



Removing Barriers to the Prevention of Hepatitis C in a Western Frontier Community

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Converse County Public Health
Douglas, Wyoming



Learning Outcomes

1. Demonstrate an improved understanding of population and frontier county classification criteria.
2. Recognize barriers to communicable disease transmission prevention in a frontier settings.

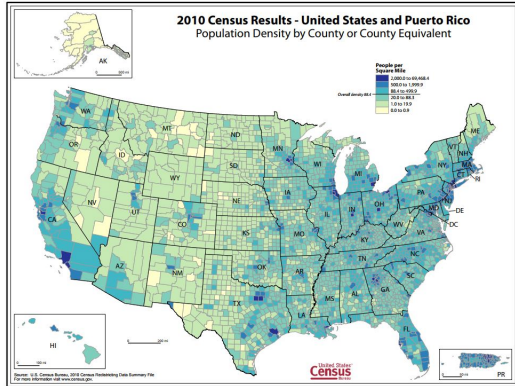


Population Background

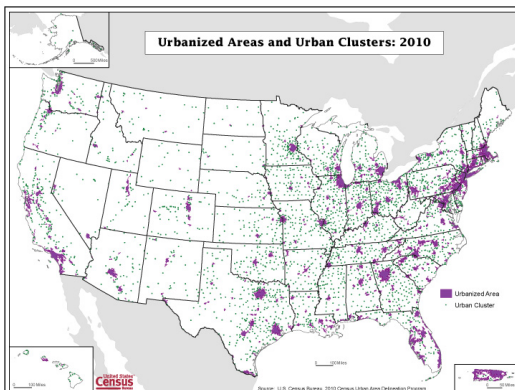
Population Classifications

- **Urban**
 - 50,000 or more residents, 1,000 persons per square mile.
 - 80.7% of the total U.S. population in 2010
- **Rural**
 - Open or sparsely settled land with settlements of less than 2,500 residents.
 - 19.3% of the total U.S. population in 2010
- **Frontier**
 - Multiple definitions for the term frontier, seldom in agreement, vary from program to program.
 - Sparsely populated rural areas with a population density of 6 or fewer people per square mile.
 - Isolated from urbanized areas
 - 56% of U.S. land mass
 - 4% of our population

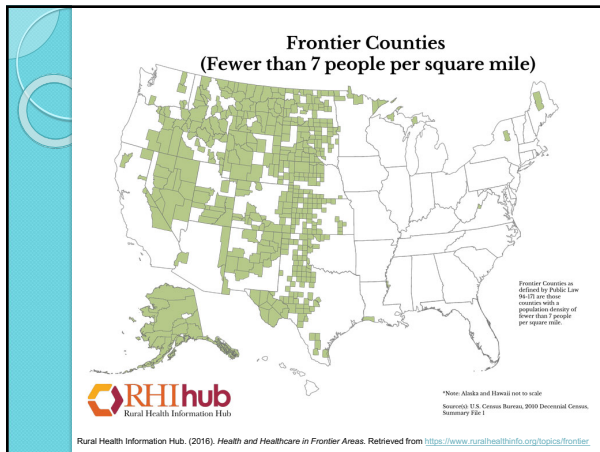
Sackett, K. (2012). Urban, rural, frontier and technology: Defining terms and setting the stage for future columns. *Online Journal of Nursing Informatics (OJNI)*, 16 (3). Available at <http://ojni.org/issues/?p=2006>



U.S. Census Bureau. (2010). Population Density by County or County Equivalent. Retrieved from https://www2.census.gov/geo/pdfs/maps-data/maps/thematic/us_popdensity_2010map.pdf



Ratcliffe, Michael (2012). *How Do We Measure Urban Areas?* United States Census Bureau, Census Blogs. Retrieved from <https://www.census.gov/newsroom/blogs/random-samplings/2012/04/how-do-we-measure-urban-areas.html>



Challenges in Frontier Populations

- Long trips to attend school, shop for groceries, get healthcare, and reach other basic services.
- Public transportation options are often limited or unavailable
- Seasonal travel barriers
- Transport to healthcare dependent on fair weather conditions
- Maintaining the healthcare workforce.
 - Thinly populated regions cannot easily compete with the wages and benefits offered by hospitals and clinics in metropolitan areas
 - Often one doctor or nurse away from a shortage
- 27% Critical Access Hospitals are located in frontier areas
- Frontier hospitals may face higher costs due to the lower volume of patients served.

