



# Infectious Disease Epidemiology Report

## Varicella, 2009

### Background

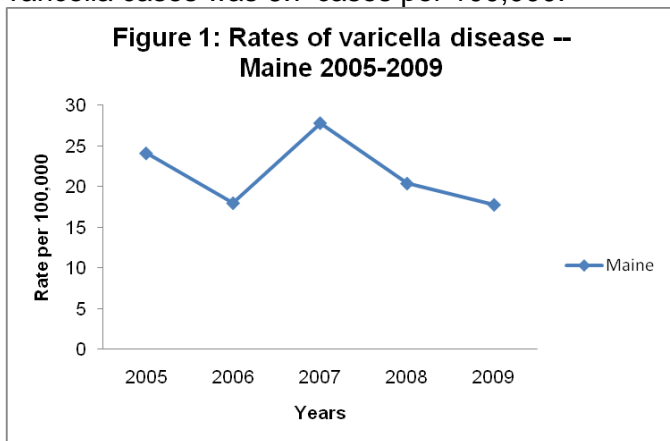
The Infectious Disease Epidemiology Program of the Maine Center for Disease Control and Prevention monitors the incidence of varicella (chicken pox) through mandatory reporting by health care providers, clinical laboratories and other public health partners. This report summarizes 2009 surveillance data on cases of varicella.

### Methods

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

### Results

A total of 235 cases of varicella were reported in 2009. Of these, 165 (70%) varicella cases were reported from schools and child care centers. The rate of Maine varicella cases was 17.8 cases per 100,000 in 2009 (Figure 1). In 2009, the US rate of varicella cases was 6.7 cases per 100,000.



Of the 235 cases of varicella reported in 2009, 199 cases (85%) were identified in children less than 18 years of age (Table 1).

**Table 1: Varicella cases by age– Maine, 2009**

Age Years	Cases #	%
<1	2	0.9
1-4	28	11.9
5-10	125	53.2
11-17	44	18.7
18-34	19	8.1
35-49	5	2.1
>= 50	0	0
Unknown	12	5.1
<b>Total</b>	<b>235</b>	<b>100</b>

While varicella was identified among residents of all Maine counties in 2009 (Table 2), the highest numbers of reported varicella cases were in Penobscot and Cumberland counties. Out of 235 Maine varicella cases reported in 2009, 78 (33%) cases had been previously vaccinated for varicella. Vaccination records were not available for all cases.

**Table 2: Varicella cases by county- Maine 2009**

County	No.	%
Androscoggin	11	4.7
Aroostook	6	2.6
Cumberland	54	23
Franklin	7	3
Hancock	30	12.8
Kennebec	7	3
Lincoln	2	0.9
Oxford	18	7.7
Penobscot	55	23.4
Piscataquis	7	3
Sagadahoc	2	0.9
Somerset	9	3.8
Waldo	3	1.3
Washington	4	1.7
York	20	8.5
<b>Total</b>	<b>235</b>	<b>100</b>

## Discussion

Maine CDC conducts routine surveillance on all varicella cases with an emphasis on cases involving children enrolled in school or child care centers. Varicella is a notifiable disease and a majority of varicella case reports come from schools. Maine CDC investigates all reported varicella cases in schools. Surveillance data suggest Maine varicella rates are decreasing. 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. Students who do not show proof of disease immunity or vaccine history and choose not to vaccinate 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 following persons are encouraged to receive varicella vaccine:

- Anyone 12 through 15 months of age without contraindications.
- Adolescents and adults 13 years of age or older who do not have evidence of varicella immunity. Persons 13 years of age and older should receive two doses of varicella vaccine separated by at least 4 weeks.
- Susceptible adults at high risk for exposure or transmission:
  - Teachers
  - Child care employees
  - Staff members in institutional settings
  - Health care 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.mainepublichealth.gov>
- Federal CDC  
[http://www.cdc.gov/ncidod/diseases/list\\_vari cl.htm](http://www.cdc.gov/ncidod/diseases/list_vari cl.htm)