



# New Hampshire Health Alert Network

## Health.Alert@nh.gov

**Status:** Actual  
**Message Type:** Update NH-HAN #20120621 Update #2 on Hepatitis C Virus (HCV) Outbreak  
**Severity:** Moderate  
**Sensitive:** Not Sensitive  
**Message Identifier:** NH-HAN #20120725 Update #3 on Hepatitis C Virus (HCV) Outbreak  
**Delivery Time:** 12 hours  
**Acknowledgement:** No  
**Originating Agency:** NH Department of Health and Human Services, Division of Public Health Services

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**DATE:** July 25, 2012                      **TIME:** 4:00 PM EDT

**TO:** Physicians, Physician Assistants, Nurses, Infection Control Practitioners, Infectious Disease Specialists, Hospital Emergency Departments, Hospital CEOs, Laboratory Response Network, Manchester Health Department, Nashua Health Department, NHHHA, Community Health Centers, EWIDS, DHHS Outbreak Team, DPHS Investigation Team, State Epidemiologists, Long-Term Care Facilities, Public Health Network, and DPHS Management Team

**FROM:** Sharon Alroy-Preis, MD, MPH, State Epidemiologist

**SUBJECT:** Update on Hepatitis C Virus (HCV) Outbreak

### **NH Division of Public Health Services (DPHS) recommends:**

- Awareness of current number of cases and the suspected mode of transmission of hepatitis C associated with an outbreak at Exeter Hospital.
- Awareness of new testing recommendations and clinics.
- Timely cooperation with DPHS requests for pertinent information on patients potentially related to this outbreak.
- Prompt reporting of recently diagnosed HCV cases without known risk factors.
- Awareness of a community meeting being held in Exeter on July 26, 2012.

### **Epidemiology**

As previously reported, NH DPHS Bureau of Infectious Disease Control was notified on May 15, 2012, of four persons at Exeter Hospital with recently diagnosed hepatitis C virus (HCV). The initial investigation showed that these persons shared a common link: being in the hospital cardiac catheterization laboratory (CCL) or its recovery room (RR), 3 patients and 1 healthcare worker (HCW). Further testing revealed that all four had identical sequences of the virus, proving a common source of infection. As of July 24, 2012, we have tested 1,130 persons of the 1,292 who have been indicated for testing among CCL/RR patients and employees and have identified 31 people with an HCV strain that matches the outbreak strain. Based on the epidemiological investigation, the mechanism of transmission is narcotic diversion by the HCV-positive HCW, who was arrested on July 19, 2012.

Based on information from the ongoing investigation, we now know that the HCW suspected of narcotic diversion may have been present in the main inpatient operating room (OR) and the intensive care unit (ICU) at Exeter Hospital. Given this new information we are now

recommending testing for patients who received care in these areas during the time of employment of the implicated HCW (April 1, 2011- May 25, 2012). This does not include patients who had procedures or surgery in the ambulatory surgical center. The estimated number of additional patients to be tested is approximately 5,000 and DPHS is setting up several community clinics in order to facilitate patient testing. The first testing clinics will begin this weekend and continue into next week.

Clinic days and hours are:

- Saturday, July 28, 2012, and Sunday, July 29, 2012 from 10 a.m. to 8 p.m.
- Monday, July 30, 2012, and Tuesday, July 31, 2012, from 12 noon to 8 p.m.
- These clinics will be located at Exeter High School and future clinics will be scheduled as needed.

This is an ongoing investigation and we continue to work with patients, the Exeter Hospital administration and regional providers as well as state and federal agencies, including the Centers for Disease Control and Prevention (CDC). It is known that this individual has worked in multiple other hospitals in several other states prior to coming to work at Exeter NH. There is no evidence that he had any contact with patients in other NH hospitals.

### **Laboratory Testing**

Patients who access the community clinics will undergo phlebotomy for rapid test using Orasure technology. The patient will be given the result at the clinic in 30-45 minutes. Their blood will also be tested by ELISA-based serology testing at the NH Public Health Laboratory for confirmation. Any who are positive will undergo PCR to determine if the infection is active and these serology and PCR results will be sent to providers. Additional testing will be done in an attempt to link them to the outbreak by sequencing. We will not be able to provide a report on these results since this test is only approved for public health purposes. Positive test results will be called to the patient and to their PCP (if they have named one).

We encourage people to come to the DHHS clinics for testing, but if they prefer to have their blood drawn with their PCP, you have the option of drawing their blood and sending it to us with the NH Public Health Laboratories Hepatitis C Test Requisition Form from the DHHS website at <http://www.dhhs.nh.gov/dphs/lab/documents/hepctestform.pdf>. If any patient needs testing and is unable to make it to the clinic or is currently living in a skilled nursing facility, contact us directly and we can help make the necessary arrangements. Call us with any questions about this process.