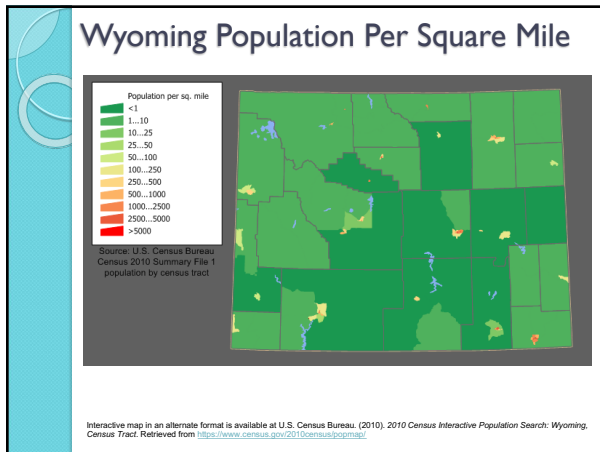
Rural Health Information Hub. (2016). *Health and Healthcare in Frontier Areas*. Retrieved from <https://www.ruralhealthinfo.org/topics/frontier>

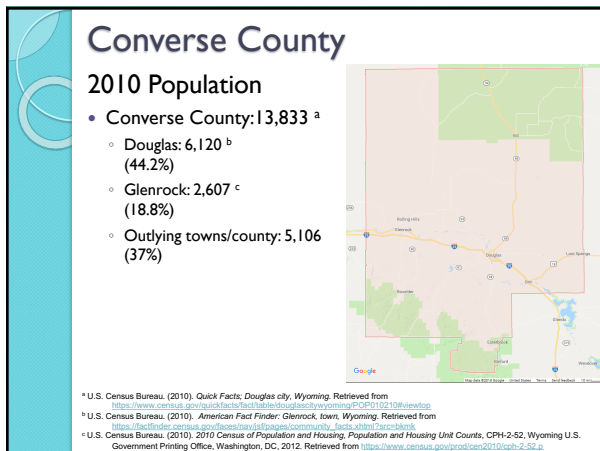
Wyoming

- 17 of 23 counties are categorized as frontier counties ^a
- Population density – 51st out of 52 ^b
- 5.8 people/square mile ^b
 - United States 87.4 people/square mile
 - New Jersey 1195.5 people/square mile

^aRural Health Information Hub. (2016). *Health and Healthcare in Frontier Areas*. Retrieved from <https://www.ruralhealthinfo.org/topics/frontier>

^bU.S. Census Bureau. (2010) Resident Population Data: Population Density. Retrieved from <https://www.census.gov/2010census/data/apportionment-dens-text.php>





Hepatitis C

Hepatitis C Testing Recommendations

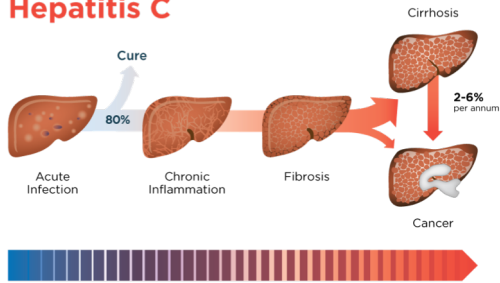
1. Born 1945-1965 birth cohort (Baby Boomers)
2. Blood transfusion, blood component, organ transplant prior to July 1992
3. Long term hemodialysis
4. Current or history of homelessness
5. Current or history of Injection Drug Use (IDU) or other intranasal illicit drug use
6. Current or past resident of a correction or detention facility
7. Hepatitis C positive sexual contact
8. HIV Infected
9. Men who have sex with men (MSM)
10. Recipient of clotting factor or blood concentrate prior to 1987
11. Sexual contact with an STI positive individual (as indicated)
12. Symptoms consistent with disease (as indicated)
13. History of prior STIs
14. Tattoos or body piercings from an unlicensed facility or person
15. Current or past history working in a healthcare setting, post-exposure
16. Children born to HCV positive women
17. Persons with a history of multiple sex partners or sexually transmitted diseases
18. Person with persistently abnormal ALT levels



Centers for Disease Control (CDC). (2015). Testing Recommendations for Hepatitis C Virus Infection. Retrieved from <https://www.cdc.gov/hepatitis/c/hcv/testing-recommendations.html>

COURSE OF ILLNESS

Hepatitis C



Premier Medical Laboratory Services. (2018). Hepatitis C infographic. Retrieved from <http://premedinc.com/tag/hepatitis-c-viral/>

Long Term HCV Infection Outcomes

- Of every 100 people infected with HCV, approximately:
 - 75-85 will develop chronic infection
 - 10-20 will develop cirrhosis over a period of 20-30 years
- Among patients with cirrhosis, there is:
 - 1-5% annual risk of hepatocellular carcinoma
 - 3-6% annual risk of hepatic decompensation
 - 15-20% risk of death in the following year
- Rates of progression to cirrhosis are increased in:
 - males > females
 - age >50 years
 - alcohol
 - nonalcoholic fatty liver disease
 - HBV or HIV coinfection
 - immunosuppressive therapy (2-4)



Centers for Disease Control (CDC). (2018). Hepatitis C FAQs for Health Professionals. Retrieved from <https://www.cdc.gov/hepatitis/hcv/faq.htm>

