

**White Paper: The Need for Harm Reduction Programs in West Virginia**  
**West Virginia Department of Health and Human Resources**  
**Bureau for Public Health**  
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**Description of Harm Reduction Programs:**

Harm reduction programs (HRPs) are comprehensive evidence-based programs that provide a host of services to persons who inject drugs (PWID), which may include facilitating safe disposal of needles used for injecting drugs [1]. HRPs provide sterile injection equipment to PWID to decrease the likelihood of transmitting bloodborne diseases such as HIV, hepatitis B (HBV), and hepatitis C (HCV), which can be spread using shared injection equipment. HRPs provide a wide array of additional support services to PWID and others including HIV, HBV, HCV, tuberculosis (TB), and sexually-transmitted infection (STI) testing; linkage to care for PWID living with HIV and/or HCV; primary medical care; pregnancy testing, prenatal care, and linkage to contraceptive services; immunizations; TB treatment; wound care; and naloxone training and distribution [1].

HRPs are effective in reducing needle sharing among other high-risk behaviors including unsafe sex and syringe borrowing and lending. A study conducted on more than 5,000 PWID in New York City found that all HIV risk behaviors studied declined in association with increased syringe exchange attendance [2]. Other studies in New York and California have found an association between syringe exchange and a reduction or cessation of syringe sharing among PWID [3] [4], as have reviews of existing literature [5] [6]. Additionally, research shows that SSPs that do not limit the number of syringes distributed are more effective in curtailing rates of syringe sharing than programs that do [7] [8].

**Centers for Disease Control and Prevention (CDC) Vulnerability Study – Implications for West Virginia:**

In late 2014, injection of prescription opioids was linked to an outbreak of HIV in Scott County, Indiana. Historically, fewer than five cases of HIV had been reported in this county; between November 2014 and October 2015, 181 persons were diagnosed with HIV in a county with a population of approximately 24,000 [9] [10]. Ninety-two percent of those diagnosed with HIV were also diagnosed with HCV [11]. As of April 24, 2015, 108 of the 112 persons who were interviewed had reported injection drug use. Like many rural counties in the United States and in West Virginia, Scott County has substantial unemployment and poverty, limited access to healthcare, and a high proportion of adults who have not completed high school [9].

The Scott County HIV outbreak led to an assessment of county-level vulnerability for rapid dissemination of HIV or HCV among PWID. A vulnerability index was applied to 2,704 counties, and 220 counties in 26 states were identified as vulnerable, including 28 of West Virginia's 55 counties. Five of the top 20 counties identified in the study are in West Virginia: McDowell, Mingo, Wyoming, Raleigh, and Logan. A July 2017 statewide survey showed that none of these counties had an HRP located within their jurisdiction. West Virginia is considered a low incidence state for HIV with less than 100 new cases reported each year, but needle sharing between HIV-infected individuals with non-HIV infected individuals could easily change the state's status.

**Disease Burden in West Virginia:**

Injection drug use (IDU) is often reported among both HBV and HCV cases. In West Virginia, reported IDU has been increasing as documented in a 2012-2015 surveillance summary that showed 30-40% of cases identified IDU as a risk factor for both acute HBV and HCV [12]. Since 2007, West Virginia has reported the highest incidence of acute HBV and ranked either first or second in acute HCV in the United States. In 2015 and 2016, the incidence rate per 100,000 persons of acute HBV in the state was greater than 13 times the national average (13.7 in 2015 and 13.5 in 2016 compared to 1 and 1.1, shown in Figure 1, Panel A). Similarly, for acute HCV, West Virginia is well above the national incidence rate at 4.8 and 5.7 times greater in 2015 and 2016, respectively (Figure 1, Panel B).

