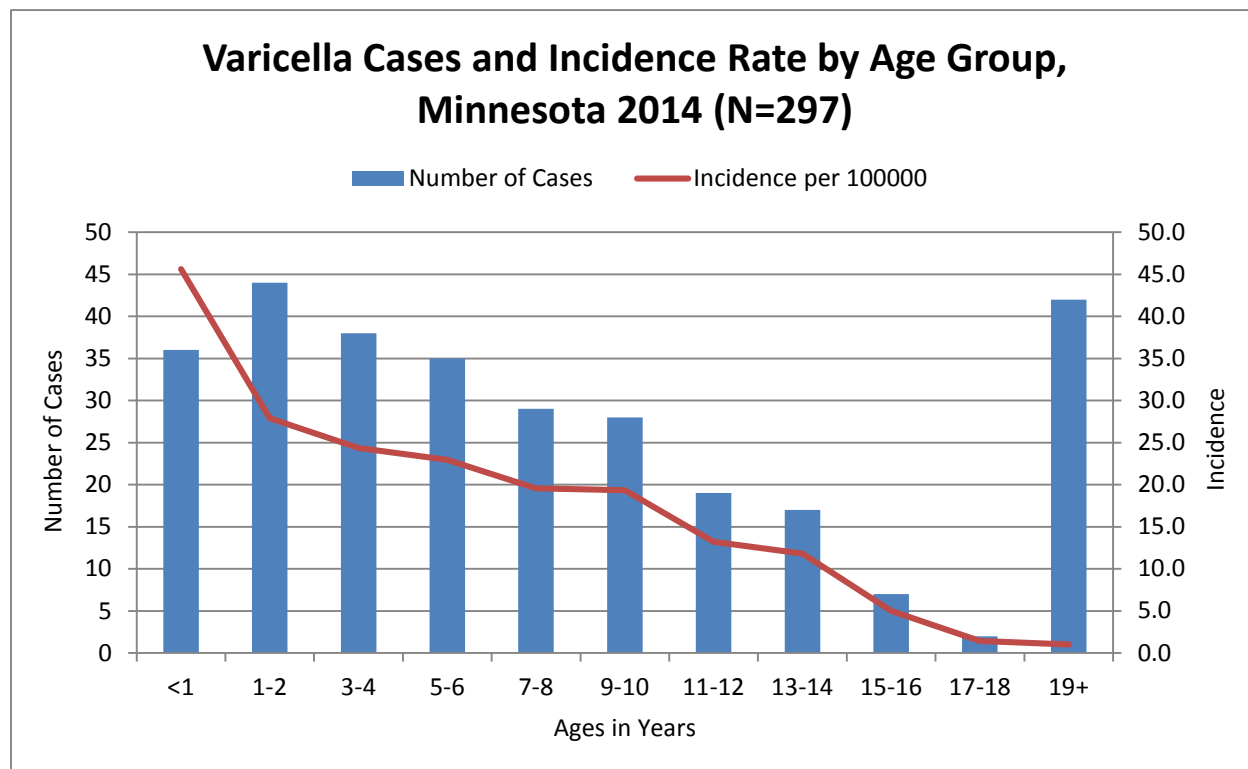


Chickenpox and Shingles in Minnesota 2014

Since Jan. 1, 2013, all cases of chickenpox are required to be reported. This report is based on case reports provided by medical providers, child care providers, and schools.

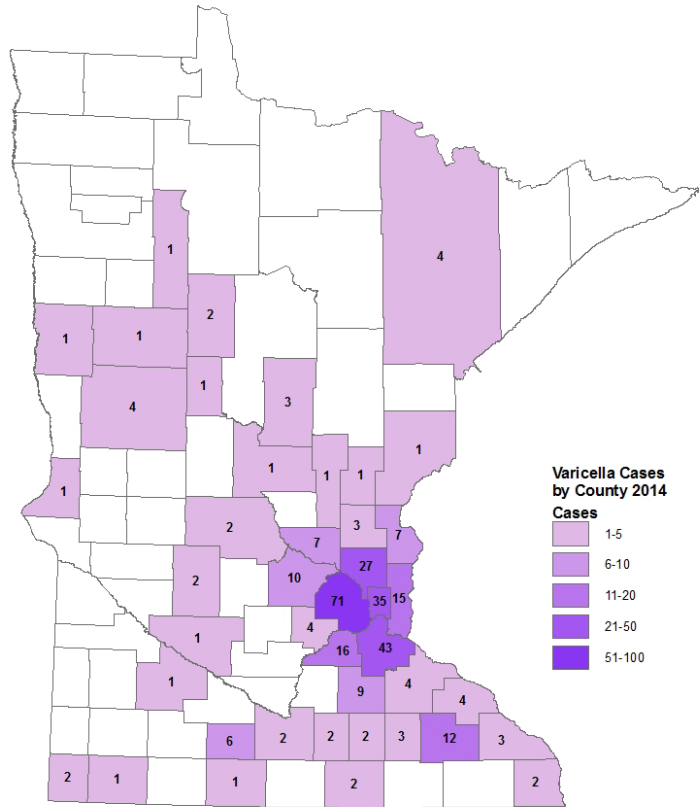
Chickenpox (Varicella) Case Reporting, January to December 2014