Hepatitis C High Risk Populations



- The CDC estimates that **1/3** of injection drug users between the ages of 18-30 years are infected.^a
- **70-90%** of older injection drug users are infected.^a
- **17.4% of incarcerated people** are chronically infected compared to 1% of the general population.^b

^a Centers for Disease Control (CDC). (2016). Access to clean syringes: What is the Public Health Issue? Retrieved from <https://www.cdc.gov/hiv/resources/asyringes/index.html>

^b Wyoming Department of Health Communicable Disease Program. Surveillance Program and Statistics, 2016 Hepatitis C Infographic. Retrieved from <https://health.wyo.gov/reporter/hepatitis2016022hepcoc.pdf>

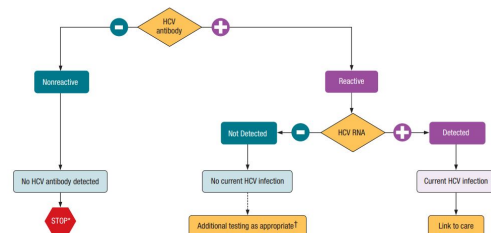
IDU and HCV

- 50% of U.S. cases
- Reported as the risk factor for 84% of individuals diagnosed with acute HCV.
- 20 to 30% are infected within the first 2 years.



Hepatitis C Online. (2018). HCV Epidemiology in the United States. Retrieved from <https://www.hepatitis-c.us.edu/pdf/screening-diagnosis/epidemiology-us-core-concept/all>

Recommended Testing Sequence for Identifying Current Hepatitis C Virus (HCV) Infection



^a For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody is recommended. For persons who are immunocompromised, testing for HCV RNA can be considered.

^b The alternative and, instead of HCV infection from testing, take possibility for HCV antibody, testing with another HCV antibody assay can be considered. Repeat HCV RNA testing if the person tested is suspected to have had HCV exposure within the past 6 months or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Source: CDC. Testing for HCV infection. An update of guidance for disease and diagnosis. MMWR 2013;62(10):199.

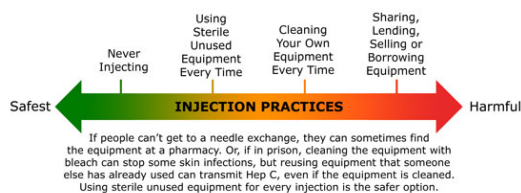
Centers for Disease Control (CDC). (2013). Recommended Testing Sequence for Identifying Current Hepatitis C (HCV) Infection. Retrieved from https://www.cdc.gov/hepatitis/hcv/pdfs/hcv_flow.pdf

Harm Reduction

Harm Reduction: What is it?

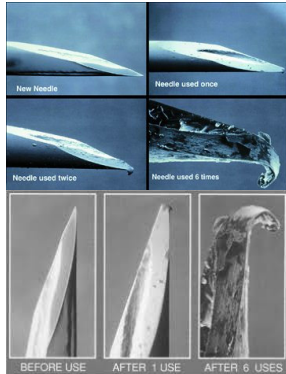
What is Harm Reduction?			
Harm Reduction is an approach designed to reduce harmful consequences related to risky activities.			
Seatbelts	Ear Protection	Sunscreen	Sharps Containers
Personal Protective Equipment	PrEP	Shoulder/Knee Pads	Drivers Education
Syringe Services Programs	Nicotine Patches/Gum	Hunters Safety Education	Sex Education
Reflective Clothing	Condoms	Overdose Prevention	Gun Locks
Medication Assisted Treatment	Birth Control	Steel Toed Boots	Helmets

Harm Reduction: Injection Practices



CATIE. (2011) Harm Reduction. Retrieved from <http://www.catie.ca/en/practical-guides/hepc-in-depth/prevention-harm-reduction/harm-reduction>

Harm Reduction: Syringes



Syringe Services Programs

Syringe services programs (SSP) have been identified as **“essential to reducing the spread of HIV/AIDS, hepatitis C and other infectious diseases”** by numerous established medical and scientific bodies including:^a

- The National Academy of Sciences
- American Medical Association
- American Public Health Association
- Centers for Disease Control and Prevention



“When properly structured, SSPs provide a unique opportunity for communities to reach out to the active drug injecting population and provide for the referral and retention of individuals in local substance abuse treatment and counseling programs and other important health services.”^b

^a Harm Reduction Coalition. *Syringe Exchange Saves Lives and Money*. Retrieved from http://harmreduction.org/wp-content/uploads/2011/12/Jurnal_Febien.pdf
^b U.S. Department of Health and Human Services. (2000) Evidence-based findings on the efficacy of syringe exchange programs: an analysis of the scientific research completed since April 1998. Retrieved from <http://harmreduction.org/wp-content/uploads/2012/10/EvidenceBasedFindingsOnEfficacyOfSEPs.pdf> Wyoming Department of Health Communicable Disease Unit. (8/22/2017) Communicable Disease Screening Recommendations. Retrieved from https://health.wyo.gov/wyoming-department-of-health-communicable-disease-screening-recommendations_2017/

