



Infectious Disease Epidemiology Report



Varicella, Maine, 2011

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 2011 varicella surveillance data.

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. 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

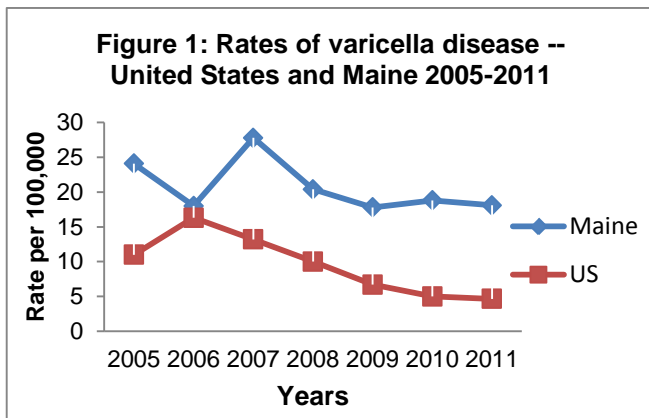
A total of 241 cases of varicella were reported in 2011. Of these, 175 (72%) were reported by schools and childcare centers. The rate of Maine varicella cases was 18.1 cases per 100,000 persons in 2011 (Figure 1). In 2011, the US rate of varicella cases was 4.7 cases per 100,000 persons. Nationally only 36 states report varicella surveillance data to federal CDC.

Table 1: Varicella diseases by age– Maine, 2011

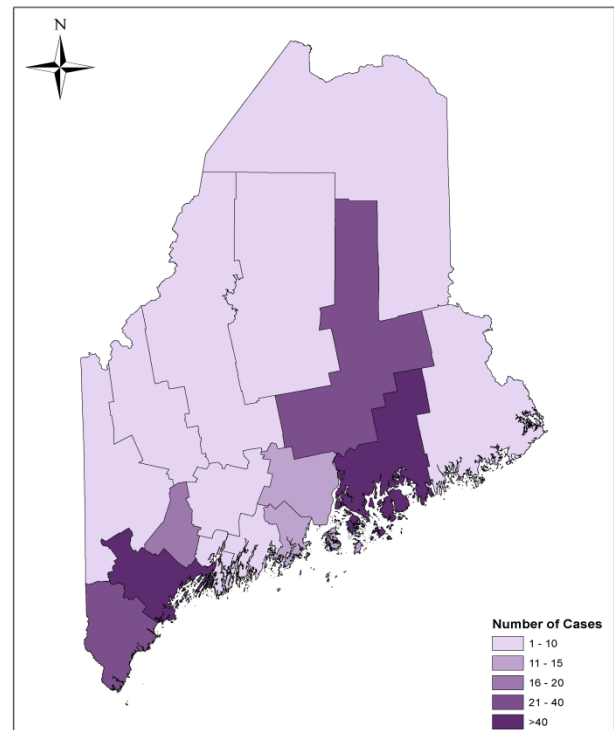
Age Years	Cases #	Percent %
0-4	39	16.2
5-9	101	41.9
10-14	46	19.1
15-19	5	2.1
20-34	11	4.6
35-49	7	2.9
>= 50	22	9.1
Unknown	10	4.2
Total	241	100

While varicella was identified among residents of all Maine counties in 2011 (Figure 2), the highest numbers of reported varicella cases were in Cumberland and Hancock counties. Out of 241 Maine varicella cases reported in 2011, 95 (40.8%) cases had been previously vaccinated for varicella. Vaccination records were not available for all cases.

Figure 2: Varicella diseases by county - Maine 2011



Of the 241 cases of varicella reported in 2011, 191 cases (79%) were identified in children less than 20 years of age (Table 1).



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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. 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 form stating the guardian has a medical, religious or philosophical reason for refusing vaccine. This form must be signed in order for an unvaccinated student to enroll in a Maine school. 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 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

Varicella cases are required to be reported immediately to Maine CDC at 1-800-821-5821. Additional information about Varicella disease can be found at:

- Maine CDC
<http://www.mainepublichealth.gov>
- Federal CDC
<http://www.cdc.gov/chickenpox/>