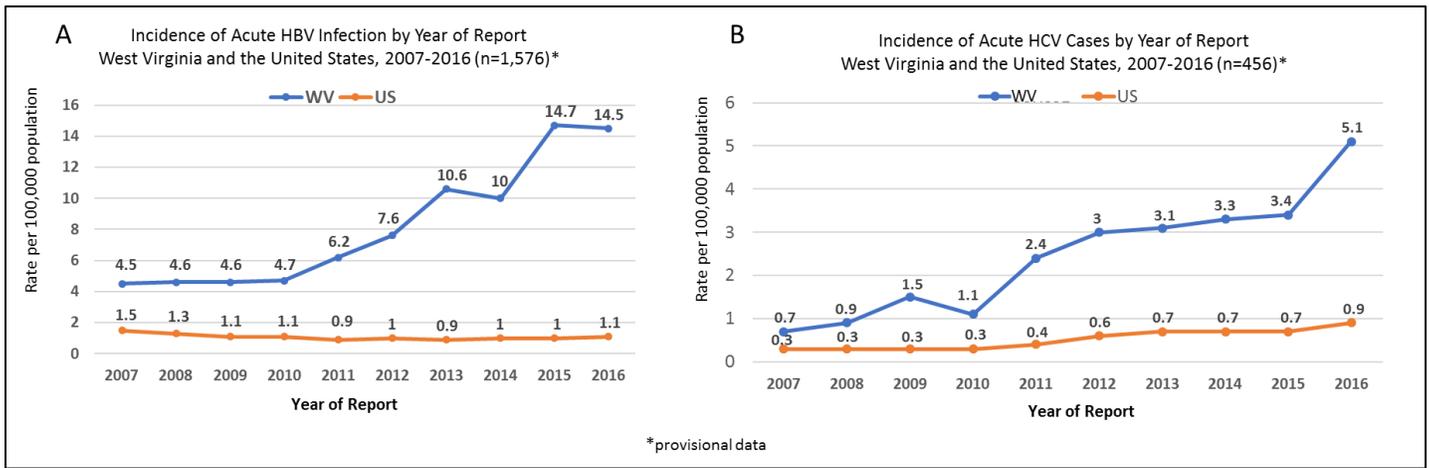


Figure 1. Comparison of incidence of acute HBV and acute HCV incidence rates in West Virginia and the United States, 2007 to 2016.

Provisional 2016 data show that the greatest burden of both acute HBV and acute HCV lie mostly in West Virginia’s southern counties, which are also considered vulnerable to rapid dissemination of HCV and HIV among PWID [13]. The five counties—Cabell, Kanawha, Putnam, Raleigh, and Wood—accounted for 55% of state’s acute HBV case burden. Kanawha, Mercer, Raleigh, and Wood counties accounted for 49.1% of the state’s acute HCV cases.

