Rates of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Residence, 2017
Rates of Acute HCV by District & Year, Virginia 2010-2018

Rates of Chronic HCV by District & Year, Virginia 2010-2018

- LENOWISCO
- Cumberland Plateau
- Virginia
# Rates of Hepatitis per 100,000 population

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Virginia</th>
<th>LENOWISCO</th>
<th>Cumberland</th>
</tr>
</thead>
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<tr>
<td></td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td>2017</td>
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<tr>
<td>Acute Hepatitis B</td>
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<td>0.7</td>
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<td>20.2</td>
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<td>1.0</td>
<td>0.8</td>
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<td>Chronic Hepatitis C</td>
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<td>117.2</td>
<td>320.6</td>
<td>380.0</td>
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<tr>
<td>Hepatitis A</td>
<td>0.6</td>
<td>0.5</td>
<td>0.9</td>
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</table>
Background LENOWISCO Hepatitis B Outbreak

2000-2009
• 17 confirmed cases

2010-2015
• 82 confirmed cases
• 16.9% of cases in the state

Cases according to CDC case definition; not all cases are included in outbreak counts
<table>
<thead>
<tr>
<th>Year</th>
<th>US Rates*&lt;br&gt;(per 100,000)</th>
<th>VA Rates*&lt;br&gt;(per 100,000)</th>
<th>Lenowisco Rates*&lt;br&gt;(per 100,000)</th>
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</thead>
<tbody>
<tr>
<td>2015</td>
<td>-----</td>
<td>0.9</td>
<td>24.4</td>
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<tr>
<td>2014</td>
<td>0.9</td>
<td>0.8</td>
<td>6.4</td>
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<tr>
<td>2013</td>
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<td>0.9</td>
<td>13.8</td>
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<tr>
<td>2012</td>
<td>0.9</td>
<td>1.0</td>
<td>24.4</td>
</tr>
<tr>
<td>2011</td>
<td>0.9</td>
<td>1.0</td>
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</tr>
<tr>
<td>2009</td>
<td>1.1</td>
<td>1.4</td>
<td>1.1</td>
</tr>
<tr>
<td>2008</td>
<td>1.3</td>
<td>1.7</td>
<td>3.3</td>
</tr>
<tr>
<td>2007</td>
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<tr>
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<td>3.0</td>
<td>2.2</td>
</tr>
<tr>
<td>2000</td>
<td>2.9</td>
<td>2.5</td>
<td>1.1</td>
</tr>
</tbody>
</table>

- US data not available for 2015
* Rates based on 2010 US Census Population
LENOWISCO 2012 Hepatitis B Outbreak Investigation

Morbidity report received on May 1, 2012
  • IVDU
  • No contacts given

Morbidity report received on May 30, 2012
  • IVDU
  • 24 contacts
Field Investigation Techniques

Community Health Fair
RAM Testing
Home Visits
Disease reporting
Local Jail
  - Educational training
  - Single use lancets and individual blood glucose monitors recommended
Tips for Interviewing IVDU

In-person interviews
Home visit
Establish rapport
Emphasize no involvement with law enforcement
Wear scrubs
Do not use state car as transportation
Ask around
Keep questioning
Normal cleaning methods unavailable
Travel in pairs
Maintain Contact
Bring food
Results of 2012 Hepatitis B Contact Investigation

177 persons evaluated
- 125 tested
  - 40 acute
  - 6 chronic
  - 19 resolved
  - 23 immune by vaccination
  - 34 susceptible
  - 3 indeterminate
40 Acute Hepatitis B Infection Cases

- 100% White, non-Hispanic
- 70% male
- Mean age of 43; range of 27-75

Hepatitis C Results

- 17 cases
- 100% HIV negative
- Results from retests
  - 3 deceased
  - 5 resolved
  - 5 chronic
Public Health Actions

HBIG
Vaccination Series
Education
  • High-risk
Additional testing
Referral to PCP
Three Cup Method

THREE STEPS, THREE CUPS
If you must reuse your syringes, follow these 3 steps each time to flush out the syringe, disinfect it with bleach, and rinse it to wash out the bleach. This will help reduce the risk of spreading disease.

STEP 1—FLUSH WITH WATER
- Fill syringe with clean water from cup #1.
- Shake the syringe and tap it.
- Squirt the water out, such as into a sink, toilet, or bucket.
- Repeat if possible.
- It’s best to do this until you can’t see any blood.

Why? This step removes blood and drugs.

