

Infectious Disease Epidemiology Report

Varicella, 2012



Background

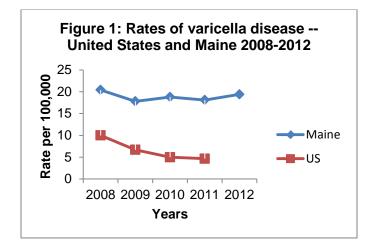
The Infectious Disease Epidemiology Program of the Maine Center for Disease Control and Prevention (Maine CDC) monitors the incidence of varicella (chicken pox) through mandatory reporting by healthcare providers, clinical laboratories and other public health partners. This report summarizes 2012 varicella surveillance data.

Methods

Varicella disease is defined as isolation of varicellazoster virus from a clinical specimen or a clinically confirmed report of a diffuse maculopapulovesicular rash. Investigations are conducted for all varicella cases in schools and childcare centers. All other varicella cases are documented in the Maine CDC surveillance system.

Results

A total of 257 cases of varicella were reported in 2012. Of these, 157 (61%) were reported by schools and childcare centers. The rate of Maine varicella cases was 19.4 cases per 100,000 persons in 2012 (Figure 1). In 2011, the US rate of varicella cases was 4.7 cases per 100,000 persons. Nationally only 36 states report varicella surveillance data to federal CDC.



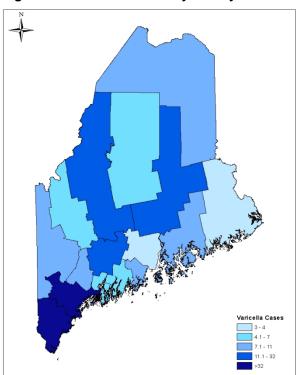
Of the 257 cases of varicella reported in 2012, 200 cases (78%) were identified in children less than 20 years of age (Table 1).

Table 1: Varicella disease by age- Maine, 2012

Age	Cases	
Years	#	%
0-4	56	21.8
5-9	80	31.1
10-14	47	18.3
15-19	17	6.6
20-34	9	3.5
35-49	19	7.4
>= 50	28	10.9
Unknown	1	0.4
Total	257	100

While varicella was identified among residents of all Maine counties in 2012 (Figure 2), the highest numbers of reported varicella cases were in Cumberland and York counties. Out of 257 Maine varicella cases reported in 2012, 100 (38.9%) cases had documentation of varicella vaccine. Vaccination records were not available for all cases.

Figure 2: Varicella disease by county- Maine 2012



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. Maine CDC investigates all reported varicella cases in schools and daycares. Surveillance data suggest Maine varicella rates are remaining stable. 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:
 - o Teachers
 - Child care employees
 - Staff members in institutional settings
 - Healthcare workers
 - Family contacts of immunocompromised persons
 - International travelers
 - Non-pregnant women of childbearing age

Additional information about Varicella disease can be found at:

- Maine CDC http://www.maine.gov/idepi
- Federal CDC http://www.cdc.gov/chickenpox/