

North Carolina Weekly Enterovirus D68 Surveillance Summary

10/24/2014

National Updates:

- From mid-August to October 23, 2014, a total of 973 people from 47 states and the District of Columbia were confirmed to have respiratory illness caused by EV-D68.
- Almost all CDC-confirmed cases have been among children. EV-D68 has been detected in specimens from eight patients who died.
- CDC is working with state and local health departments to investigate reports of focal limb weakness occurring in children on or after August 1, 2014. As of October 23, CDC has verified reports of 51 cases in 23 states that meet the established case definition (<http://www.cdc.gov/ncird/investigation/viral/sep2014.html>).
- Health professionals should consider EV-D68 as a cause of severe respiratory illness and also evaluate and report to the state or local public health any patients ≤21 years of age with sudden onset of limb weakness and an MRI showing spinal cord lesions largely restricted to gray matter.

North Carolina Updates:

- Nineteen cases of EV-D68 infection have been confirmed in North Carolina. Almost all were in children <10 years of age with respiratory illness.
- Currently two cases meet the criteria established by CDC for acute neurologic illness with focal limb weakness; reported from the eastern and western part of the state. Testing for EV-D68 is pending.
- DPH continues to monitor data from a variety of sources to track trends in respiratory illness that could indicate increasing or decreasing respiratory syndromic surveillance data, laboratory data, and hospital admission data.
- Specimens submitted for EV-D68 testing:
 - Results have been received for 52 specimens submitted through the State Laboratory of Public Health for EV-D68 testing at CDC: 19 positive for EV-D68, 16 positive for rhinovirus, and 17 negative.

# of specimens sent to SLPH (as of 10/23/2014)	# Positive for EV D68 from CDC
70	19

- Positive results by regions can be found here: <http://www.ncdhhs.gov/evd68/>
- Other activities:
 - DPH has developed and disseminated guidance and information for providers, schools/childcare centers and the public, available at <http://epi.publichealth.nc.gov/cd/diseases/enterovirus.html>.
 - DPH has disseminated information about neurologic illness with focal limb weakness to clinical and public health partners.
 - DPH continues to investigate reports related to focal limb weakness.

HOSPITAL-BASED PUBLIC HEALTH EPIDEMIOLOGIST (PHE) NETWORK

Respiratory Viral Pathogen Surveillance

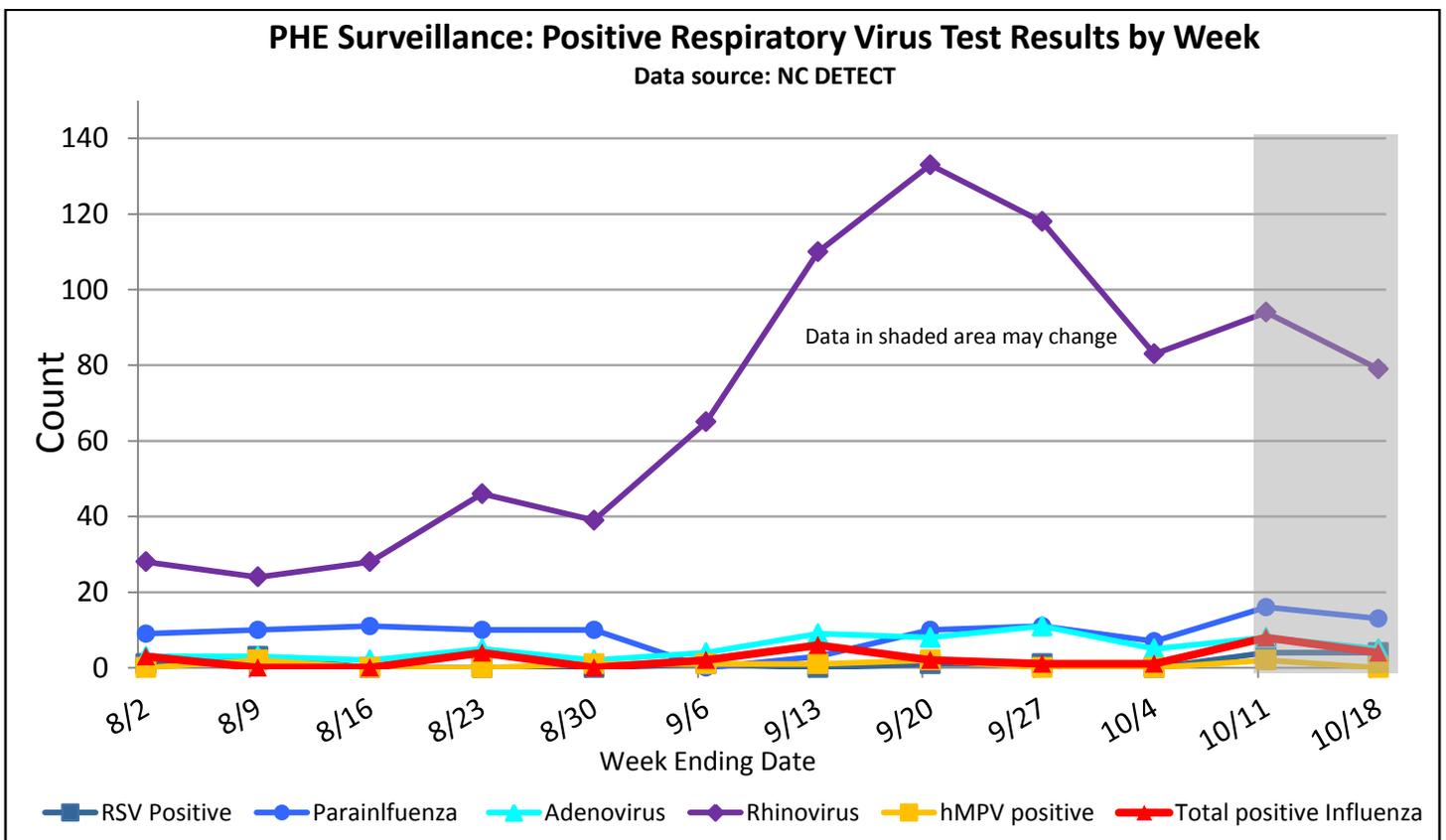
Background :