Syringe Services Programs

- SSP participants are “five times more likely to enter a drug treatment program than nonparticipants”.
- “were more likely than IDUs who had not participated to reduce or stop injecting”.



amfAR. (March 2013) Fact Sheet, Public Safety, Law Enforcement, and Syringe Exchange. Retrieved from http://www.amfar.org/uploadedFiles/amfarorg/ArticlesOn_The_HIV/2013/fact%20sheet%20Syringe%20Exchange%20031913.pdf

Project Evolution

Corrections and Treatment Centers

Area prisons, jails, mental facilities, and treatment centers often offer HCV Antibody testing however they **do not** always perform confirmatory testing (RNA).

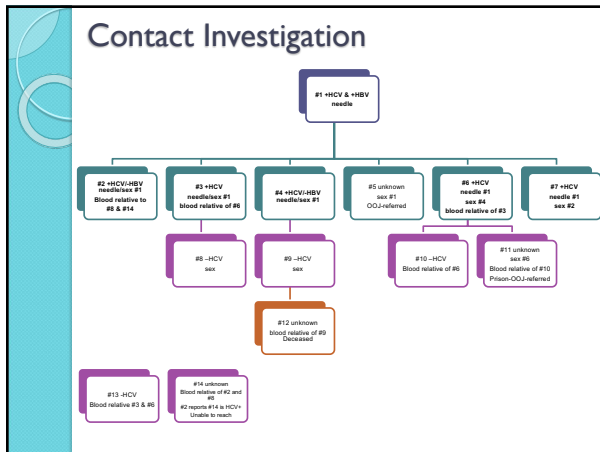
- Advised “dormant”, “not infectious”
 - Incorrect education vs. ability to understand, process and retain education
 - Released and do not use barriers, protect others, or access care




Local Trends




- Detention center visits
 - Noticed trends
 - Initially alcohol, marijuana, smoking meth
 - Then mostly injecting meth, alcohol
- Initial Response
 - Expanded on Tb risk assessment “illicit drug use” question and offered testing
 - Expanded harm reduction education
- Regular office patient returned for testing





Wyoming
Department
of Health

Commit to your health.
visit www.health.wyo.gov



Thomas O. Forslund, Director

August 3, 2016

Governor Matthew H. Mead

PHSS-2016-239

Dear Provider,

The Wyoming Department of Health (WDH) Communicable Disease Unit has detected a cluster of hepatitis C infection among injection drug users in Converse County. Some of the infected persons reported sharing injection drug use equipment. WDH encourages health care providers to evaluate their patients' risk for hepatitis C, including injection drug use, and conduct hepatitis C testing if indicated.

Up to this point...


- Increased identification of risk
- Increased testing
- Expanded harm reduction
- Communicated with other organizations
- Increased education to high risk populations
- Researching treatment resources

I knew we needed a full SSP but I didn't think the public or government officials would support one so we needed a modified approach.

[illegible]

Policy Academy

- Six month training
- Research the state legislative process
- Identify a problem and possible interventions
- Conduct research and draft a policy statement
- Training on messaging techniques
- Draft a policy brief
- Identify potential coalition members and “champions”
- Develop a strategic plan
- D.C. in person meet
 - Additional training
 - Meet with state legislators



National Coalition of STD Directors (NCSD). (2018). The Policy Academy. Retrieved from <http://www.ncstdc.org/longtech/ncsd-policy-academy/>

[illegible]

Community Collaboration

- Mental Health
- Law Enforcement
- District Attorney
- Prevention Alliance
- Hospital
- Landfill
- Communicable Disease Unit
- Resource in neighboring states
- Pharmacies
- Resources in other counties



Policy Brief

Policy Brief

Statement of Issue:
 Converse County has a significant intravenous drug use (IVDU) issue as well as increased occurrence of hepatitis C virus (HCV) in the IVDU population.

Policy Brief- Recommendation

Policy Recommendation:
 Syringe Services Programs (SSP) offer education regarding infectious disease transmission and infection prevention, referrals to care and treatment, STD testing, and proper hazardous waste disposal.

 Additionally SSPs provide access to harm reduction supplies including sharps containers, alcohol pads, bleach packets, sterile equipment (syringes, cookers, filters, and tourniquets), and naloxone for overdose death prevention.

Policy Brief: Advantages & Disadvantages

Advantages:

- "essential to reducing the spread of HIV/AIDS, hepatitis C and other infectious diseases".
- "When properly structured, SSPs provide a unique opportunity for communities to reach out to the active drug injecting population and provide for the referral and retention of individuals in local substance abuse treatment and counseling programs and other important health services."
- "five times more likely to enter a drug treatment program than nonparticipants".
- "were more likely than IVDUs who had not participated to reduce or stop injecting".