In 2014, MDH received reports of 559 suspected cases of chickenpox, of which 297 were identified as probable and confirmed cases and used for statistics. Minnesota had a statewide annual incidence of 6 cases/100,000 population, which is similar to the most recent available national statistic of 5.3/100,000 (2012). Age information was available for all Minnesota cases.



This graph shows the number of cases by age in years and by age incidence. Incidence peaked in children <1 year. Children in this age group are too young to be vaccinated for varicella. Incidence declined in each succeeding age group and was lowest in adults aged 19 and over.

Chickenpox and Shingles in Minnesota 2014



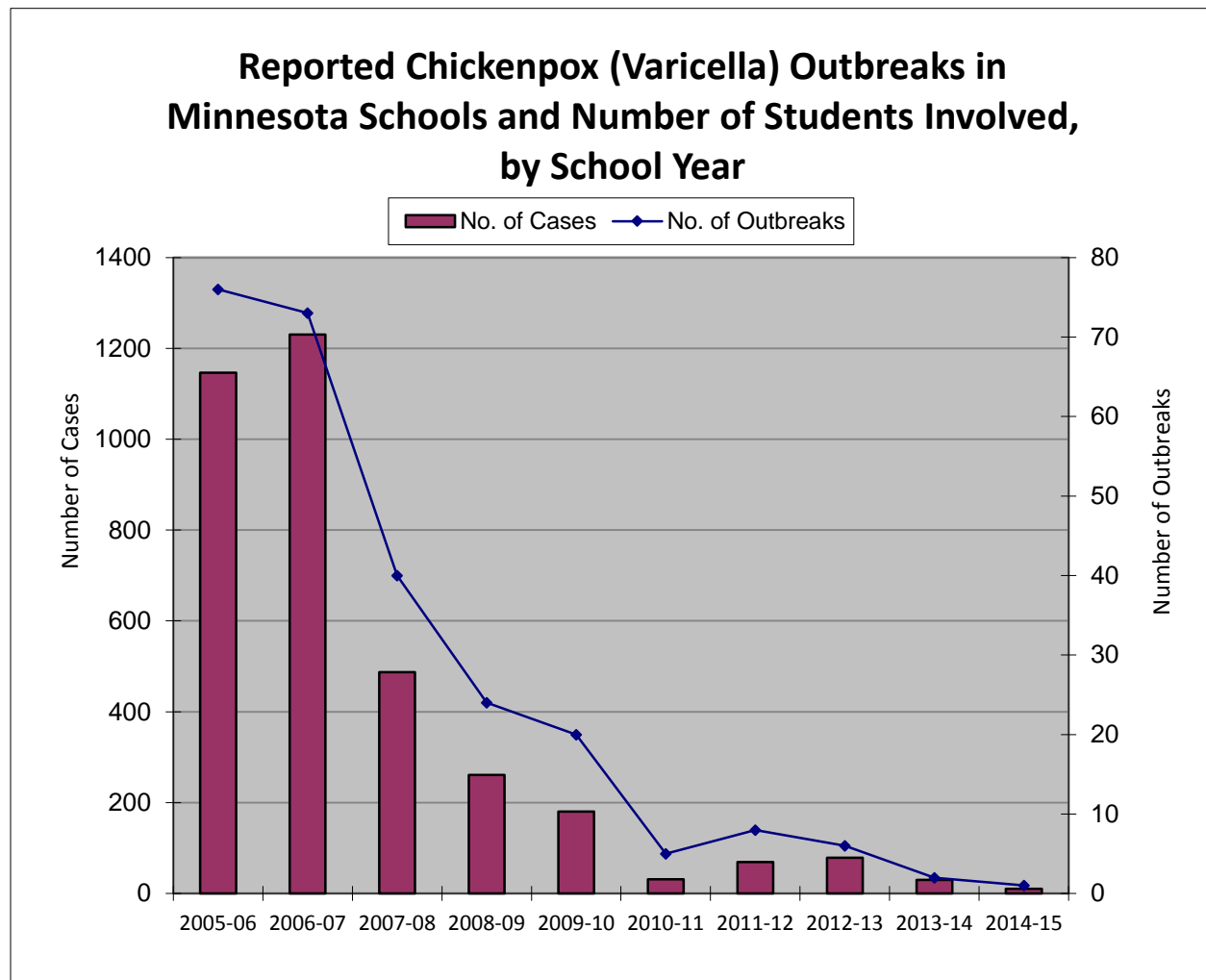
Minnesota Varicella Cases by County, January 1 –December 31, 2014							
County	Cases	County	Cases	County	Cases	County	Cases
Anoka	27	Goodhue	4	Olmsted	12	Stearns	2
Becker	1	Hennepin	71	Otter Tail	4	Steele	2
Blue Earth	2	Houston	2	Pine	1	Traverse	1
Carver	4	Hubbard	2	Ramsey	35	Wabasha	4
Chisago	7	Isanti	3	Redwood	1	Wadena	1
Clay	1	Kanabec	1	Renville	1	Waseca	2
Clearwater	1	Kandiyohi	2	Rice	9	Washington	15
Crow Wing	3	Martin	1	Rock	2	Watsonwan	6
Dakota	19	Mille Lacs	1	St. Louis	4	Winona	3
Dodge	3	Morrison	1	Scott	16	Wright	10
Freeborn	2	Nobles	1	Sherburne	7		