Positive test results for selected respiratory viruses are reported on a weekly basis by Public Health Epidemiologists (PHEs) located in seven of the largest hospital networks across North Carolina. The graph below shows the number of positive tests for respiratory syncytial virus (RSV), parainfluenza, adenovirus, rhinovirus/enterovirus and human metapneumovirus (hMPV) beginning with the week ending 8/2/2014.

These data provide a useful indication of which respiratory viruses are circulating and possibly contributing to respiratory illness in the state. Please note that the total number of tests performed is not available from all hospital networks, so the overall proportion testing positive cannot be calculated. Also, testing protocols and practices differ among hospitals. Finally, these numbers reflect test results from participating hospitals only and might not be reflective of the entire state.

Summary:

- The number of specimens testing positive for rhinovirus/enterovirus has declined since late September.



Note: Most facilities use tests that do not distinguish rhinoviruses from enteroviruses

HOSPITAL-BASED PUBLIC HEALTH EPIDEMIOLOGIST (PHE) NETWORK

Acute Respiratory Admissions Surveillance

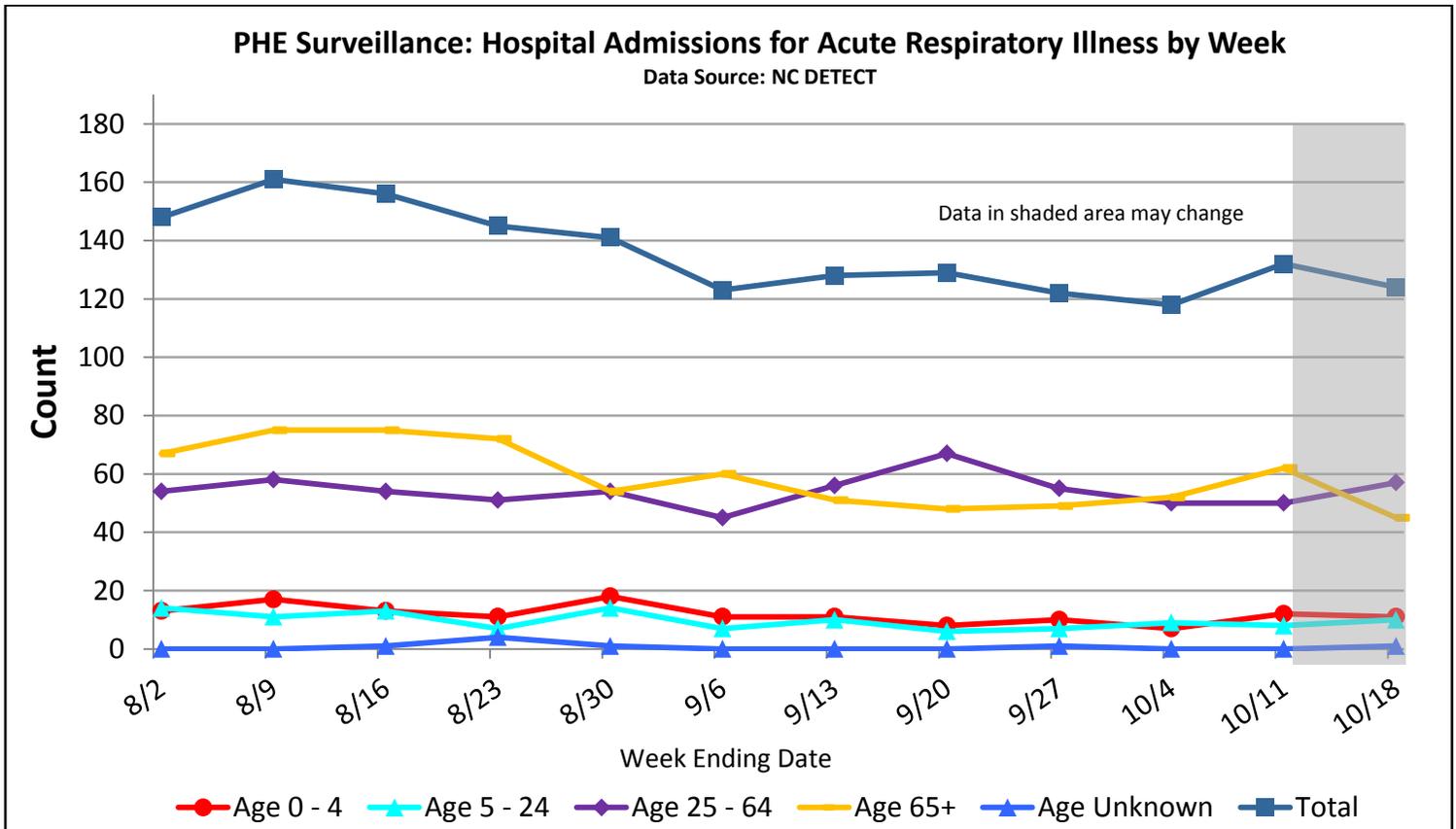
Background:

The number of patients admitted to the hospital with respiratory symptoms is reported on a weekly basis by Public Health Epidemiologists (PHEs) located in seven of the largest hospital networks across North Carolina. The graph below shows the number of acute respiratory illness admissions to participating hospitals by age group.

In conjunction with other surveillance information, these data help us monitor for changes in severity of respiratory illness. Please note that these reports are not limited to patients with laboratory-confirmed enterovirus infection. Also, these numbers reflect admissions to participating hospitals only and might not be reflective of the entire state.

Summary:

- The weekly number of admissions for acute respiratory illness decreased slightly during the week ending 10/18/2014. Overall it is lower than at the end of August.