Possible Disadvantages:

- Funding for supplies, hazardous waste disposal, and PHN time.
- Time/staffing
- Staff comfort level with IVDU community interactions
- Security
- Support


Policy Brief - Recommendation

Converse County Public Health currently provides education regarding infectious disease transmission and infection prevention, referrals to care and treatment, STD testing, immunizations, and low cost family planning services. **The addition of harm reduction supplies and proper hazardous waste disposal to Converse County Public Health's existing services will provide necessary interventions to improve access to harm reduction measures, needed care, and decrease the transmission of HCV in our community.**

Gaps and Interventions


Gaps Identified

1. **Availability of data**
2. Sharps management
3. Community knowledge
4. Access to care
5. Access to harm reduction supplies



Data


- Lack of additional data
 - Drug offenses
 - not categorized
 - Needlestick prevention
 - No local or state OSHA/Workers' comp data
 - Wyoming Statistical Analysis Center (WYSAC)
 - Experience



Data: Other Resources

Mental Health

- Member Information Services (MIS)
- Law enforcement
 - Evidence inventory – future resource
- Jail visit data
 - Appointments/PHNI
- Prevention Alliance
 - Data Summit



MIS Data

2016 Drug problems 1-3 for Substance Abuse Clients ^a

1. Alcohol 61.69%
2. Methamphetamine 12.99%
3. Marijuana/Hashish 11.69%



2017 First Presenting Problem; Drugs ^b

- Females 30% (second to evaluation)
- Males 21.52% (third to alcohol and evaluation)

2018* First Presenting Problem; Drugs ^c

- Females 34.15% (second to alcohol)
- Males 28.17% (second to alcohol)

^a Solutions for Life, (2016). Member Information Services (MIS). Drug problems 1-3 for SA Clients from 7/1/15 thru 6/30/16.
^b Solutions for Life, (2018). Member Information Services (MIS). First Presenting Problem for SA Clients from 7/1/17 thru 6/30/18.
^c Solutions for Life, (2018). Member Information Services (MIS). First Presenting Problem for SA Clients from 7/1/16 thru 6/30/17.

Data

Jail Visits (*Updated 4/9/2018 4:54pm)						
	Visits	Hcg	LTBI	STD	Imm	PPD
2012	1	0	0	1	0	0
2013	12	0	0	3	0	19
2014	42	1	0	1	0	46
2015	57	5	6	8	0	81
2016	62	2	21	19	2	69
2017	72	1	22	46	24	78
*2018	21	1	1	16	7	13

Hcg: Pregnancy test

LTBI: Latent tuberculosis treatment

STD: Sexual Transmitted Disease testing, education, results

Imm: Immunizations

PPD: Tuberculosis test

Hepatitis C in Converse County

From 2015^a to 2016^b the number of newly diagnosed Hepatitis C cases in Converse County increased **220%**.

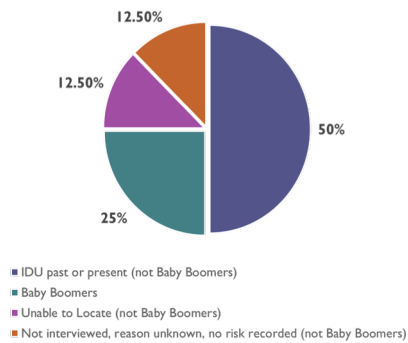


2016	Rate per 100,000
310.1	Goshen
198.7	Niobrara
127.8	Sheridan
126.1	Big Horn
125.8	Weston
119	Washakie
113.5	Converse
92.5	Natrona
92.2	Laramie
89.3	Sweetwater
73.6	Fremont
71.7	Uinta
69.9	Carbon
69.2	Crook
69	Park
62.4	Hot Springs
59.3	Sublette
58.6	Albany
50	Campbell
44.8	Teton
34.3	Platte
23.3	Johnson
16.4	Lincoln
91.2	Avg

^a Braund, W. E. (2016). Communicable Disease Epidemiological Profile, 2011-2015. Retrieved from https://health.wyo.gov/wp-content/uploads/2016/02/2015_CDE_Profile.pdf

^b Wyoming Department of Health Communicable Disease Program. (2017). 2016 Wyoming Hepatitis C Report. Retrieved from <https://health.wyo.gov/wp-content/uploads/2017/02/2016-WY-HepC-Data.pdf>

2016 Newly Diagnosed Risk Groups



Wyoming Department of Health Communicable Disease Unit. (2018).

Gaps Identified

1. Availability of data
- 2. Sharps management**
3. Community knowledge
4. Access to care
5. Access to harm reduction supplies



Sharps Management

- Stakeholders meeting
 - Law enforcement reports
- Researched hospital and landfill capabilities/preferences.
 - MHCC containers/disposal
 - Landfill/transfer station
- Collaboration with MHCC on a Safe Sharps Campaign.
- Secured grant funding for sharps containers and sharps disposal.



