

North Carolina Weekly Enterovirus D68 Surveillance Summary

11/14/2014

National Updates:

- From mid-August to November 12, 2014, a total of 1116 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 twelve patients who died.
- Reports from states over the last five weeks have indicated reduced EV-D68-like illness activity. Some states, in the last two weeks, have reported increasing respiratory illness activity which is likely caused by seasonal viruses such as influenza and respiratory syncytial virus (RSV).
- 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 November 12, CDC has verified reports of 75 cases in 29 states that meet the established case definition (<http://www.cdc.gov/ncird/investigation/viral/sep2014.html>). A causal link to EV-D68 infection has not been established.
- Health professionals should consider EV-D68 as a cause of severe respiratory illness and also evaluate and report to 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:

- Twenty-three cases of EV-D68 infection have been confirmed in North Carolina, with a majority among young children with respiratory illness.
- Two cases met the criteria established by CDC for acute neurologic illness with focal limb weakness; reported from the eastern and western part of the state. Both case results were negative for EV-D68.
- 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 71 specimens submitted through the State Laboratory of Public Health for EV-D68 testing at CDC: 23 positive EV-D68, 21 positive rhinoviruses, 2 other enteroviruses and 25 negatives. Four specimens have not yet been resulted.

# of specimens sent to SLPH (as of 11/14/2014)	# Positive for EV D68 from CDC
75	23

- 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

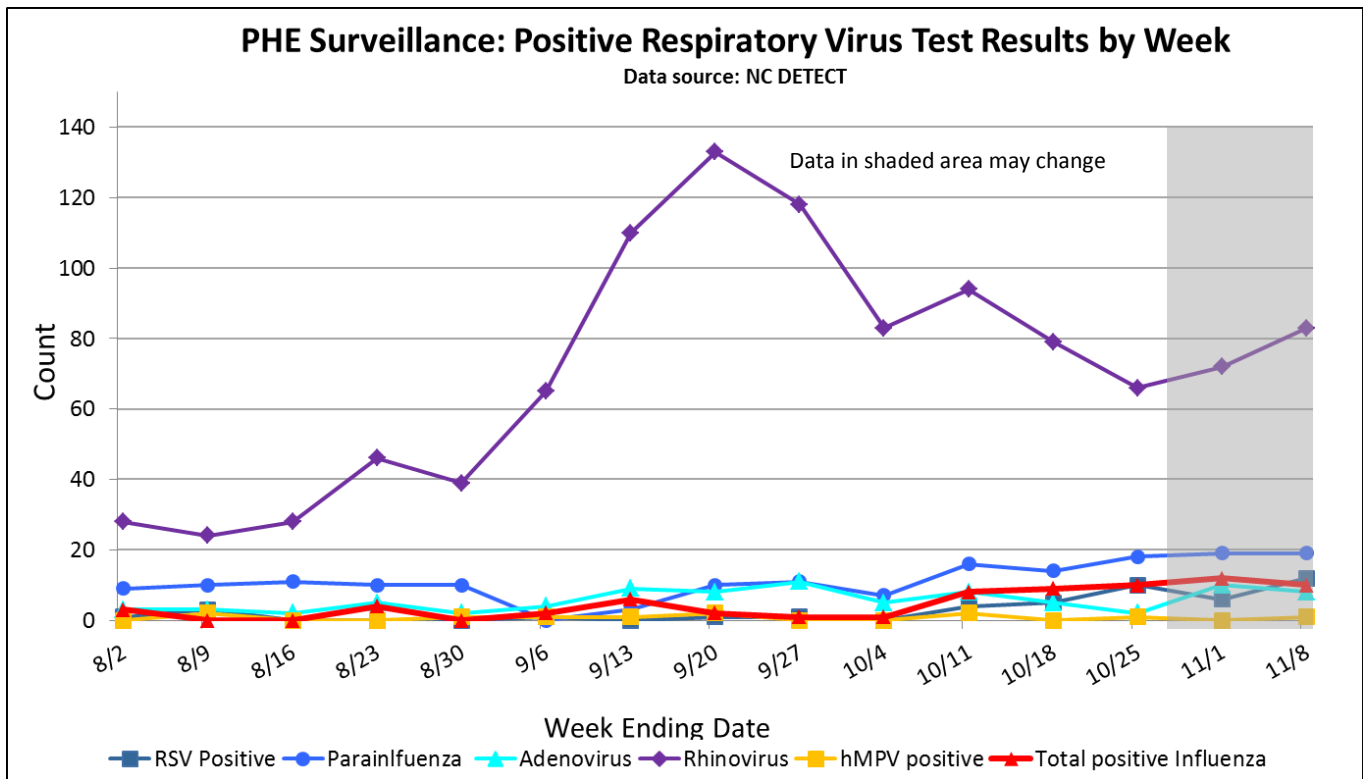
Background :

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 increased over the past two weeks but still lower than mid-September.