Patients who have already had hepatitis C testing performed as part of the first tier of testing do not need to have repeat testing under the second tier at this time. However, the recommendation for follow up testing will depend on new potential exposure date. For example, if someone had a cath procedure in January 2011 and was tested in June 2012, they do not need follow up testing. However, if that person also had an ICU stay in April 2012, that person will need follow up testing in six months from last exposure (or 6 months from their first blood draw, if that is simpler).

For patients with negative serology whose exposure date was on or after February 1<sup>st</sup> 2012 it is recommended that the PCP repeat serology 6 months after the exposure date. Please send DPHS all follow up positive tests results so we can continue with testing as needed to determine connection to the outbreak. (See attached testing algorithm). We have recommended that all

patients have medical follow up with their PCP. Please feel free to contact us if you need assistance to refer your patient to a hepatitis specialist.

### **Additional Requested Actions**

As a part of ongoing broad surveillance activities, we would like to reiterate our request that you notify us about patients you have diagnosed with HCV. We are particularly interested in those who lack traditional risk factors and who have had any exposure to Exeter Hospital. Although HCV is not legislated as a reportable disease in NH, all cases suspected to be part of this outbreak should be reported. This is in accordance with the state statute RSA 141:C and administrative rule He-P 300 to report any unusual occurrence or cluster of illness that may pose a threat to the public health. The information provided to us as part of this request to date has been valuable in conducting a complete and thorough public health investigation. As part of this investigation we may be contacting you to request additional medical information including past documentation of hepatitis C testing.

### **Public Meeting Event**

NH DPHS will hold another community meeting in Exeter on Thursday, July 26<sup>th</sup> at 6pm at Exeter High School. We will explain our new testing recommendations and will be available to answer questions from the public about the status of the ongoing investigation.

This is an ongoing and complex investigation and we will continue to update you with changes in clinical recommendations or requests for additional information. Do not hesitate to contact us anytime with questions or concerns related to this investigation or the patients that you care for.

### **Attachments**

- 1) Updated HCV Testing Algorithm

**For any questions regarding the contents of this message, please contact NH Department of Health and Human Services, Division of Public Health Services' Bureau of Infectious Disease Control at 603-271-4496.**

**After hours or toll free (in NH), call 800-852-3345, ext. 4496 or 603-271-5300 and ask for the public health professional on call.**

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## DEFINITION OF TERMS AND ALERTING VOCABULARY

### Message Type

Alert: Original alert  
Update: Prior alert has been updated and superseded  
Cancel: Prior alert has been cancelled  
Error: Prior alert has been retracted

### Status

Actual: Refers to a live event  
Exercise: Designated recipients must respond to the communication or alert  
Test: Related to a technical and/or system test

### Severity

Extreme: Extraordinary threat to life or property  
Severe: Significant threat to life or property  
Moderate: Possible threat to life or property  
Minor: Minimal threat to life or property  
Unknown: Unknown threat to life or property

### Sensitive

Sensitive: Indicates the alert contains sensitive content  
Not Sensitive: Indicates non-sensitive content

### Message Identifier

A unique alert identifier that is generated upon alert activation

### Delivery Time

Indicates the time frame for the delivery of the alert

### Acknowledgement

Indicates whether an acknowledgement on the part of the recipient is required to confirm that the alert was received, and the time frame in which a response is required.

### Originating Agency

A guaranteed unique identifier for the agency originating the alert.

### Alerting Program

The program sending the alert or engaging in alerts and communications using PHIN Communication and Alerting (PCA) as a vehicle for their delivery.

**You have received this message based upon the information contained within our emergency notification database.**

**If you have a different or additional e-mail or fax address that you would prefer to be used, please contact:**

Denise M. Krol, MS  
NH HAN Coordinator  
[Denise.Krol@dhhs.state.nh.us](mailto:Denise.Krol@dhhs.state.nh.us)