Safe Sharps Campaign

BE SMART WITH SHARPS

DO NOT PUT LOOSE SHARPS IN THE TRASH

WARNING

7 BILLION SHARPS ARE DISCARDED IN THE TRASH EVERY YEAR.

GET A SHARPS CONTAINER

USE A SHARPS CONTAINER

KEEP YOUR COMMUNITY SAFE

Federal Drug Administration. (n.d.). Be Smart with Sharps. Retrieved from <https://www.fda.gov/consumers/medicaldevices/consumermedicalprocedures/homehealthandconsumerconsumerproducts/sharps/ucm383005.pdf>

Safe Sharps Campaign

Use a Sharps Container

Discard a Sharps Container

Safe Sharps Program

If you or someone you know uses injection drugs **prescribed** by a medical provider:

- 1) Pick-up a sharps container at the Memorial Hospital Converse County (MHCC) admissions desk.
- 2) When it's full, drop it off at the MHCC admissions desk and receive a new sharps container.

Memorial Hospital of Converse County
111 S. 5th Street
Douglas, Wyoming 82633

If you or someone you know is using **injection drugs, of any kind, that are not prescribed by a medical provider**:

- 1) Pick-up a sharps container from Converse County Public Health (CCPH).
- 2) When it's full, bring it back to CCPH and receive a new sharps container.

* Services at CCPH are confidential.


Converse County Public Health
307-358-2536
255 North Russell
Douglas, WY 82633

Gaps Identified

1. Availability of data
2. Sharps management
3. **Community knowledge**
4. Access to care
5. Access to harm reduction supplies

Community Knowledge

- Lawmaker/Public Perception vs facts
 - Stakeholders
 - “They just need to quit”
 - View on harm reduction supplies
- Difficult to impact change when there is a lack of understanding regarding an issue.




Community Knowledge

Used my Policy Academy messaging training and collaborated with the Converse County Prevention Alliance on an “Addiction Facts” Facebook campaign.

- Simple graphic related to an addiction or substance and with a short paragraph on “what you can do” or “how you can help”.

Small steps to impact lawmaker and public perception of addiction and harm reduction.



Addiction Facts Campaign

Converse County Prevention Alliance
Facebook Published by Leslie Fowler · 19 · September 28 at 8:00am ·

Addiction Facts:
 Expecting your child (or anyone else) to “just quit” cold turkey is unrealistic.
 How you can help:
 You can help those overcoming addictions by referring them to accessible support services, being supportive and encouraging healthy coping skills to replace the unhealthy coping skill.
 Healthy coping skills can provide a distraction from the stressor and increase the release of “feel good” chemicals. After just a 5 minutes of a healthy coping skill the craving might be gone or the person may feel less stressed.

#2 FACT: Expecting your child to “just quit” cold turkey is unrealistic.
 Changing substance use behavior is a process. In the beginning your child may not think there is a problem. Next, she may realize it is a problem, but feel conflicted about addressing it. Then she needs to figure out how to deal with it and take steps in a healthier direction, including getting professional help, changing friends, learning drug refusal skills and more.

49 people reached

Boost Post

Converse County Prevention Alliance
Facebook Published by Leslie Fowler · 19 · October 20 ·

Addiction Facts: Stress, Coping Skills, and Addiction.
 “Stress” is how many people describe feeling pressured, overwhelmed, and like they have too much to handle.
 Coping skills is how we manage stress in our lives. Many people who use substances such as tobacco, alcohol, and drugs report the reason they use a substance or engage in an unhealthy activity is to cope with stress. When a coping skill causes harm to self or others it is an unhealthy coping skill.
 How you can help:
 You can help those overcoming addictions by referring them to accessible support services, being supportive and encouraging healthy coping skills to replace the unhealthy coping skill.
 Healthy coping skills can provide a distraction from the stressor and increase the release of “feel good” chemicals. After just a 5 minutes of a healthy coping skill the craving might be gone or the person may feel less stressed.

TYPES OF COPING SKILLS

<p>Self-Soothing Coping skills that help you calm down when you are stressed or upset.</p> <p>Emotional Awareness Coping skills that help you understand and manage your emotions.</p>	<p>Distraction Coping skills that help you take your mind off the stressor for a moment.</p> <p>Mindfulness Coping skills that help you stay present and focused on the current moment.</p>	<p>Opposite Action Coping skills that help you do the opposite of what you feel like doing when you are stressed or upset.</p> <p>Crisis Plan Coping skills that help you prepare for and respond to a crisis situation.</p>
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Converse County Prevention Alliance
 Posted by Leah Fennie on October 8 at 1:09pm · [Open](#)

Addiction Facts:
 Misuse of opioid pain medications may open the door to heroin use.

