



# Infectious Disease Epidemiology Report

## Varicella, 2013



### Background

Varicella is a very contagious disease caused by the varicella-zoster virus. It causes a blister-like rash, itching, tiredness, and fever. Varicella can be serious, especially in babies, adults, and people with weakened immune systems. Varicella is spread in the air through coughing or sneezing. It can also be spread by touching or breathing in the virus particles that come from the blisters.

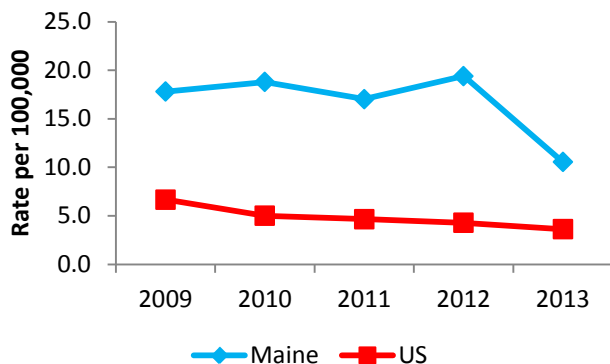
### Methods

Varicella disease is defined as isolation of varicella-zoster virus from a clinical specimen or a clinically confirmed report of a diffuse maculopapulovesicular rash. Maine CDC conducts investigations for all reported varicella cases in schools and childcare centers. All other varicella cases are documented in Maine CDC's surveillance system.

### Results

A total of 139 cases of varicella were reported in 2013. Of these, 47 (33.8%) were reported in schools or childcare centers. The rate of Maine varicella cases was 10.5 cases per 100,000 persons in 2013 (Figure 1). Nationally, only 36 states report varicella surveillance data to federal CDC.

Figure 1. Rates of varicella disease – United States and Maine, 2009-2013



Of the 139 cases of varicella reported in 2013, 73 cases (52.5%) were identified in children less than 20 years of age (Table 1). The age range was from

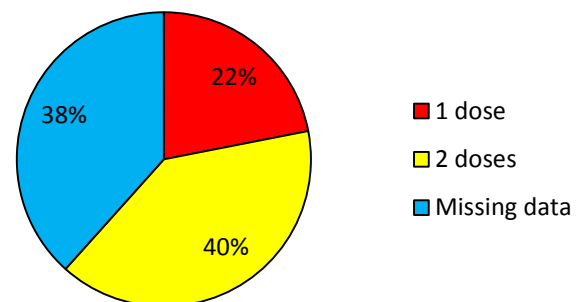
6 months to 98 years with the median age of 17 years.

Table 1: Varicella disease by age– Maine, 2013

Age Years	Cases	
	#	%
0-4	13	9.4
5-9	33	23.7
10-14	15	10.8
15-19	12	8.6
20-34	16	11.5
35-49	19	13.7
>= 50	31	22.3
Total	139	100

Out of 139 Maine varicella cases reported in 2013, 45 (32.4%) cases had documentation of varicella vaccine. In cases under the age of 20, 16 (21.9%) received one vaccine dose and 29 (39.7%) received two vaccine doses. Vaccination records were not available for 28 cases (38.4%) less than 20 years (Figure 2).

Figure 2. Varicella vaccination data in individual cases under 20 years old – Maine, 2013

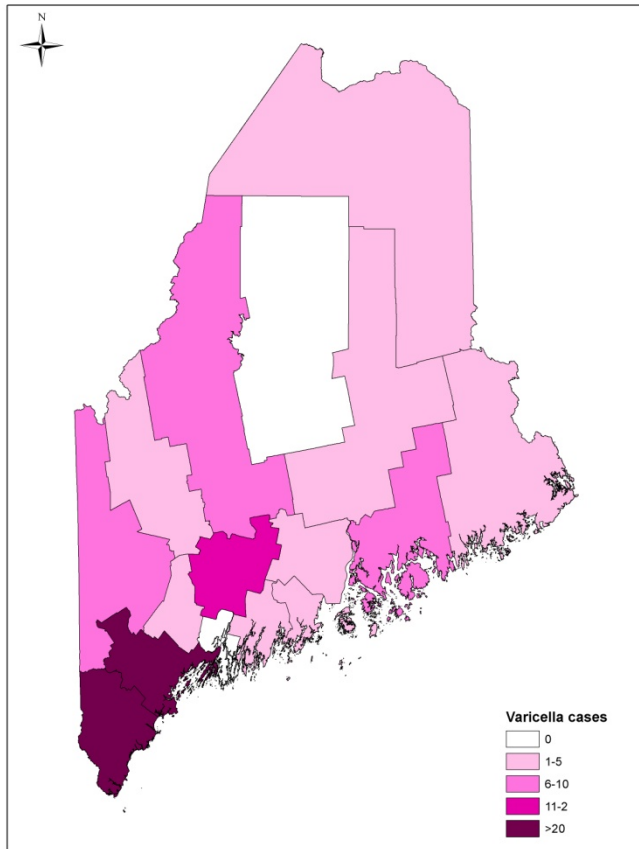


One school experienced an outbreak of varicella (3 or more cases) during 2013, and a total of 39 schools reported at least one case.

Varicella was identified among residents of 14 Maine counties in 2013 (Figure 2), with the highest numbers of reported varicella cases in Cumberland and York counties. Patient address was available

for 85 cases; for the 54 cases without a patient address the provider address was used as a proxy.

**Figure 2: Varicella disease by county- Maine 2013**



## Discussion

Maine CDC conducts routine surveillance on all varicella cases with an emphasis on cases involving children enrolled in school or childcare centers. Varicella is a notifiable disease, and the majority of varicella case reports come from schools. National surveillance data is limited since 14 states do not report varicella cases.

As of 2007, all Maine students are required to have one dose of varicella vaccine for school enrollment. Parents of students who do not show proof of disease immunity or vaccine history and choose not to get their child vaccinated must sign an exemption letter stating the guardian has a medical, religious or philosophical reason for refusing vaccine. Students who do not have proof of varicella immunity will be excluded from school for 16 days from the onset of symptoms of the last identified case.

The Advisory Committee for Immunization Practices (ACIP) recommends the following persons receive varicella vaccine:

- Children 12 through 15 months of age
- 4-6 years of age receive a second dose
- Catch up series for children 7-12 years of age and adolescents
- Susceptible adults at high risk for exposure or transmission:
  - Teachers
  - Child care employees
  - Staff members in institutional settings
  - Healthcare workers
  - Family contacts of immunocompromised persons
  - International travelers
  - Non-pregnant women of childbearing age

The shingles vaccine is approved by FDA for people aged 50 years and older. CDC recommends a one-time vaccination for people 60 years and older to prevent shingles.

All cases of varicella disease in Maine must be reported by calling 1-800-821-5821, or by faxing reports to 1-800-293-7534. For more information, contact your healthcare provider or local health center.

Additional information about Varicella disease can be found at:

- Maine CDC  
<http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vaccine/varicella.shtml>
- Federal CDC  
<http://www.cdc.gov/chickenpox/>