**Business Hours: 8 AM – 4 PM**

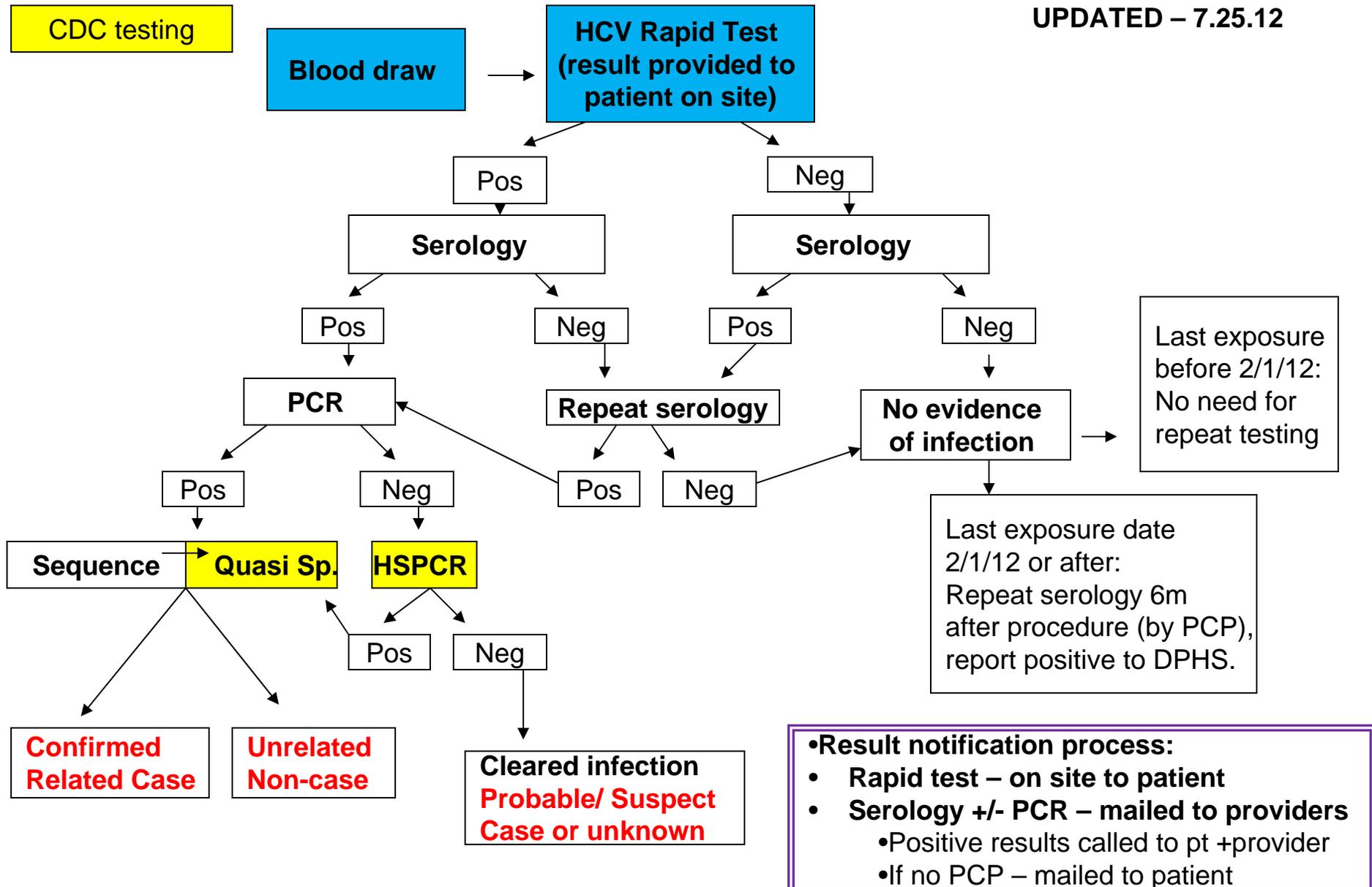
Tel: 603-271-4596

Fax: 603-271-0545

- Clinic site testing
- Testing at DPHS
- CDC testing

# HCV Testing Expansion Algorithm

UPDATED – 7.25.12



- Result notification process:**
- Rapid test – on site to patient
  - Serology +/- PCR – mailed to providers
    - Positive results called to pt +provider
    - If no PCP – mailed to patient

# Algorithm Logic

Facts and assumptions:	Decision:
Rapid test = serology in sensitivity but not confirmatory for positive result	Replace serology with rapid test (finger stick). If positive continue with blood draw
Positive serology appears after 4-10 w of virus acquisition.	If time interval between exposure day and blood collection < 12 w – could be window period for serology.
Based on first tier of testing – with recent exposure no one with negative serology had positive PCR.	No default serology + PCR testing for recent exposure (only rapid test and if negative repeat serology after 6 month)
>97% of patients will have pos serology 6 month after virus acquisition	If serology negative repeat serology after 6 month
Sensitivity of PCR in NH PHL is 100 IU/ml	If PCR is neg with pos serology - send specimen for CDC for hypersensitive PCR (15 IU/ml)
Assumption for simplification – collection date 8/1/12 (first clinic 7/28/12)	Can base decisions on date of procedure
Patients could have repeated exposures (repeated procedures, prolong ICU stay, etc)	Take last exposure as the date used for algorithm.
Questionable results will be f/u by BIDC	Cases to f/u: Repeat serology for patient with exposure date during May 2012 (within window period for serology)