How you can help:
 Talk to your doctor about ways to manage your pain that do not involve prescription opioids. Some of these options may actually work better and have fewer risks and side effects. Depending on the type of pain you are experiencing, options may include:

- Acupuncture (Yin-Yang) or biofeedback (Auricular)
- Cognitive behavioral therapy – a psychological, goal-directed approach in which patients learn how to modify physical, behavioral, and emotional triggers of pain and stress.
- Exercise therapy, including physical therapy
- Medications for depression or for anxiety
- Interventional therapies (injections)
- Exercise and weight loss
- Other therapies such as acupuncture and massage

Additional information can be found at:
<https://www.oaio.gov/drugoverdose/patients/materials.html>

FACT

 Misuse of opioid pain medications may open the door to heroin use.

Converse County Prevention Alliance
 Posted by Leslie Fowler on October 10 at 12:00pm · [Open](#)

Addiction Facts:
 Drug and alcohol use can increase risk for chronic liver disease and cancer among those with hepatitis.

How you can help:
 Individuals with hepatitis are encouraged to follow-up with a medical provider on a routine basis.

You can help those overcoming addictions by referring them to accessible support services, being supportive and encouraging healthy coping skills to replace the unhealthy coping skill.

Healthy coping skills can provide a distraction from the stressor and increase the release of "feel good" chemicals. After just a 5 minutes of a healthy coping skill the craving might be gone or the person may feel less stressed.

FACT

 Drug and alcohol use can increase risk for chronic liver disease and cancer among those with hepatitis.

NIH National Institute on Drug Abuse

10 people reached

38 people reached

Initial Outcome

The initial promotion increased:

- page likes/followers 3,100%
- views increased 93%
- reach increased 404%

<https://www.facebook.com/conversecountyprevention/>



Gaps Identified

1. Availability of data
2. Sharps management
3. Community knowledge
- 4. Access to care**
5. Access to harm reduction supplies



Access to Care: Positive HCV Result

- Insured:
 - Referred to primary care/infectious disease
- Un/underinsured
 - Sliding fee scale care
 - Casper (50 miles each way): primary care only
 - HealthWorks in Cheyenne (129 each away)
 - Often unable to access specialized care
 - Mental health/substance abuse treatment
 - Particularly in Central Wyoming
 - Viral suppression



Project ECHO



- Project ECHO (Extension for Community Healthcare Outcomes)
- **FREE** collaborative model of medical education
- Does not actually "provide" care to patients, provides front-line clinicians with the knowledge and support they need to manage patients with complex conditions.
- Over 65 complex conditions including:
 - Hepatitis C
 - HIV
 - Tuberculosis
 - Chronic pain
 - Endocrinology
 - Behavioral health disorders
 - Substance use disorders
 - Autism
 - Palliative Care
- Continuous learning system and partnering with specialist mentors at an academic medical center or hub.

University of New Mexico School of Medicine Project ECHO. (2017). About ECHO. Retrieved from <https://echo.unm.edu/about-echo/>
University of New Mexico School of Medicine Project ECHO. (2017). Project ECHO: Right Knowledge, Right Place, Right Time. https://echo.unm.edu/wp-content/uploads/2017/09/ECHO_One-Pager_08.17.2017.pdf

Access to Care: Providers

- Reached out to closest FQHC (60 miles away)
 - Considering the participation in the Project ECHO
 - Ongoing effort
- Educated state legislators in Washington D.C.



Access to Care: Medication

- Based on genotype
 - 6 genotypes ^a
- Anti-viral medications
- “Cure” medication
 - Harvoni (genotypes 1, 4, 5, & 6) ^b
 - As of 3/27/2017 the retail cost for 12 week course of Harvoni is approximately \$143,544 ^c.
 - Can become reinfected
 - Sober 6-12mo for “cure” medication.
 - Unable to get sober without access to care/insurance



^a HepatitisC.net. (n.d.). Your Hepatitis C Genotype. Retrieved from <http://hepatitis.net/diagnosis/genotype/>

^b Harvoni. (2017). Retrieved from <http://www.janssen.com/>

^c Shatto's Frontier Drug. (3/27/2017).

Harm Reduction: Costs

- Converse County
 - Majority of +HCV clients are uninsured
- Acute Care
 - ER visits, hospital stays, IV antibiotics, wound care for injection site infections.
 - Unpaid charges - increased rates
- Wyoming
 - Not a Medicaid Expansion state
 - Adults must have dependent children or be legally disabled and meet financial eligibility criteria. ^a
 - No treatment often leads to disability
 - Once disabled THEN eligible for WY Medicaid.



