

## Hepatitis C Exposure at a Medical Clinic

### Current Situation

Earlier today, the Southern Nevada Health District began contacting close to 40,000 Southern Nevada residents to recommend that they visit their primary care provider to be tested for hepatitis C, hepatitis B, and HIV due to exposures resulting from unsafe injection practices. In an attempt to reach patients for whom current addresses were not available, the health district held a press conference in conjunction with the Nevada State Health Division and its Bureau of Licensure and Certification. Please be advised that you may be contacted by your patients after they receive a notification letter or learn about the exposure through their media.

In early January, the health district began investigating a cluster of hepatitis C cases who had reported undergoing procedures at the Endoscopy Center of Southern Nevada, located at 700 Shadow Lane, Las Vegas. The investigation identified the use of unsafe injection practices related to the administration of intravenous anesthetic that could result in the transmission of bloodborne pathogens among the clinic's patients. Although these practices have since been corrected, these were the prevailing practices of the clinic for an extended period of time. With consultation from the Centers for Disease Control and Prevention (CDC), the health district determined that patients seen at the clinic between March of 2004 and January 11, 2008, and had procedures performed which required administration of intravenous anesthetic, should be notified of the exposure risk and the recommended for hepatitis C, hepatitis B, and HIV testing.

The number of people who were infected as a result of clinic practices cannot be determined. The recommendation for testing is based on the identification of an increased risk for exposure to bloodborne pathogens. Even in acute cases, it is not possible to determine the source of infection for an individual patient from the results of available laboratory testing.

It is expected that a significant number of patients were infected prior to undergoing procedures at the clinic. Based on national statistical data for popula-

tion prevalence of disease it is estimated that:

- About 4% of patients may be previously infected with hepatitis C
- Less than 0.5% of patients may be previously infected with HIV
- About 0.5% will show evidence of current infection with hepatitis B and about 5% will show past hepatitis B infection.

HIV or hepatitis seroconversion may take up to 6 months. The date of the patient's most recent procedure performed at the center should be used to identify the best timing for testing. Initial negative tests performed prior to the 6 month seroconversion window may have to be repeated.

### Patient Communication

Although the cases under investigation have been linked to only one particular clinic, it is not unreasonable to expect patients who had undergone procedures at different clinics to request testing. The health district is not recommending the routine testing of any other group of patients. However, testing should be ordered if indicated because of illness or based on your risk assessment of an individual patient.

The Southern Nevada Health District has established a hotline for patients at (702) 759-INFO. Patients can also obtain information from the health district website at <http://www.southernnevadahealthdistrict.org>. The health district has identified resources for patients without insurance or access to a physician, and information on this topic can be obtained on the website.

### Disease Reporting

Per Nevada Administrative Code 441A, all known or suspected cases of hepatitis C, hepatitis B, and HIV must be reported to the Southern Nevada Health District. As it is important to the ongoing investigation, please report acute hepatitis cases by phone at (702) 759-1300, option #2. This number is available 24-hours, seven days a week. Due to the expected high volume of calls, please report all non-acute (chronic) hepatitis cases by fax at (702) 759-1414.

Please report all HIV cases to the office of HIV/AIDS at (702) 759-0702.

### Laboratory Testing Recommendations

Because screening for blood borne pathogens in an asymptomatic population may result in false positive test results, the CDC and the health district are recommending the initial and reflex laboratory testing listed in Table 1 for persons who were administered intravenous anesthetic during procedures performed at Endoscopy Center of Southern Nevada located at 700 Shadow Lane in Las Vegas between March 2004 and January 11, 2008.

To assist with the testing follow up and to ensure appropriate reflex testing occurs, Labcorp and Quest laboratories will provide custom panels and tests for clients located in Nevada (see Tables 2 and 3).

### Additional information regarding supplemental testing for Hepatitis C Antibody (HCV Ab)

The "Guidelines for Laboratory Testing and Result Reporting of Antibody to Hepatitis C Virus" published by CDC in MMWR, February 7, 2003, 52 (RR03):1-16 provides recommendations for use of the signal-to-cutoff ratio (s/co) of positive HCV screening test results to identify samples which would require additional supplemental testing. The recommended s/co ratio will vary depending on the testing equipment used. Contact the reference laboratory for details regarding the supplemental testing performed at their facility.

