



Since measles outbreak, California vaccination rate climbs

By Chelsea Rice | March 22, 2017

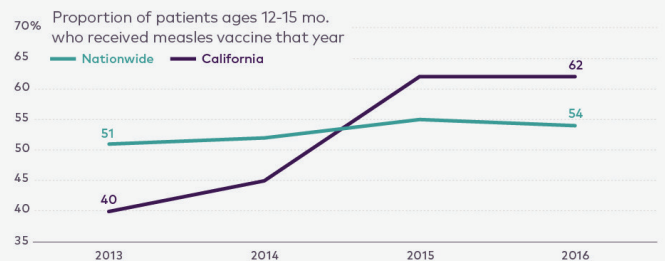
In 2014, California saw its worst measles outbreak in 15 years, stemming from a Disneyland theme park visitor who had recently been overseas. At least 40 people who visited or worked at the Orange County theme park contracted the highly contagious airborne virus – and spread it across six states, Mexico, and Canada. Nearly half of the 147 people who got sick were unvaccinated.

Two years later, data from the athenahealth network suggests that the outbreak made a positive, lasting impression on child vaccination rates for 12 to 15 month-olds in California. Doctors vaccinated more than a third more of this age group in 2015 than in the previous year, and the trend has continued.

Researchers reviewed visits for patients 12 to 15 months old – the age that the Centers for Disease Control and Prevention recommends children receive a first measles vaccination – to primary care providers and pediatricians across the state. The analysis looked at the proportion of all patients whose records that year included a procedure code for any kind of measles vaccine, including the measles, mumps, and rubella vaccine known as MMR.

In 2014, the year of the Disneyland outbreak, 45 percent of 6,000 California babies were vaccinated against the measles during one of those visits. By the end of 2015, that figure had climbed to 62 percent, an increase of 17 percentage points. That level stayed steady through the end of 2016.

Measles vaccination rates¹ in California climb faster than nation since 2014 outbreak



¹The proportion of all patients with visits that year whose patient record included a measles vaccine procedure code. This included measles virus vaccine; measles and rubella virus vaccine; measles, mumps, and rubella vaccine (MMR); and measles, mumps, rubella, and varicella vaccine (MMRV).
Source: athenaResearch
Sample: Visits from 130,000 (nationwide) and 6,000 (CA) patients per year to 3,500 (nationwide) and 80 (CA) primary care providers and pediatricians at 508 (nationwide) and 27 (CA) practices live on athenaNet since 2012.

In addition to increased awareness, the jump could stem, in part, from a change in California law. In 2016, in response to the outbreak, the state legislature passed a series of strict vaccine mandates, removing families' right to a personal-belief or religious exemption to child

vaccinations, and requiring that school-aged children be vaccinated against 10 diseases unless they have a medical waiver.

While the new California policy applies to school-aged children, the data indicates that parents of young children have also begun to shift their thinking in a state that has been seen as a hotbed of the anti-vaccine movement. Communities of unvaccinated have popped up in certain California counties, and parents' fears are flamed by celebrity endorsement of discredited claims that vaccines cause autism.

A nearby outbreak may be what it takes for pockets of vaccine skeptics to change their minds about a public health strategy that depends on "herd immunity." The CDC has also reported an increase in California, since 2014, in the proportion of children who have received MMR vaccines.

Measles vaccination rates nationwide didn't see as dramatic a shift. Across the country, according to athenahealth data, the proportion of patients ages 12 to 15 months who received a measles vaccine during a visit increased from 52 to 55 percent between 2014 and 2015, then dipped to 54 percent in 2016.

While the athenahealth data examines vaccination rates within one year, nationwide, the CDC reports that approximately 91 percent of children 19 to 35 months old have been vaccinated against measles, mumps, and rubella at some point in their lives.

Data analysis by Stewart Richardson. Chelsea Rice is a staff writer for athenaInsight. Follow her on Twitter @ChelseaRice.

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