STEP 2—DISINFECT WITH BLEACH
- Fill syringe with fresh, full-strength bleach from cup #2.
- Shake the syringe, tap it, and then let it sit for 30 seconds.
- Squirt the bleach out, such as into a sink, toilet, or bucket.

Why? This step kills viruses and germs that can make you sick.

STEP 3—RINSE WITH WATER
- Fill syringe with clean water from cup #3.
- Shake the syringe and tap it.
- Squirt the water out, such as into a sink, toilet, or bucket.

Why? This step washes out the bleach and any viruses that are left in the syringe.

Other tips:
- DO NOT share your cups with anyone else or use someone else’s cups.
- ALWAYS change your water and bleach at least once per day.

PROTECT YOURSELF TO STAY HEALTHY
- The best advice is to stop injecting and get into substance abuse treatment.
- If you can’t do that, the next best thing is to use a new sterile syringe every time and NEVER reuse or share syringes, spoons, water solutions, or cotton. HBV, HCV, and HIV can be spread by sharing these items. Any item contaminated with blood can contaminate other items and transmit disease.
- Wash your hands and arms.
- Make sure any surfaces your skin or blood might touch are kept clean.
- If you are having sex, use a latex condom every time and use water-based lube because that kind of lube won’t destroy the condom.
- If you aren’t already, get vaccinated against HBV.
Disinfect Syringes to Reduce Disease Risk

Protect Yourself and Protect Others

VDH

Three Steps, Three Cups

With bleach, dilute bleach solution in two glasses, each time to flush out the syringe. This can help reduce the risk of spreading disease.

Protect Yourself To Stay Healthy

VDH

Other tips:

- Do not mix the bleach and water.
- Do not wash the syringe with soap and water.
- Always wash your hands and bf your mouth after using a syringe.
Scott County, Indiana

- December 2014: 3 HIV diagnoses → May 2018: 231 HIV diagnoses
  - All linked to single strain of HIV
  - 91% co-infected with Hepatitis C
- Nation-Wide Assessment by CDC Identified 220 Similar ‘At-Risk Counties’
- Drug Overdose Deaths
- Rx Opioid Sales
- Mental Health Services
- Insurance Coverage
- Urgent Care Facilities
- Vehicle Availability
- Access to Interstate
- Education
- Income
- Poverty
- Unemployment
- HCV Infection Rates
April 2016- Southwest Outbreak Exercise (SWOBEX)

- Identify and initiate response to an outbreak of Hepatitis and HIV
- 4 Southwest Virginia Health Districts Participating
  - LENOWISCO
  - Cumberland Plateau
  - Mount Rogers
  - New River
220 Vulnerable Counties - CDC

VIRGINIA

County-level Vulnerability to Rapid Dissemination of HIV/HCV Infection Among Persons Who Inject Drugs


Vulnerable Counties and National Ranks (from 1-220)

<table>
<thead>
<tr>
<th>County</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buchanan</td>
<td>28</td>
</tr>
<tr>
<td>Lee</td>
<td>73</td>
</tr>
<tr>
<td>Patrick</td>
<td>166</td>
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<tr>
<td>Dickenson</td>
<td>29</td>
</tr>
<tr>
<td>Wise</td>
<td>78</td>
</tr>
<tr>
<td>Wythe</td>
<td>210</td>
</tr>
<tr>
<td>Russell</td>
<td>61</td>
</tr>
<tr>
<td>Tazewell</td>
<td>96</td>
</tr>
</tbody>
</table>
NACCHO Project - Phase I

“...to develop a model practice to address the syndemics of HBV, HCV, HIV and opioid abuse that can be adapted and implemented by local health departments throughout the U.S.”

NACCHO
National Association of County & City Health Officials

LENOWISCO Health District
VIRGINIA DEPARTMENT OF HEALTH

With Support from CDC Division of Viral Hepatitis
1) Tabletop exercise focused on community response
2) Develop a draft community response plan
3) Present plan to community in series of ‘town hall’ style meetings
4) Refine and publish final response plan
5) Future planning direction
APPALACHIAN H.E.A.R.T.
TABLETOP EXERCISE
HEART Exercise Objectives

- Discuss outbreak prevention and mitigation.
- Discuss viral hepatitis/HIV outbreak response needs.
- Examine information sharing processes with community partners.
- Discuss laws, regulations, and procedure for viral hepatitis/HIV outbreak.
Town Hall Meetings

- Reviewed key components of draft plan
- Obtained feedback from town hall participants
- Town hall participants received a copy of draft executive summary of the response plan
- Feedback from participants at the 4 meetings was used to inform and refine the final plan
Emergency Response Plan