^a Wyoming Department of Health. Wyoming Medicaid. (2016). Programs and Eligibility. Retrieved from <https://health.wyo.gov/healthcare/wyoming-medicare-programs-and-eligibility/>

Gaps Identified

1. Availability of data
2. Sharps management
3. Community knowledge
4. Access to care
5. **Access to harm reduction supplies**



2016 Harm Reduction Services (7 of 14)

Available Services	NCAP Ft. Collins ^a	Denver ^b	CCPH Douglas
Sterile syringes	X	X	
Cotton/cooker	X	X	
Hazardous waste disposal	X	X	
Risk reduction counseling	X	X	X
Referrals	X	X	X
First aid supplies	X	X	
Sharps containers	X	X	
Alcohol pads/Bleach kits	X	X	
Safer sex supplies	X	X	X
OD Prevention/Treatment (naloxone)	X	X	EMT/CCSO
HIV/HCV Testing	X	X	X
Other STD testing/Three Site Testing			X
Immunizations			X
Low Cost Family Planning			X

^aNorthern Colorado AIDS Project (NCAP), (2017). NCAP Syringe Exchange Program.
^bColorado Health Network/Denver Colorado AIDS Project, (2016). Colorado Syringe Access Programs.

Harm Reduction: Cost Comparison

- Cash price of treatment with Harvoni is \$144K:
 - x491^a new cases in WY = \$70.7million (\$125/WY resident)
- Liver Transplant (amount billed) in U.S.:
 - \$577,100 in 2011 ^b
 - \$739,100 in 2014 ^b (28% increase)
 - \$812,500 in 2017 ^c (10% increase)
 - 41% increase since 2011
 - x491^a new cases in WY = \$399 million (\$708/WY resident)



^aWyoming Department of Health Communicable Disease Program, (2017). 2016 Wyoming Hepatitis C Report. Retrieved from <https://health.wyo.gov/wp-content/uploads/2018/02/hepCReport2016.pdf>
^bMillman, (2014). 2014 U.S. Organ and Tissue Transplant Cost Estimate and Discussions. Retrieved from http://www.millman.com/uploads/ResearchHealth/enr2014RDP_20141230.pdf
^cMillman, (2017). 2017 U.S. Organ and Tissue Transplant Cost Estimate and Discussions. Retrieved from http://www.millman.com/uploads/ResearchHealth/enr1908RDP_20141230.pdf

Harm Reduction: Cost Comparison

Syringes (50)	\$8.50
Alcohol pads (50)	\$0.66
Sharps container	\$2.14
Tourniquet	\$0.19
Bleach (1oz.)	\$1.15
Cotton/Filter (50)	\$0.80
Cookers (50)	<u>\$5.50</u>
	\$18.94

**Save Lives
and
Save Money!**

\$144k / \$18.94 = 7,603
 7,603 months = 634 years

^aMcKesson, (10/26/2017). 1cc Insulin syringe pricing, \$12-\$17/100.
^bTotal Access Group, (10/26/2017). Alcohol pad, 1oz. bleach bottle, and sharps container pricing.

Harm Reduction Kits

Help decrease your risk for
Hepatitis and HIV infection
with **HARM REDUCTION KITS** from

Converse County Public Health
255 N. Russell
Douglas, WY 82633
307-358-2536

This is a **confidential** service made possible
through grant funding.

HARM REDUCTION KITS

- Sharps Container & Disposal Information
- 30 Alcohol Pads
- 1 oz. Bleach Bottle
- Syringe Cleaning Instructions
- Safer Injection Practices
- 4 Condoms
- Needle Exchange Information
- Community Resource Information



2018 Harm Reduction Services (11 of 14)

Available Services	NCAP Ft. Collins ^a	Denver ^b	CCPH Douglas
Sterile syringes	X	X	
Cotton/cooker	X	X	
Hazardous waste disposal	X	X	X
Risk reduction counseling	X	X	X
Referrals	X	X	X
First aid supplies	X	X	
Sharps containers	X	X	X
Alcohol pads/Bleach kits	X	X	X
Safer sex supplies	X	X	X
OD Prevention/Treatment (naloxone)	X	X	EMT, CCSO, and DPD
HIV/HCV Testing	X	X	X
Other STD testing/Three Site Testing			X
Immunizations			X
Low Cost Family Planning			X

^a Northern Colorado AIDS Project (NCAP), (2017). NCAP Syringe Exchange Program.
^b Colorado Health Network/Denver Colorado AIDS Project, (2016). Colorado Syringe Access Programs.

Outcomes Recap...so far

- Safe Sharps Program
- Addiction Facts Campaign
- Grant funding for DPD naloxone kits
 - Would like to add GRPD
- Harm reduction kits
- Sterile syringe program – pending review
- Access to care – ongoing effort



Why this matters.

- Humans
 - Parent, child, sibling, friend, etc
- Risk of transmission to others:
 - Children
 - Other adults
 - First responders
 - Sanitation workers
- Cost
 - Patient, family, consumers, taxpayers

**THAT'S
WHY!**

Public Health Nursing's Impact

- Front line experience matters
- Notice trends
- Collaborate
- Research
- Training Opportunities
- Advocate
- Communicate
- You CAN impact change



Questions?

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