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

HOSPITAL-BASED PUBLIC HEALTH EPIDEMIOLOGIST (PHE) NETWORK

Acute Respiratory Admissions Surveillance

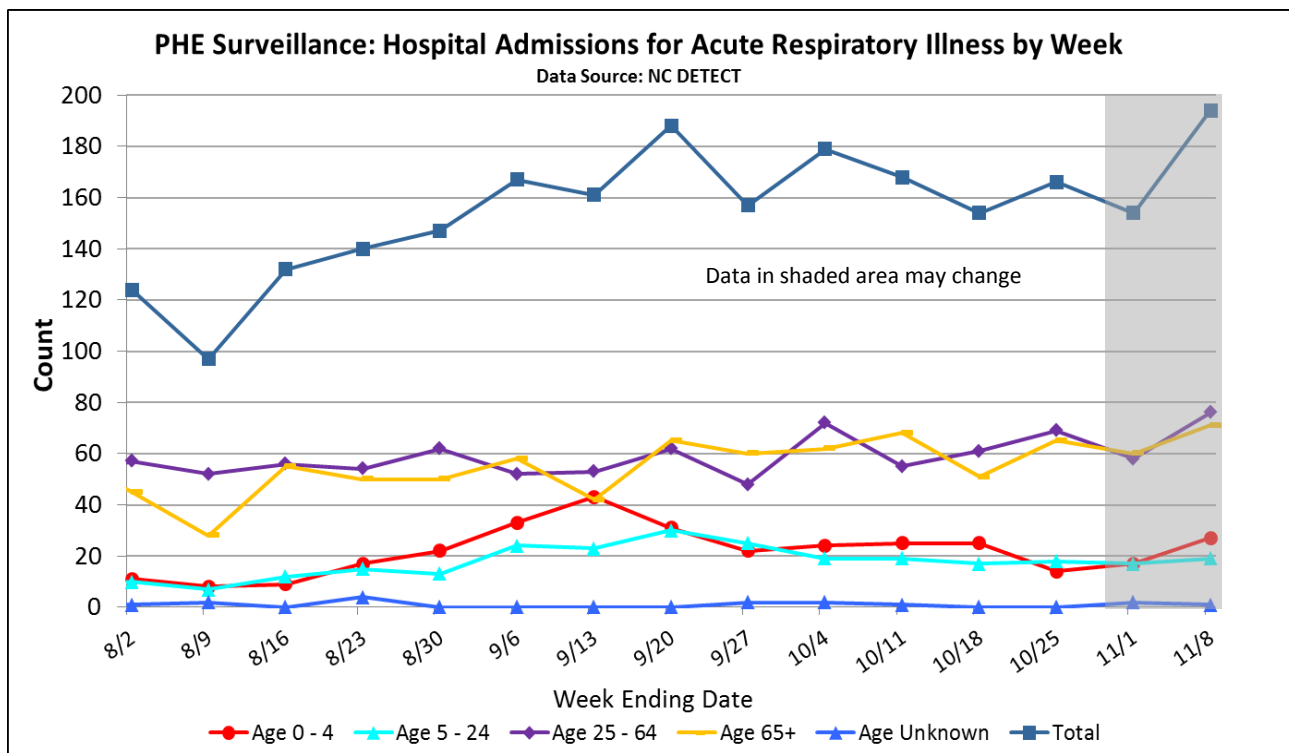
Background:

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 increased slightly during the week ending 11/8/2014.