Chickenpox and Shingles in Minnesota 2014

Chickenpox (Varicella) School Reporting 2014-15

Because school outbreaks have declined steeply, schools are asked to report all suspect or confirmed cases as they occur. However, outbreaks are still reportable. During the 2014-15 school year:

- Only one Minnesota school reported an outbreak of five or more verifiable cases.
- 10 students and no staff were cases.
- Only one outbreak case had been vaccinated for varicella.

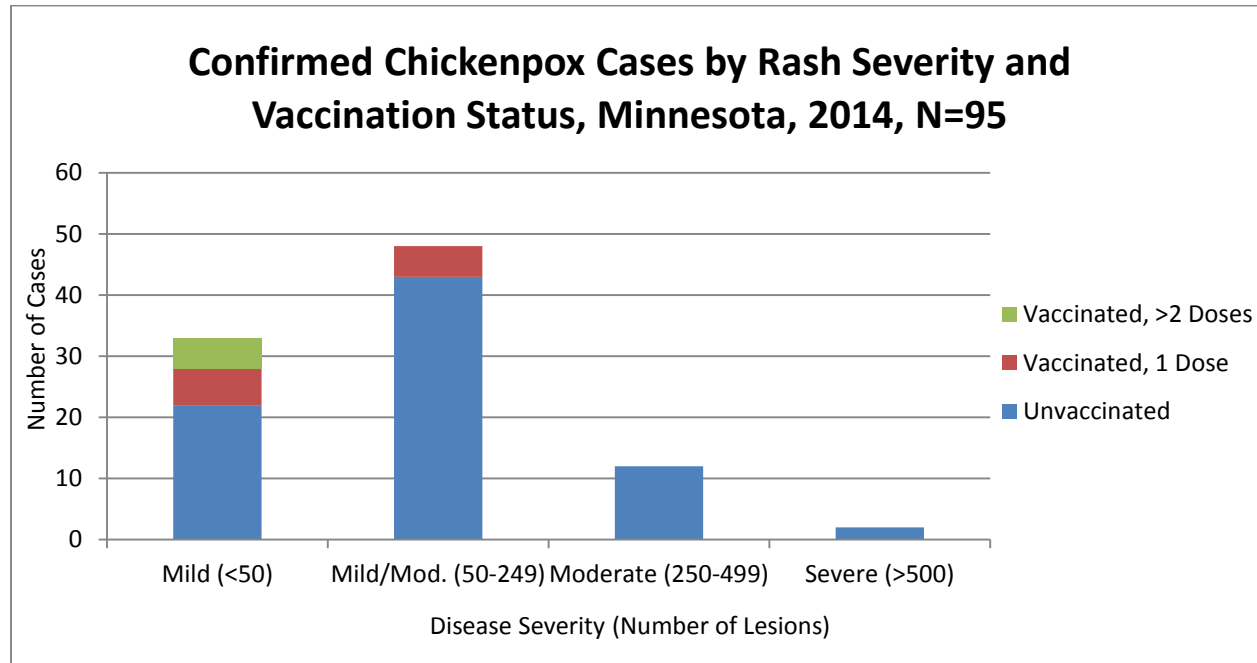


This graph shows that outbreaks of chickenpox in Minnesota schools have sharply declined since requirements for one dose (2004) and two doses (2009) of chickenpox vaccine were put into place.