**Community Prevention**
- Targeted education; partnering with community/agencies

**Community Response**
- Targeted prevention; BBP surveillance & testing; community-wide education & training efforts

**Community Recovery**
- Messaging; training; treatment; continued community status analysis

COMMUNITY RESPONSE PLANNING FOR OUTBREAKS OF HEPATITIS AND HIV AMONG PEOPLE WHO INJECT DRUGS
A CASE STUDY FROM LENOWISCO HEALTH DISTRICT, A RURAL COMMUNITY IN VIRGINIA

NACCHO

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment
PrEP Program

- Provides PrEP in all health departments in LENOWISCO, Cumberland Plateau and Mt Rogers Health districts (14 locations)
- Funded in part by VDH Division of Disease Prevention
- Lab/medication provided FREE to patients
The Virginia Department of Health identified 55 localities with high rates of hepatitis C as candidates to open a syringe exchange. They include Salem, Roanoke and Radford.
…to engage local communities, including law enforcement and local government officials to support and implement comprehensive harm reduction; adhering to Virginia Code § 32.1-45.4, Virginia Code § 54.1-3467, as well as identified evidence-based best practice strategies. Criteria to implement a harm reduction program in Virginia is as follows:

• Demonstrate support from locality’s governing body
• Demonstrate support from locality’s law enforcement
• Demonstrate support from the local health department
• Demonstrate support from partner agencies that will accept referrals for key services
• Demonstrate and document a plan for community engagement.
• Demonstration of sufficient administrative capacity including but not limited to budget and source of funding

NACCHO Project- Phase II

With Support from CDC Division of Viral Hepatitis
1) Engage community coalitions for support
2) Syringe exchange site visit to Charleston, WV
3) Community engagement & education forums
Wise County gets approval to launch Virginia's first needle exchange

By KATIE O'CONNOR Richmond Times-Dispatch  Apr 25, 2018

One Year Later, Wise County Needle Exchange

Virginia's first as localities seek...
LENOWISCO CHR Overview  As of March 31, 2019

- Total Participants: 52
  - Ages 20 to 65
  - 349 Total Visits

LENOWISCO CHR First Sharps Bin - July to October 2018
LENOWISCO CHR Outcomes  As of March 31, 2019

- **Syringes**
  - Distributed: 7,033
  - Collected: 8,860

- **Hepatitis C & HIV**
  - 42 Screening Tests Complete
    - 13 Currently Active in HCV Tx Program
    - 3 Participants in Pre Exposure Prophylaxis (PrEP) Program
  - 3 Participants in Recovery
  - 47 dual pks Narcan dispensed
  - 6 Overdose Reversals Reported
  - 30 Referrals for Family Planning
  - 5 Referrals for Domestic Violence Support Services
  - 1 Participant Pregnant & Linked with Support Services
  - 25 Participants Linked with Wrap Around Social Services (food, clothing, and housing assistance)
Supply Cabinet

Harm Reduction Supplies

Prevention NOT Permission
Hepatitis C Treatment Program

Partnership with Virginia Department of Health, LENOWISCO Health District, University of Virginia Health System, and Stone Mountain Health Services

- No-cost treatment for Virginia residents
- Telemedicine Services (I.D. clinician mentoring local providers)
June 2012  
LENOWISCO HD  
Hepatitis B Outbreak

January 2015  
Scott County, Indiana  
HIV Outbreak Related to PWID

November 2016  
Virginia  
Public Health Emergency Declaration

December 2016  
DiLENOWISCO HD  
NACCHO Phase I

June 2017  
DiLENOWISCO HD  
Public Town Hall Meetings

July 2018  
LENOWISCO HD  
Harm Reduction Start

2012 & Onward  
LENOWISCO HD  
Ongoing In-Depth HBV & HCV Case Investigations/Response

April 2016  
Virginia Dept. of Health  
SWOBEX Tabletop Exercise

March 2017  
DiLENOWISCO HD  
Appalachian H.E.A.R.T. Tabletop Exercise

September 2017  
LENOWISCO HD  
Community Response Plan Finalized

November 2016  
Centers for Disease Control and Prevention (CDC)  
County Level Vulnerability Assessment- 220 Counties ID’d

January 2018  
DiLENOWISCO HD  
NACCHO Phase II
Michelle McPheron, RN, BSN
Nurse Manager Senior
LENOWISCO & Cumberland Plateau Health Districts
michelle.mcpheron@vdh.virginia.gov