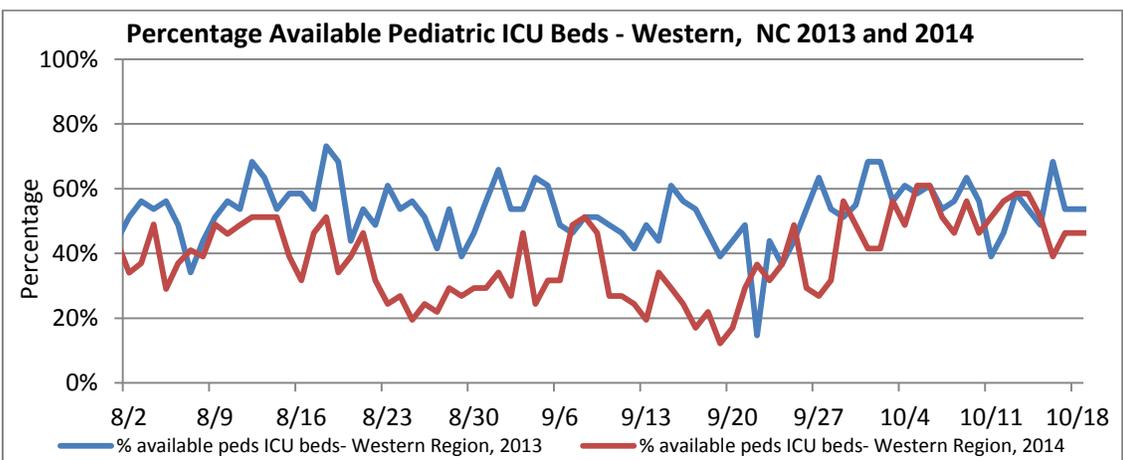
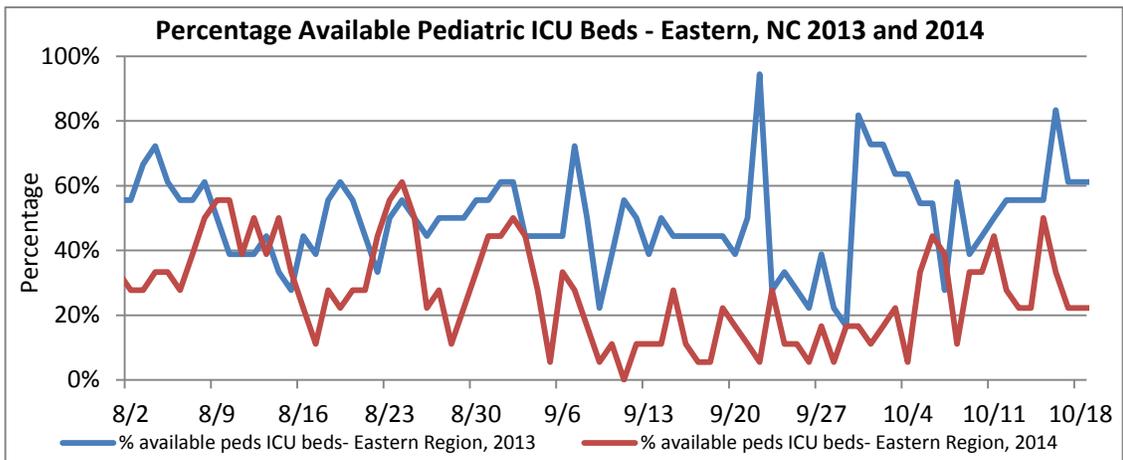
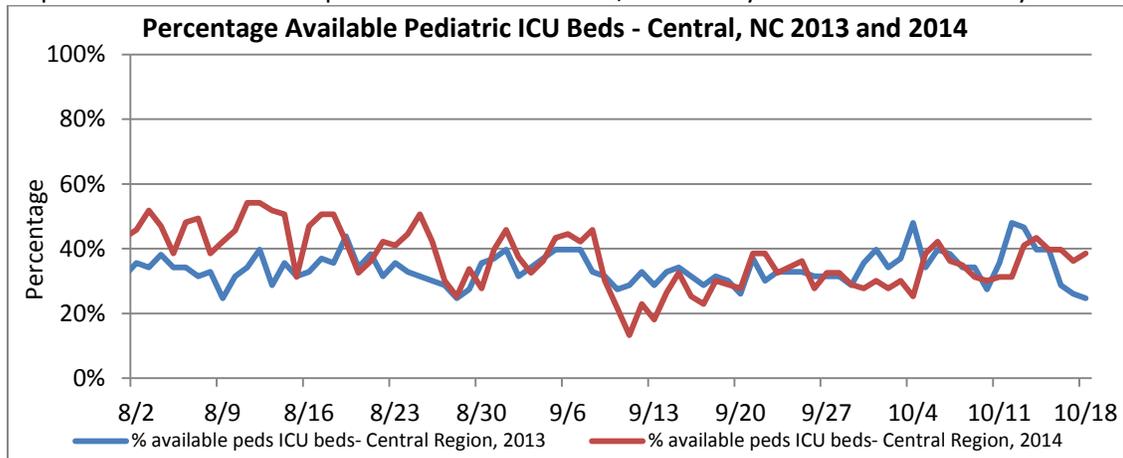
STATE MEDICAL ASSET RESOURCE TRACKING TOOL (SMARTT)

Background:

The state medical asset resource tracking tool, a web-based system designed to provide daily information to hospitals, EMS Systems, and state disaster management personnel. All acute care hospitals provide data on a daily basis; not sure if that includes state-operated facilities. Information that is collected within the SMARTT system daily include hospital bed availability, specialty care availability, and closed services with the expected time those services are anticipated to resume normal operations.

Summary:

- The proportion of pediatric ICU beds available in the eastern region of the state has remained low since mid-August compared to the same time period in 2013. However, availability has increased recently in all regions.



North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) ILI Surveillance

Background:

Near real-time syndromic surveillance is conducted through the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). This system uses a variety of data sources including emergency departments (EDs). NC DETECT is currently receiving data daily from 122 of the 123 24/7 EDs in North Carolina. The NC DETECT graphs below uses Respiratory ALL syndrome and Asthma syndrome.

Summary:

- ED visits for respiratory illness and asthma among children increased slightly during the past week but remain lower than during early and mid-September.