Based on the MMWR recommendations:

- HCV Ab positive screening test results with high s/co ratios can be considered anti-HCV positive without supplemental testing.
- HCV Ab positive screening test results with low s/co ratios should have supplemental testing performed, preferably by Recombinant Immunoblot Assay (RIBA) for anti-HCV.
- If Nucleic Acid Test (NAT) for HCV RNA is performed, CDC recommends RIBA follow up for a negative NAT.

### Medicare patients

Medicare carriers have implemented policies that ensure the medical necessity of certain services rendered to Medicare beneficiaries. These policies are called Local Medical Review Policies (LMRPs). HIV and

hepatitis testing may be subject to LMRPs. Contact your reference laboratory representative for more information regarding medical necessity guidelines.

### References

Guidelines for Laboratory Testing and Result Reporting of Antibody to Hepatitis C Virus, MMWR, February 7, 2003:<http://www.cdc.gov/mmwr/PDF/rr/rr5203.pdf>

Alter MJ. Healthcare should not be a vehicle for transmission of hepatitis C virus. J Hepatology 48 (2008); 2-4.

Transmission of Hepatitis B and C Viruses in Outpatient Settings—New York, Oklahoma, and Nebraska, 2000-2002. MMWR 52(38); 901-906.

### Additional Resources

CDC website: Hepatitis:

<http://www.cdc.gov/ncidod/diseases/hepatitis/>

American Liver Foundation:

<http://www.liverfoundation.org/>

Hepatitis C physicians booklet:

[http://www.cdc.gov/ncidod/diseases/hepatitis/c/hcv\\_physician\\_booklet.pdf](http://www.cdc.gov/ncidod/diseases/hepatitis/c/hcv_physician_booklet.pdf)

Safe injection practices poster:

<http://www.cdc.gov/ncidod/diseases/hepatitis/spotlights/ambulatory.pdf>

**Table 1 Initial and reflex laboratory testing**

<b>Test Name</b>	<b>Description</b>	<b>Synonyms</b>	<b>Reflex testing for positives</b>
HBcAb, Total	Antibody to Hepatitis B core antigen, total IgG and IgM. Nonspecific marker of acute, chronic, or resolved Hepatitis B infection. It is not a marker of vaccine induced immunity.	Hepatitis B Core Antibody, Total; Anti-HBc (total); HBV Core Total Antibody	Positives reflex to Hepatitis B core antibody, IgM and Hepatitis B surface antigen
HCV Ab	Antibody to Hepatitis C Virus. Screening immunoassay method with signal-to-cutoff ratio (s/co) reported	Hepatitis C Antibody; Anti-HCV; HCV; Hep C	Positives with low s/co ratio reflex to RIBA, anti HCV
HIV 1 or HIV 1/2	Antibody to Human Immunodeficiency Virus. Immunoassay method with reflex to Western Blot for all positives	HIV 1/2 EIA Antibody Screen; HIV-1; HIV-1/O/2	Positives reflex to HIV-1 Western Blot

**Table 2. Labcorp Test Codes**

<b>Labcorp Panel code</b>	<b>Initial testing includes</b>	<b>Reflex testing</b>
344053	Hepatitis B Core Antibody, total (006718) Hepatitis C Antibody (143991) HIV-1/O/2 (083824)	Reflex testing for positives will automatically occur based on the tests listed in Table 1

**Table 3. Quest test codes**

Order the individual Hepatitis custom codes and HIV test code listed below. The Hepatitis custom codes must be written on the test requisition form to ensure the appropriate reflex testing occurs

<b>Quest test code</b>	<b>Description</b>	<b>Reflex testing</b>
7040E	Hepatitis B Core Antibody, Total	Reflex testing for positives will automatically occur based on the tests listed in Table 1, only if custom test codes are ordered
1590E	Hepatitis C Antibody (HCV)	
3200	HIV1/2 EIA Antibody Screen with reflexes	