [reported](#).

The outbreak ranks as the state's worst since the chickenpox vaccine became available more than 20 years ago. Since then, the two-dose course has succeeded in limiting the highly contagious disease that once affected 90 percent of Americans — a public health breakthrough.

The school is a symbol of the small but strong movement against the [most effective means](#) of preventing the spread of infectious diseases. The percentage of children under 2 years old who haven't received any vaccinations has [quadrupled since 2001](#), according to the Centers for Disease Control and Prevention.

Like the [Disneyland measles outbreak](#) in 2015, the flare-up demonstrates the real-life consequences of a shadowy debate fueled by [junk science](#) and fomented by the same sort of [Twitter bots and trolls](#) that spread misinformation during the 2016 presidential election. And it shows how a seemingly fringe view can gain currency in a place like Asheville, a funky, year-round resort town nestled between the Blue Ridge and Smoky Mountains.

“The school follows immunization requirements put in place by the state board of education, but also recognizes that a parent’s decision to immunize their children happens before they enter school,” the school explained in a [statement](#) to Blue Ridge Public Radio.

Jennifer Mullendore, the medical director of Buncombe County, N.C., was unambiguous: “We want to be clear: Vaccination is the best protection from chickenpox.”

“When we see high numbers of unimmunized children and adults, we know that an illness like chickenpox can spread easily throughout the community — into our playgrounds, grocery stores, and sports teams,” she said in a news release.

But not all parents seemed to grasp the gravity of the outbreak. Nor does everyone see the rationale behind vaccines, which some believe — contrary to scientific evidence — cause more severe health issues than they’re meant to cure. The claim of an autism risk, though it has been [debunked](#), has remained a rallying cry of the anti-vaccine movement.

“What’s the big deal with chickenpox?” one city resident, Amy Gordon, [told the Citizen-Times](#). Chickenpox is serious, [warns](#) the CDC, “even life-threatening, especially in babies, adolescents, adults, pregnant women and people with weakened immune systems.”

A person can [spread the disease](#) one to two days before the rash appears, increasing the risk of broad transmission of the virus before it is detected.

That was before a two-dose vaccination program was introduced in the United States in 1995.

The [virus](#) used to crop up in about 4 million cases annually in the United States, causing more than 10,000 hospitalizations and between 100 and 150 deaths. Children were especially susceptible, as schools seemed to incubate the blisterlike rash, which appears first on the stomach, back and face and can extend over the entire surface of the body, creating as many as 500 itchy blisters.

The vaccine, which the CDC [says](#) is about 90 percent effective, hasn’t eliminated the varicella zoster virus, which causes chickenpox. But since the regimen became commercially available, it has reduced the number of cases, as well as their severity. A 14-year prospective [study](#) published in *Pediatrics* in 2013 found that the incidence of infection was nine- to 10-times lower than in the pre-vaccine era.

Still, the vaccine’s clearly documented merits remain unconvincing to some. Asheville Waldorf has one of the highest religious vaccination exemption rates in the state, according to [data](#) maintained by the state’s Department of Health and Human Services.

The private school has a higher rate of exemption on religious grounds than all but two other North Carolina schools, the *Citizen-Times* reported. During the 2017-18 school year, 19 of 28 kindergartners were exempt from at least one vaccine required by the state. Of the school’s 152 students, 110 had not received the chickenpox vaccine, the newspaper reported.

North Carolina requires all students in the state to receive certain immunizations. Among the vaccines required for kindergarten-aged children are two doses for chickenpox, two for measles and two for mumps. Seventh graders must again submit to immunization.

But the state also permits exemptions based on the advice of a physician — as well as on religious grounds.

“If the bona fide religious beliefs of an adult or the parent, guardian or person in loco parentis of a child are contrary to the immunization requirements contained in this Part, the adult or the child shall be exempt from the requirements,” state statute allows.

Recent efforts to tighten the rules have foundered. In 2015, state legislators withdrew a bill that would have all but eliminated the religious exemption after their efforts were met with strident protest. Protesters picketed the state’s General Assembly in Raleigh, warning of “Medical Terrorism.”

Meanwhile, the county’s medical director has been exhorting residents to immunize their children. “What happens when we lack community immunity? Measles is what happens,” Mullendore this fall told commissioners of the county, which had the highest rate of religious exemptions last year.

The friction between medical experts and the residents in their care is not unique to Buncombe County, where the parents of 5.7 percent of kindergartners claimed a religious exemption, or even to North Carolina, where the rate was 1.2 percent.

Forty-seven states allow religious exemptions to vaccine requirements, according to the National Conference of State Legislatures. CDC data shows that the median percentage of kindergartners with an exemption from one or more required vaccine was highest in Oregon.