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CDC HEALTH ADVISORY

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Outbreak of Recent HIV and HCV Infections among Persons Who Inject Drugs

Summary

The Indiana State Department of Health (ISDH) and the Centers for Disease Control and Prevention (CDC) are investigating a large outbreak of recent human immunodeficiency virus (HIV) infections among persons who inject drugs (PWID). Many of the HIV-infected individuals in this outbreak are co-infected with hepatitis C virus (HCV). The purpose of this HAN Advisory is to alert public health departments and healthcare providers of the possibility of HIV outbreaks among PWID and to provide guidance to assist in the identification and prevention of such outbreaks.

Background

From November 2014 to January 2015, ISDH identified 11 new HIV infections in a rural southeastern county where fewer than 5 infections have been identified annually in the past. As of April 21, 2015, an on-going investigation by ISDH with assistance from CDC has identified 135 persons with newly diagnosed HIV infections in a community of 4,200 people; 84% were also HCV infected. Among 112 persons interviewed thus far, 108 (96%) injected drugs; all reported dissolving and injecting tablets of the prescription-type opioid oxycodone (OPANA® ER) using shared drug preparation and injection equipment.¹

This HIV outbreak was first recognized by a local disease intervention specialist. In late 2014, interviews conducted with three persons newly diagnosed with HIV infections in three separate venues (i.e., an outpatient clinic, a drug rehabilitation program, during a hospitalization) indicated that two of these persons had recently injected drugs and had numerous syringe-sharing and sexual partners. Contact tracing identified eight additional HIV infections leading to the current outbreak investigation, which has demonstrated that HIV had spread recently and rapidly through the local network of PWID. Without an attentive health department, active case finding, and additional testing provided as part of this investigation, this cluster may not have been identified.

Urgent action is needed to prevent further HIV and HCV transmission in this area and to investigate and control any similar outbreaks in other communities.

Injection drug use accounts for an estimated 8%² of the approximate 50,000 annual new HIV infections in the United States.³ HCV infection is the most common blood-borne infection in the United States and percutaneous exposure via drug-injecting equipment contaminated with HCV-infected blood is the most frequent mode of transmission. Nationally, acute HCV infections have increased 150% from 2010 to 2013,⁴ and over 70% of long-term PWID may be infected with HCV.⁵ Abuse of prescription-type opioids is increasing nationally⁶ and opioid-analgesic poisoning deaths have nearly quadrupled from 1999 through 2011.⁷ Rates of acute HCV infection are increasing, especially among young nonurban PWID, often in association with abuse of injected prescription-type opioids. These increases have been most substantial in nonurban counties east of the Mississippi River.⁸

Recommendations for Health Departments

- Review the most recent sources of data on HIV diagnoses, HCV diagnoses (acute as well as past or present), overdose deaths, admissions for drug treatment, and drug arrests. Attributes of communities at risk for unrecognized clusters of HIV and HCV infection include the following:
 - Recent increases in the:
 - Number of HIV infections attributed to injection drug use,
 - Number of HCV infections, particularly among persons aged ≤ 35 years;
 - High rates of injection drug use and especially prescription-type opioid abuse, drug-related overdose, drug treatment admission, or drug arrests.
- Ensure complete contact tracing for all new HIV diagnoses and testing of all contacts for HIV and HCV infection.
- Ensure persons actively injecting drugs or at high-risk of drug injection (e.g., participating in drug substitution programs, receiving substance abuse counseling or treatment, recently or currently incarcerated) have access to integrated prevention services,⁹ and specifically:
 - Are tested regularly for HIV and HCV infection (consider more frequent testing based on frequency of injection drug usage or sharing of injection equipment);
 - If diagnosed with HIV or HCV infection:
 - Are rapidly linked to care and treatment services;
 - If actively injecting drugs:
 - Have access to medication-assisted therapy (e.g., opioid substitution therapy) as well as other substance abuse services, if not already engaged,
 - Are counseled not to share needles and syringes or drug preparation equipment (e.g., cookers, water, filters),
 - Have access to sterile injection equipment from a reliable source.
 - If not HIV infected but actively injecting drugs:
 - Are referred for consideration of HIV pre-exposure prophylaxis¹⁰ and if potentially exposed within the past 72 hours (e.g., shared drug preparation or injection equipment with a known or potentially HIV-infected person) HIV post-exposure prophylaxis^{11,12}
- Remind venues that may encounter unrecognized infections, such as emergency departments and community-based clinical practices (e.g., family medicine, general medicine, prenatal care) of the importance of routine opt-out HIV testing as well as HCV testing per current recommendations¹³⁻¹⁵

- Local health departments should notify their state health department and CDC of any suspected clusters of recent HIV or HCV infection.

Recommendations for Healthcare Providers

- Ensure all persons diagnosed with HCV infection are tested for HIV infection,¹⁶ and that all persons diagnosed with HIV infection are tested for HCV infection.¹⁷
- Ensure persons receiving treatment for HIV and/or HCV infection adhere to prescribed therapy and are engaged in ongoing care.
- Encourage HIV and HCV testing of syringe-sharing and sexual partners of persons diagnosed with either infection.
- Report all newly diagnosed HIV and HCV infections to the health department.
- For all persons with substance abuse problems:
 - Refer them for medication-assisted treatment (e.g., opioid substitution therapy) and counseling services,
 - Use effective treatments (e.g., methadone, buprenorphine), as appropriately indicated.
- For any persons for whom opioids are under consideration for pain management:
 - Discuss the risks and benefits of all pain treatment options, including ones that do not involve prescription analgesics.
 - Note that long-term opioid therapy is not associated with reduced chronic pain.¹⁸
- Contact the state or local health department to report suspected clusters of recent HIV or HCV infection.