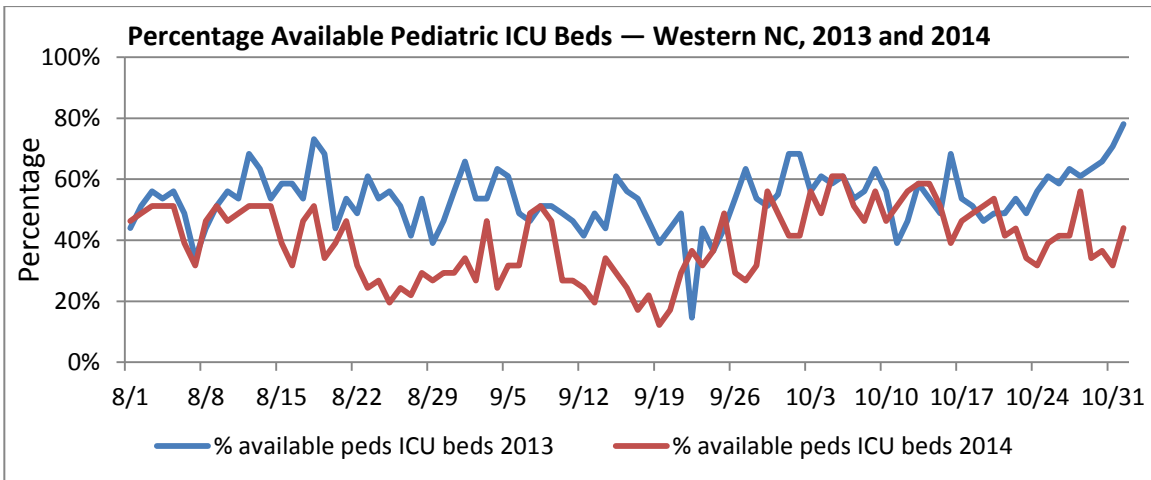
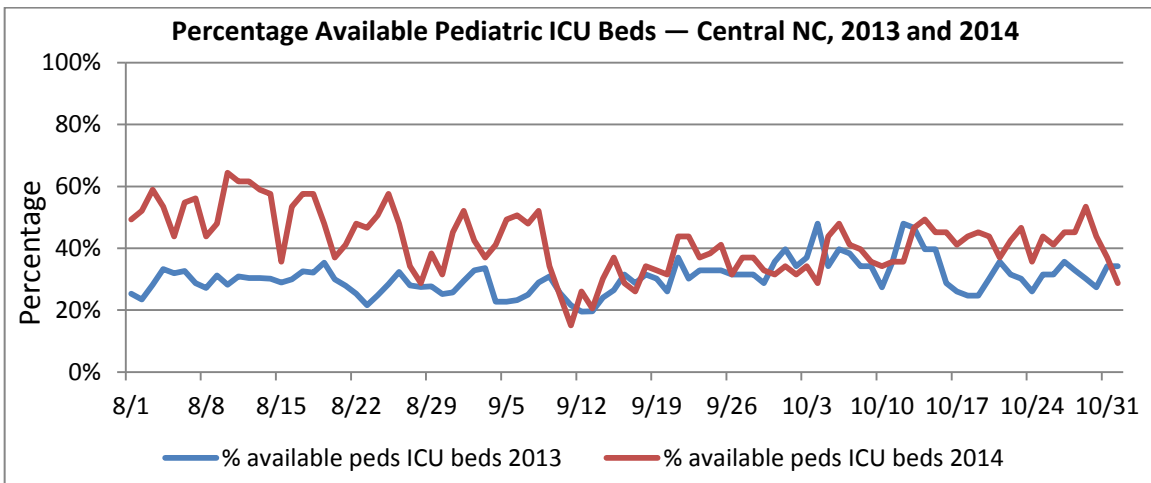
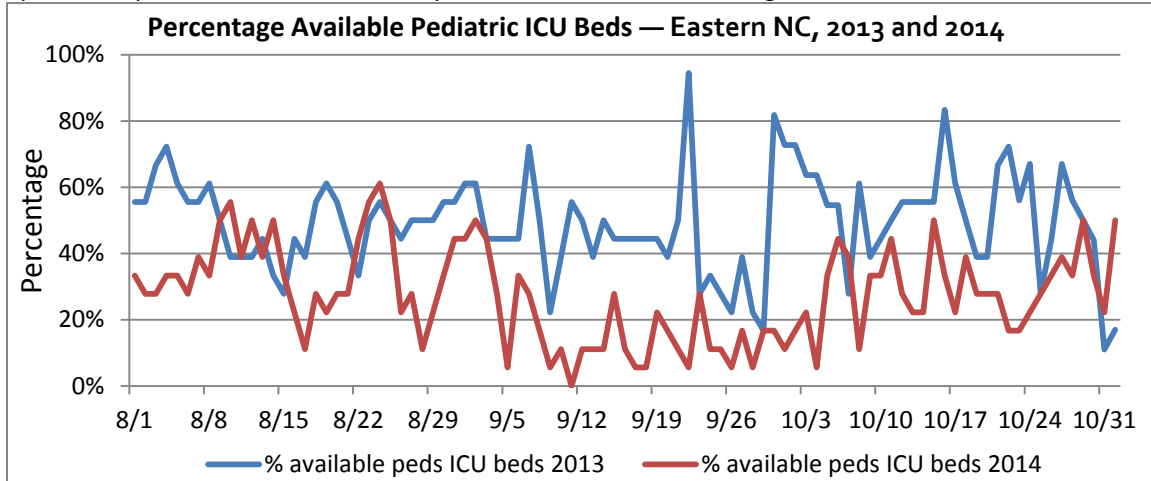
STATE MEDICAL ASSET RESOURCE TRACKING TOOL (SMARTT)

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 bed availability has overall increased 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 among children was stable during the past week and asthma among children decreased slightly. Overall both remain lower than during early September.