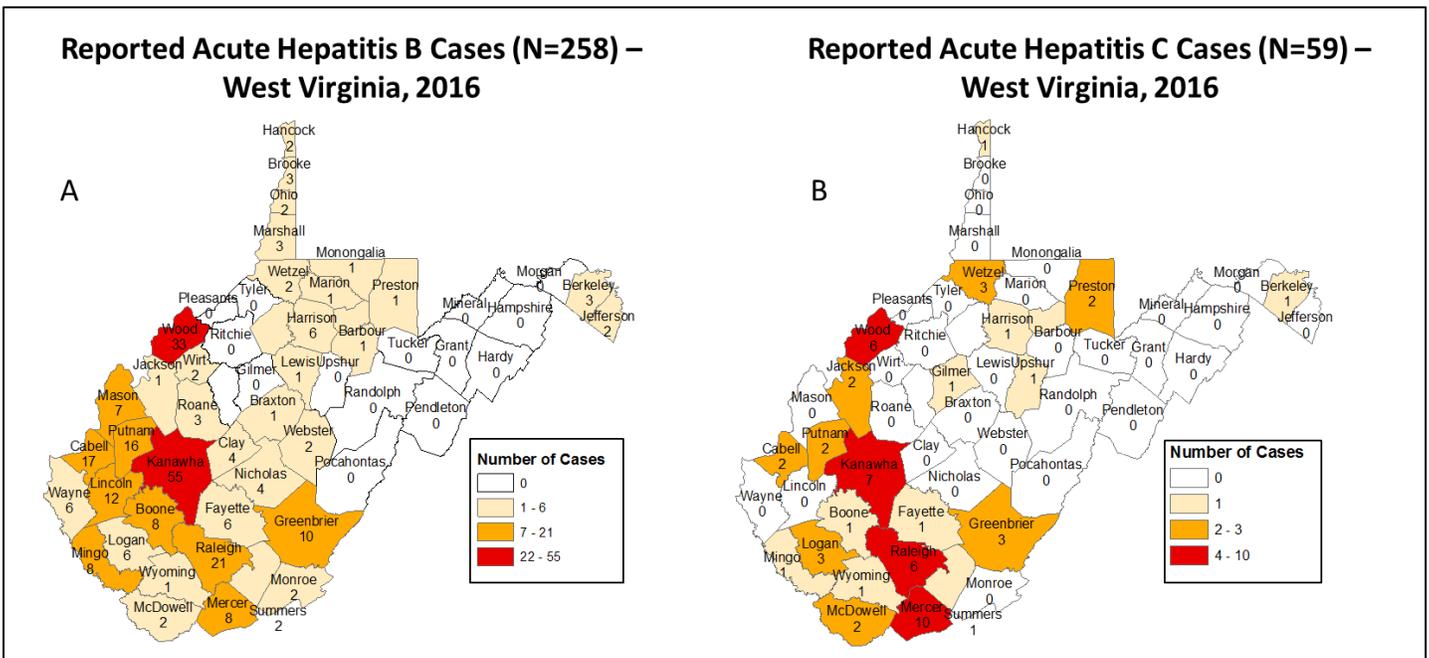


Figure 2. Prevalence of acute HBV and acute HCV, West Virginia, 2016.

Chronic HBV and HCV rates are also staggering in the state. In 2016, West Virginia reported 353 chronic HBV cases and 6,506 chronic HCV cases. Four counties reported greater than 300 new chronic HCV cases: Cabell (n=486), Kanawha (n=824), Mercer (n=340), and Raleigh (n=479).

HRPs may serve to quell West Virginia’s HBV and HCV epidemics by:

- Reducing the number of needles and syringes contaminated with HBV and/or HCV and properly disposing of them
- Discouraging multiple use of needles and syringes for IDU
- Offering screening for HBV and HCV
- Linking individuals to addiction treatment, counseling and recovery so they can re-enter workforce
- Offering condoms to encourage safe sex practices
- Providing HBV vaccine

### Effectiveness of Harm Reduction Programs:

There has been extensive research on the effectiveness of HRPs. Primary among public health concerns related to injection drug use is the spread of HIV, HBV, and HCV. The evidence overwhelmingly supports the effectiveness of HRPs, specifically those involving syringe exchange, in their ability to reduce unsafe injecting habits and HIV risk behaviors, reduce disease transmission, and facilitate linkage to care and treatment for PWID. Additionally, the evidence supports the cost-effectiveness of HRPs.

HRPs not only reduce syringe sharing, but have subsequently been proven to reduce HIV transmission. HIV transmission is a major concern with syringe sharing practices because the virus can live in syringes for up to four weeks [14]. Furthermore, research of PWID shows syringe sharing to be the primary risk factor for HIV infection; PWID who developed HIV were four times more likely to have shared syringes in the past year than PWID who did not [15]. The first federally funded evaluation of a syringe exchange program conducted in the U.S. found that over time, the program reduced the proportion of returned needles contaminated with HIV [16].

There is overwhelming evidence that a decline in HIV incidence and prevalence is associated with the implementation and utilization of HRPs. A study of 103 cities found that HIV prevalence declined an average of 18.6% in cities with HRPs, compared to a mean increase of HIV prevalence of 8.1% in cities without HRPs [17]. Additional studies found that HIV incidence rates significantly declined following the implementation of harm reduction services [18], and additional literature is available that demonstrates further evidence for the association between HRPs and HIV reduction [5] [6].

While evidence is limited, HRPs may also be effective in reducing transmission and prevalence of HBV and HCV. Several studies found reduced rates of HBV after implementation of harm reduction strategies [18] [19]. There is mixed evidence on the effects of harm reduction programs on HCV [18] [19] [20]; one study suggested that SSPs may be more effective at decreasing HCV transmission in conjunction with other harm reduction methods, such as bleach provision, education, and referral to treatment [21]. HBV is estimated to be between 50 to 100 times more infectious than HIV [22], meaning that deterring needle sharing can greatly prevent disease transmission. Additionally, many HRPs offer adult HBV vaccine.

According to the West Virginia Department of Health and Human Resources' (DHHR) Bureau for Medical Services, the number of Medicaid patients who have tested positive for HBV and/or HCV has increased by 2.7 times from 2010 to 2016 (Figure 3A). This equates to a 2.8 times rise in Medicaid costs to almost \$150 million in 2016 (Figure 3B) [23].