For more information:

- Centers for Disease Control and Prevention. Integrated Prevention Services for HIV Infection, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis for Persons Who Use Drugs Illicitly: Summary Guidance from CDC and the U.S. Department of Health and Human Services. 2012: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6105a1.htm?s_cid=rr6105a1_w.
- Centers for Disease Control and Prevention. HIV and Injection Drug Use fact sheet. (<http://www.cdc.gov/hiv/pdf/g-l/cdc-hiv-idu-fact-sheet.pdf>)
- Centers for Disease Control and Prevention. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. 2006; <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>.

- Centers for Disease Control and Prevention and Association of Public Health Laboratories. Laboratory Testing for the Diagnosis of HIV Infection: Updated Recommendations. <http://dx.doi.org/10.15620/cdc.23447>
- Centers for Disease Control and Prevention. Testing for HCV infection: an update of guidance for clinicians and laboratorians. *MMWR Morb Mortal Wkly Rep.* May 10 2013;62(18):362-365.
- Centers for Disease Control and Prevention. MMWR Integrated Services Report. (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6105a1.htm?s_cid=rr6105a1_w)
- Centers for Disease Control and Prevention. HIV and Injection Drug Use fact sheet. (<http://www.cdc.gov/hiv/pdf/g-l/cdc-hiv-idu-fact-sheet.pdf>)
- US Public Health Service. Preexposure prophylaxis for the prevention of HIV infection in the United States - 2014 clinical practice guideline. 2014; <http://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf>.
- Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. 2015; <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>.
- AASLD/IDSA/IAS–USA. HCV testing and linkage to care. Recommendations for testing, managing, and treating hepatitis C. <http://www.hcvguidelines.org/full-report/hcv-testing-and-linkage-care>.

References

1. Spiller MW, Broz D, Wejnert C, Nerlander L, Paz-Bailey G. HIV Infection and HIV-Associated Behaviors Among Persons Who Inject Drugs - 20 Cities, United States, 2012. *MMWR Morb Mortal Wkly Rep.* Mar 20 2015;64(10):270-275.
2. Centers for Disease Control and Prevention. HIV Surveillance Report, 2013; vol. 25. <http://www.cdc.gov/hiv/library/reports/surveillance/>, last accessed April 22, 2015.
3. Prejean J, Song R, Hernandez A, et al. Estimated HIV incidence in the United States, 2006-2009. *PLoS ONE.* 2011;6(8):e17502.
4. Hagan H, Des Jarlais DC, Stern R, et al. HCV synthesis project: preliminary analyses of HCV prevalence in relation to age and duration of injection. *The International journal on drug policy.* Oct 2007;18(5):341-351.
5. Maxwell JC. The prescription drug epidemic in the United States: a perfect storm. *Drug and alcohol review.* May 2011;30(3):264-270.
6. Chen LH HH, Warner M. Drug-poisoning deaths involving opioid analgesics: United States, 1999–2011. NCHS data brief, no 166. Hyattsville, MD: National Center for Health Statistics. 2014.
7. Suryaprasad AG, White JZ, Xu F, et al. Emerging epidemic of hepatitis C virus infections among young nonurban persons who inject drugs in the United States, 2006-2012. *Clin Infect Dis.* Nov 15 2014;59(10):1411-1419.
8. Centers for Disease Control and Prevention. Integrated prevention services for HIV infection, viral hepatitis, sexually transmitted diseases, and tuberculosis for persons who use drugs illicitly: summary guidance from CDC and the U.S. Department of Health and Human Services. *MMWR Recomm Rep.* Nov 9 2012;61(Rr-5):1-40.
9. US Public Health Service. Preexposure prophylaxis for the prevention of HIV infection in the United States - 2014 clinical practice guideline. 2014; <http://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf>.

10. Centers for Disease Control and Prevention. Antiretroviral Postexposure Prophylaxis After Sexual, Injection-Drug Use, or Other Nonoccupational Exposure to HIV in the United States Recommendations from the U.S. Department of Health and Human Services. 2005; <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5402a1.htm>.
11. Kuhar DT, Henderson DK, Struble KA, et al. Updated US Public Health Service guidelines for the management of occupational exposures to human immunodeficiency virus and recommendations for postexposure prophylaxis. *Infection control and hospital epidemiology*. Sep 2013;34(9):875-892.
12. Centers for Disease Control and Prevention. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. 2006; <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>. Accessed April 22, 2015.
13. Centers for Disease Control and Prevention and Association of Public Health Laboratories. Laboratory Testing for the Diagnosis of HIV Infection: Updated Recommendations. <http://dx.doi.org/10.15620/cdc.23447>. Accessed April 22, 2015.
14. Centers for Disease Control and Prevention. Testing for HCV infection: an update of guidance for clinicians and laboratorians. *MMWR Morb Mortal Wkly Rep*. May 10 2013;62(18):362-365.
15. AASLD/IDSA/IAS–USA. HCV testing and linkage to care. Recommendations for testing, managing, and treating hepatitis C. <http://www.hcvguidelines.org/full-report/hcv-testing-and-linkage-care>. Accessed April 22, 2015.
16. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. 2015; <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>. Accessed April 22, 2015.
17. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. 2015; <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>. Accessed April 22, 2015.
18. Chou R, Turner JA, Devine EB, et al. The effectiveness and risks of long-term opioid therapy for chronic pain: a systematic review for a National Institutes of Health Pathways to Prevention Workshop. *Ann Intern Med*. Feb 17 2015;162(4):276-286.

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##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##