Chickenpox and Shingles in Minnesota 2014

Schools have been reporting individual cases of chickenpox since the 2012-13 school year. Cases that are not related to an outbreak of five or more are called sporadic cases. High levels of vaccination in a school help to prevent outbreaks by limiting the spread of disease to others. For the first three years of individual case reporting, the total number of sporadic, probable and confirmed cases reported in Minnesota school children are:

- 2012-13: 175
- 2013-14: 99
- 2014-15: 139

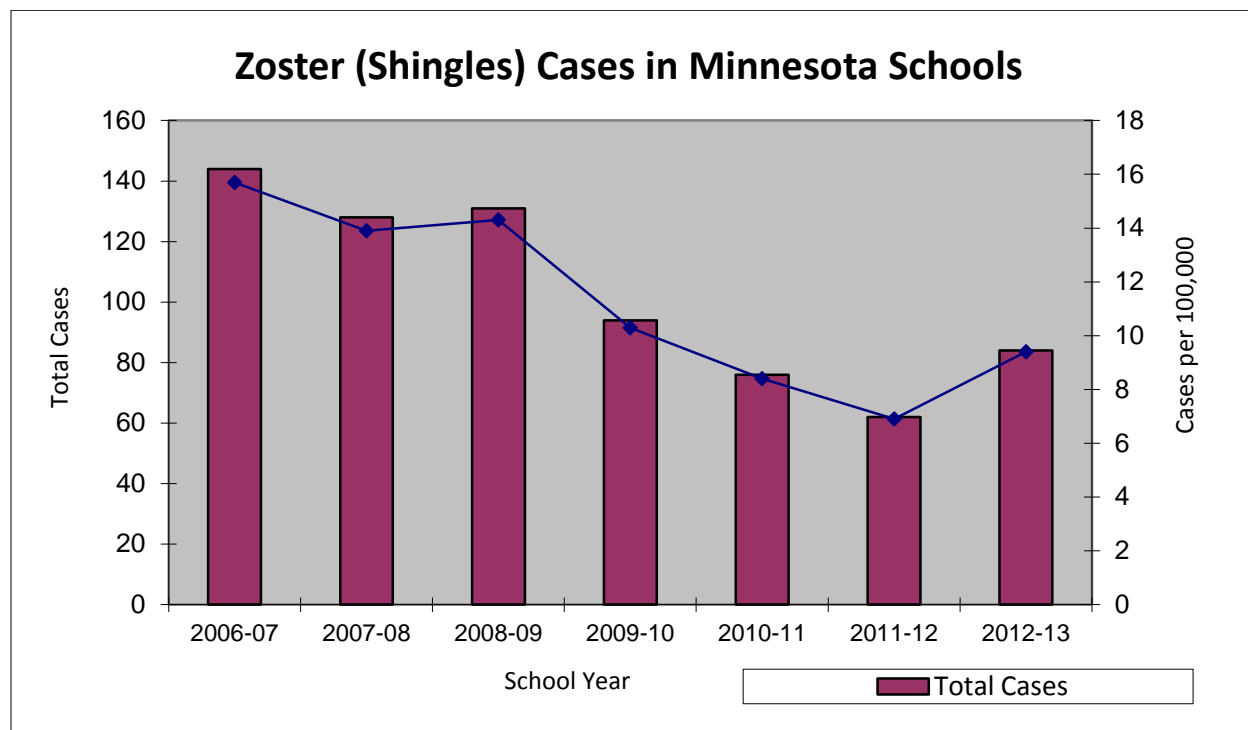


Varicella vaccine prevents most cases of chickenpox. If breakthrough disease does occur, symptoms are usually mild, with fewer lesions. Cases with severe rash are more likely to have lesions in the mouth and throat, which can make swallowing uncomfortable and increase the risk of dehydration. This graph shows that severe disease was not seen in vaccinated individuals in 2014. Those vaccinated individuals who got breakthrough chickenpox got mild or mild-to-moderate disease.

Cases hospitalized with chickenpox also provided evidence for vaccine effectiveness. During 2014, 12 individuals were hospitalized because of varicella, but there were no reported deaths. Seven of the cases had complications of varicella, such as bacterial superinfection, high fever, seizures, and dehydration. Eight of the cases (67%) had never received varicella-containing vaccine. Three cases (25%) were partly vaccinated (1 dose) and were hospitalized for observation rather than for complications or severe rash. The remaining case had an unknown history of vaccination.

Shingles (Zoster) in Minnesota Children Under 18 Years of Age

From the 2006-07 through the 2012-13 school years, MDH conducted surveillance for shingles in children chiefly through reports from schools. As increasing numbers of children were being vaccinated for chickenpox, cases of shingles being reported from K-12 schools declined from 15.7/100,000 to 9.4/100,000. Since that time, MDH has begun receiving reports from health care providers and child care as well. Even so, the total number of case reports per calendar year from all sources remains lower than the numbers formerly reported by schools alone.



For more information on shingles in Minnesota, see the “Varicella and Zoster” articles in the Disease Control Newsletter www.health.state.mn.us/divs/idepc/newsletters/dcn/sum14/varicella.html.