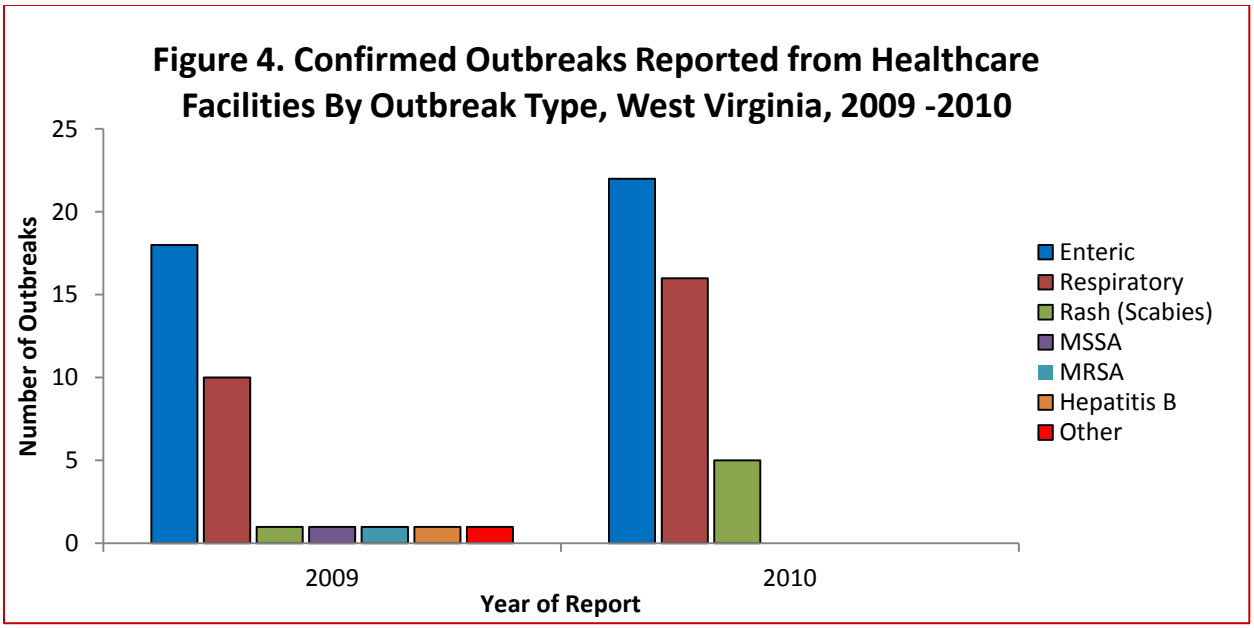
Healthcare-Associated Outbreaks:

In 2010, 43 (45%) outbreaks were reported from healthcare facilities. Forty-one (95%) of these outbreaks were reported from long-term care facilities, and the remaining 2 (5%) were reported from hospitals. The number of confirmed healthcare-associated outbreaks (HAOs) increased from 33 in 2009 to 43 in 2010. Enteric outbreaks comprised the majority of HAOs in both 2009 and 2010, followed by respiratory disease outbreaks (Figure 4)



In 2010, the majority (51%) of healthcare associated outbreaks were enteric disease outbreaks followed by respiratory disease (37%) and rash illness (11.6%) (Table 10).

Table 10. Healthcare-Associated Outbreaks by Type of Outbreak, West Virginia, 2010

Type of outbreak	Number of Outbreaks	Percent
Enteric	**22**	**51.2%**
Respiratory	**16**	**37.2%**
Rash	**5**	**11.6%**
Total	**43**	**100%**

Twenty one enteric disease outbreaks were reported from LTCFs and the remaining outbreak was reported from a hospital. Eleven outbreaks were laboratory-confirmed as

norovirus. Laboratory testing was negative or non-contributory in 4 outbreaks and was not done in the remaining 6 outbreaks (Table 11)