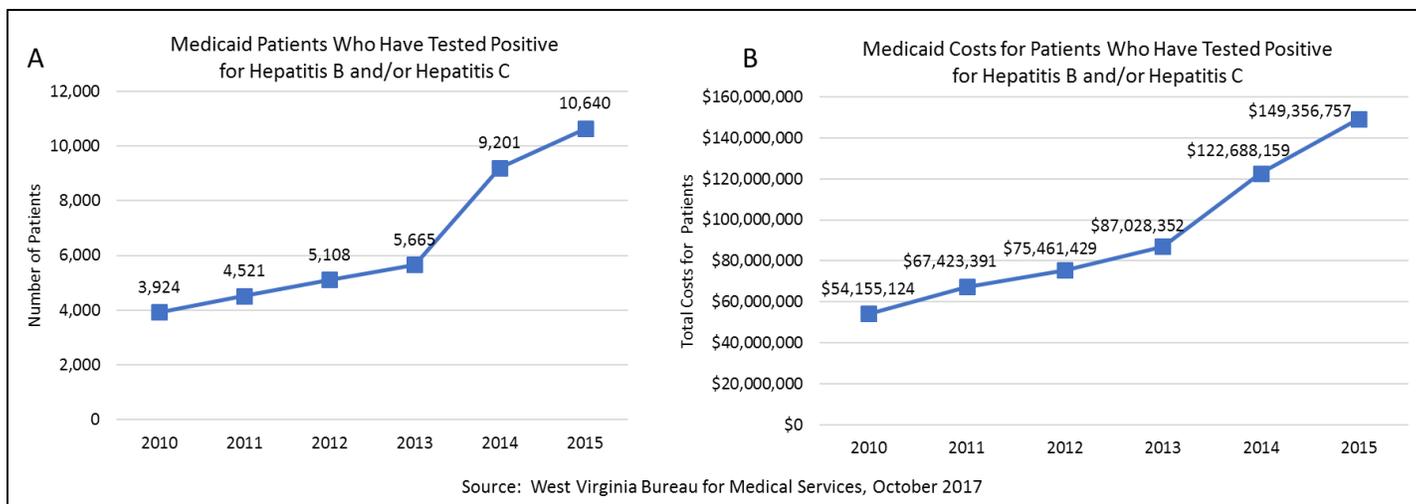


Figure 3. Counts of HBV- and HCV-positive Medicaid patients and associated costs by year, West Virginia, 2010-2015.

Harm reduction programs are cost-effective in preventing HIV, which has an estimated lifetime treatment cost of more than \$379,000 [24]. One study estimated that had HRPs been implemented at the beginning stages of the HIV/AIDS epidemic, 15-33% of HIV cases could have been prevented, saving between \$244 and \$538 million in treatment costs



With support from DHHR, the Cabell-Huntington Harm Reduction Program (CHHRP) began in September 2015 in response to surveillance indicators and community concerns regarding opioid overdose, overdose deaths, HBV, HCV, and neonatal abstinence syndrome (NAS). When services began, 15 clients were seen in a two-hour clinic session and demand quickly grew. In 2016, CHHRP served 1,980 clients, dispensed 300,049 syringes, and collected 232,067 syringes [34].

CHHRP administers voluntary client intake surveys which request data on insurance status, housing status, race, gender, history of substance use treatment, infectious disease diagnoses, and drug use history and habits. CHHRP reported that its returning clients are **one-third as likely as new clients to share needles**, suggesting that PWID who access the CHHRP services regularly are more likely engaged in safer injection practices, and thus reduce their risk of transmitting or contracting a bloodborne virus [34].

In September 2017, DHHR's Bureau for Public Health, Office of Epidemiology and Prevention Services (OEPS) released the *Harm Reduction Program Guidelines and Certification Procedures* [1]. This document establishes a mechanism by which entities can become certified by the state, thereby ensuring appropriate and competent standards of care across HRP. Entities desiring state certification must file an application for certification through the OEPS Harm Reduction Program by mail. HRP state certification commenced in November 2017. More information can be obtained at [www.harmreductionwv.org](http://www.harmreductionwv.org).

### **Legal Issues in Harm Reduction Programs:**

While West Virginia law does not specifically authorize HRP, the state health officer is empowered to adopt rules and regulations to obstruct and prevent the introduction or spread of communicable or infectious diseases into or within the state (W. Va. Code § 16-3-1). Some aspects of West Virginia law may conflict with HRP operations and may subject HRP to potential criminal and civil liability.

