

Outbreaks of respiratory illness were the third most common type of disease outbreak in 2010, accounting for 26 (27%) confirmed outbreaks (Table 8). Respiratory illness outbreaks were reported by 14 (25%) counties. In 2009, outbreaks of respiratory illness represented the most common type of outbreak reported in West Virginia because of the emergence of (2009) influenza A (H1N1) virus that peaked in October, 2009. This peak was followed by a marked reduction in influenza activity during 2010.

Table 8. Respiratory Outbreaks by Clinical Syndrome, West Virginia, 2010

Clinical Syndrome	Number of Outbreaks	Percent
Upper Respiratory Illness	16	61.6%
Pertussis (Whooping Cough)	5	19.2%
<i>Streptococcus</i> Pharyngitis	3	11.6%
Influenza-Like Illness	1	3.8%
Upper Respiratory Illness / Pneumonia	1	3.8%
Total	26	100%

Upper respiratory illness (URI) represented the majority of respiratory outbreaks. Sixteen outbreaks were reported from healthcare facilities (see Healthcare-Associated Outbreaks section) and one outbreak was reported from a school.

There was one outbreak of influenza-like illness reported from a school. Influenza-like illness is defined as a fever of a 100 degrees Fahrenheit or higher, plus cough, and/or sore throat in the absence of a known cause.

There were 3 (11.6%) outbreaks of *Streptococcus* pharyngitis reported in 2010. *streptococcus* pharyngitis is caused by group A *Streptococcus* (GAS) and presents clinically with fever, pharyngitis and sore throat. Two outbreaks were reported from schools and the one outbreak was reported from a daycare. All three outbreaks were rapid test positive but not culture confirmed.

No outbreaks of seasonal influenza, or 2009 influenza A (H1N1) were reported in 2010.

There were 5 outbreaks of pertussis (whooping cough) reported in 2010. Four outbreaks were reported among communities and the remaining outbreak was reported among daycare attendees. There were no pertussis-related deaths in WV in 2010. Pertussis is an endemic disease in West Virginia and the U.S. The disease displays a cyclical pattern and causes periodic outbreaks every 3 to 5 years. The incidence of sporadic cases of pertussis has increased dramatically in West Virginia during 2010

(figure 3). Pertussis outbreaks can be difficult to identify and manage. For the purpose of this report, a pertussis outbreak is defined as two or more cases involving two or more households clustered in time and space where transmission is suspected to have occurred. One or more cases in an outbreak should be confirmed by positive culture and or PCR results. It is imperative to note that PCR tests to detect *Bordetella pertussis* vary in specificity; therefore, culture remains the gold standard for diagnosis. Vaccination is the best defense against this disease. However, since the vaccine is not 100% effective, pertussis outbreaks can still occur even in highly vaccinated populations.