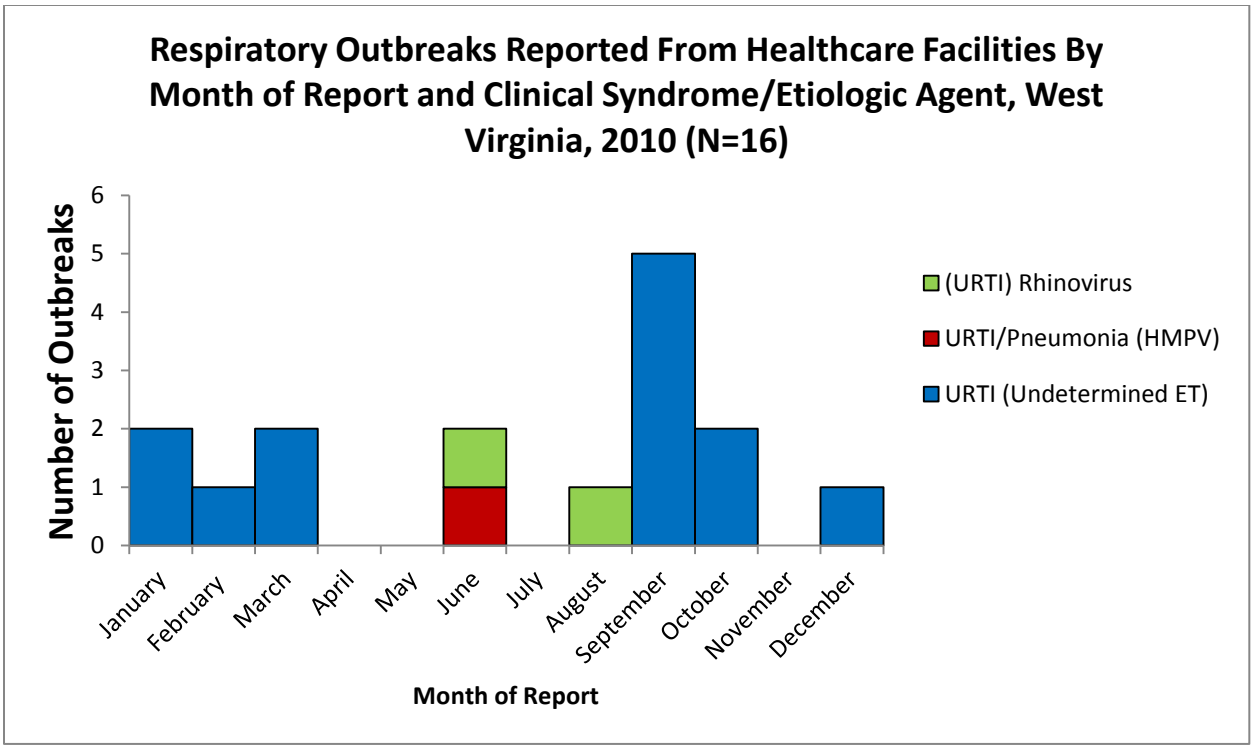
Table 11. Enteric Outbreaks reported from Healthcare Facilities by Etiologic Agent, West Virginia, 2010

Etiologic Agent	Number of Outbreaks	Percent
Norovirus Genotype II	8	36.4%
Undetermined (Lab testing not done)	6	27.0%
Undetermined (Lab testing negative or non contributory)	4	18.0%
Norovirus Genotype I	2	9.1%
Norovirus (no typing)	1	4.5%
Norovirus Genotype I & II	1	4.5%
Total	22	100%

Among HAOs caused by enteric disease, the mode of transmission was person-to-person in 19 outbreaks, likely point source in 2 outbreaks and point source with secondary person-to-person transmission in 1 outbreak.

Respiratory outbreaks were the second most common HAO with 16 reported in 2010. Fifteen were reported from long-term care facilities and one was reported from a hospital. All reported outbreaks were due to upper respiratory illnesses and one of them was complicated by pneumonia. There were no reported HAOs of influenza or influenza-like illness.

Upper respiratory illness is defined as new onset of at least two of the following symptoms: runny nose or sneezing, stuffy nose / congestion, sore throat / hoarseness / difficulty swallowing, dry cough, and/or cervical lymphadenopathy. Among upper respiratory illness HAOs, laboratory testing was negative or non-contributory in 8 outbreaks, not done in the 5 outbreaks, and confirmed as rhinovirus (common cold) in the remaining 2 outbreaks. Rhinovirus was identified by using an advanced PCR assay at CDC. Human metapneumovirus caused an outbreak of URI/pneumonia at one LTCF. This outbreak had an attack rate of 47% and death rate of 1%. Several cases were complicated by pneumonia. Human metapneumovirus was laboratory confirmed at CDC.



Five HAOs were rash illnesses. All confirmed rash illness outbreaks were caused by scabies and reported from LTCFs. Two outbreaks were laboratory confirmed and 3 were confirmed by clinical diagnosis. Scabies outbreaks are not uncommon in institutional settings, such as LTCFs and hospitals. Early identification, implementation of isolation and control measures, and the timely treatment and prophylaxis of patients and exposed is essential to control scabies outbreaks