Possession of any amount of a controlled substance is illegal. Hypodermic needles may contain trace amounts of a controlled substance, and possession of hypodermic needles may open HRP to criminal liability. There are criminal prohibitions on the sale of any items, effect, paraphernalia, accessory or thing designed or marketed for use with controlled substances without obtaining a license from the state tax commissioner (W.Va. Code § 47-19-1). HRP distribute needles free of charge making this statute inapplicable unless a prosecutor argues that the transactional exchange of one needle for another constitutes compensation for the clean needle and is thus a sale.

Additionally, the West Virginia Uniform Controlled Substances Act prohibits a person from conducting, financing, managing, supervising, directing or owning all or part of an illegal drug paraphernalia business (W.Va. Code § 60A-4-403a). A person violates this law when:

- The person conducts, finances, manages, supervises, directs, or owns all or part of a business which for profit, in the regular course of business or as a continuing course of conduct, manufactures, sells, stores, possesses, gives away or furnishes objects designed to be primarily useful as drug devices; and
- The person knows or has reason to know that the design of such objects renders them primarily useful as drug devices.

A "drug device" in this context refers to "an object usable for smoking marijuana, for smoking controlled substances defined as tetrahydrocannabinols, or for ingesting or inhaling cocaine." The law lists several applicable devices of which syringes are excluded. Even though drug devices are defined in the context of objects usable for smoking and ingesting marijuana, tetrahydrocannabinols, or for ingesting or inhaling cocaine, it is conceivable that list might be read to include syringes since they can be used to inject cocaine.

A place where drug devices are manufactured, sold, stored, possessed, given away or furnished in will be deemed a common or public nuisance. A person maintains or knowingly is associated with the nuisance is guilty of a misdemeanor, subject to a fine of up \$1,000 or up to six months in jail. The law also gives a prosecuting attorney or a citizen of the county or municipality where the nuisance is located the authority to bring a suit to abate and perpetually enjoin the nuisance. Upon a finding that the material allegations of the complaint are true, the court can enjoin the operation of the nuisance.

Finally, any property, including money, used in violation of the law may be seized and forfeited to the state. This law is directed at for-profit businesses that engage in the distribution of drug paraphernalia. It is unlikely to be applicable to local health departments or other organizations administering HRP. However, it is conceivable that a prosecutor could assert that because a local health department bills for certain services that it constitutes a business. Although it would be difficult to show that health department is a for-profit business, entities other than local health departments that engage in HRP may want to be prepared to assert that they are not a for-profit business.

All HRP that include syringe exchange will want to consult with local law enforcement, particularly the county prosecuting attorney, to ensure program support and provide assurances that they will not seek to enforce any potentially applicable criminal statutes.

The uncertainty around the potential criminal or civil liability associated with operation of HRP is an area in which the legislature is best positioned to resolve. There is the potential for civil liability. Injuries resulting from the use of a syringe obtained from a harm reduction program are likely to give rise to a lawsuit. Further, a person or the family of a person who uses a syringe obtained from a syringe exchange program and suffers an overdose may also bring a civil claim for damages.

### **Summary:**

Acceptance for HRP in West Virginia is growing as evidenced by the increased number of HRP across the state as well as increased participation in the state's more successful HRP. The public health benefits are significant and are not limited to simply reducing disease transmission. HRP help expand public health services to vulnerable populations, namely those in need of behavioral health services. HRP also positively impact public safety in communities affected by drug abuse. They reduce the risk of needlestick injuries among first responders by providing a system for proper disposal of needles and syringes [35], as demonstrated by CHHRP. Some HRP have kiosks on their premises that allow the public to safely dispose of injection paraphernalia. Many HRP distribute life-saving naloxone kits and offer training on their use. Critical to successful HRP is collaboration with local law enforcement and other stakeholders, creating a bridge between public health and a variety of community partners. As West Virginia grapples with combating the current opioid overdose epidemic, HRP provide many tools that may help to rebuild communities overwhelmed by the social and economic effects of this public health crisis.

HRP are playing a key role across West Virginia in fighting the opioid crisis and ensuring state residents can access treatment while reducing the likelihood of a significant and costly infectious disease outbreak, risks identified by the CDC. It is critical that the state legislature recognizes and provides protection and support to HRP to allow the programs to remain successful.

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