

# Harm Reduction Vending Machines: Considerations for Implementation

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Harm reduction vending machines help reduce overdose deaths and promote better health and wellness for people experiencing homelessness who have substance use disorders or co-occurring disorders. This fact sheet introduces the evidence-based harm reduction vending machine model, explains how it supports overdose prevention strategies, outlines what supplies to include, and highlights key considerations for implementation.

## Introduction

**Harm Reduction** is an evidence-based, practical, and transformative approach that incorporates public health strategies—including prevention, risk reduction, and health promotion—to empower people who use drugs and their families with the choice to live healthier, self-directed, and purpose-filled lives.<sup>1</sup>

Harm reduction is part of a comprehensive prevention strategy, as outlined in the U.S. Department of Health and Human Services' Overdose Prevention Strategy.<sup>2</sup> Harm reduction vending machines are stocked with crucial supplies intended to prevent injury, promote public health, and reduce overdose deaths. These machines allow individuals to access these supplies for free or at a very low cost and serve as one tool in the broader continuum of prevention, treatment, and recovery care.

## Why vending machines?

Vending machines offer an innovative method for distributing life-saving naloxone and other harm-reduction supplies. Strategically placed machines can complement syringe service programs (SSPs), pharmacies, and mobile outreach initiatives by making these supplies available outside typical business hours and potentially reaching a broader population.

## What to include

**Naloxone** is a life-saving medication that can reverse an opioid overdose when administered in time. It is available in two forms: a prefilled nasal spray (commonly known as Narcan) and injectable.<sup>3</sup> Overdose reversal kits typically include two doses of intranasal naloxone spray and instructions for use.

### Learn more:

[SAMHSA Overdose Prevention and Response Toolkit](#) | [Substance Abuse and Mental Health Services Administration \[PDF\]](#)

[Understanding Naloxone](#) | [National Harm Reduction Coalition \[HTML\]](#)

**Testing supplies** can include fentanyl and xylazine test strips, which can alert users to the presence of these additives in drugs such as cocaine, heroin, or methamphetamine. A positive test result can help individuals make informed decisions about their drug use, including choosing not to use mixed drugs or opting for less risky consumption methods.<sup>4</sup>

### Learn more:

[What You Can Do to Test for Fentanyl](#) | [U.S. Centers for Disease Control and Prevention \[HTML\]](#)

[What You Should Know About Xylazine](#) | [U.S. Centers for Disease Control and Prevention \[HTML\]](#)

[Xylazine Basics: Overdose Prevention, Harm Reduction, and Wound Care](#) | [Homeless and Housing Resource Center \[HTML\]](#)

[Fentanyl](#) | [National Harm Reduction Coalition \[HTML\]](#)

[Xylazine in the Drug Supply](#) | [National Harm Reduction Coalition \[PDF\]](#)

**Safer-use supplies** can include resources for both safer injection and safer smoking. Safer injection kits include cookers, tourniquets, alcohol wipes, sterile water, cotton fiber, bandages, hand sanitizers, and sharps disposal containers. Safer smoking kits include glass stems, plastic mouthpieces, pipe screens, wooden push sticks, and foils. Both types of safer-use kits typically include educational materials on safer practices and access to treatment.

These supplies reduce the risk of disease transmission and injury from makeshift tools or shared supplies. Safer smoking supplies can also reduce the risk of overdose by providing an alternative to injections. Laws related to the distribution and possession of syringes and other supplies vary by state. The Network for Public Health Law, in partnership with NEXT Distro, provides [plain-language updates for each state](#).

**Learn more:**

[Safer Smoking 101](#) | [NEXT Distro \[HTML\]](#)

[The Safer Injecting Handbook](#) | [NEXT Distro \[HTML\]](#)

**Wound care kits** can include band-aids, non-latex gloves, first-aid triple antibiotic ointment, gauze pads, conforming gauze rolls, sterile water, self-adherent bandage rolls, and sterile alcohol pads. It can also be helpful to include information on how to care for wounds and guidance on when to see a medical professional.

**Learn more:**

[Wound Care & Medical Triage for People Who Use Drugs and the Programs That Serve Them](#) | [NASTAD \[PDF\]](#)

[Wound & Abscess Care for People Who Use Drugs](#) | [NEXT Distro \[HTML\]](#)

**Safer sex supplies** can include male and female condoms; dental dams; personal lubricants; HIV test kits; Plan B; pregnancy tests; and literature providing information and referrals to additional testing, emergency response, and counseling. These materials help reduce the spread of HIV and STIs, prevent unwanted pregnancies, and connect individuals to valuable community support.<sup>5</sup>

**Learn more:**

[Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions](#) | [World Health Organization \[HTML\]](#)

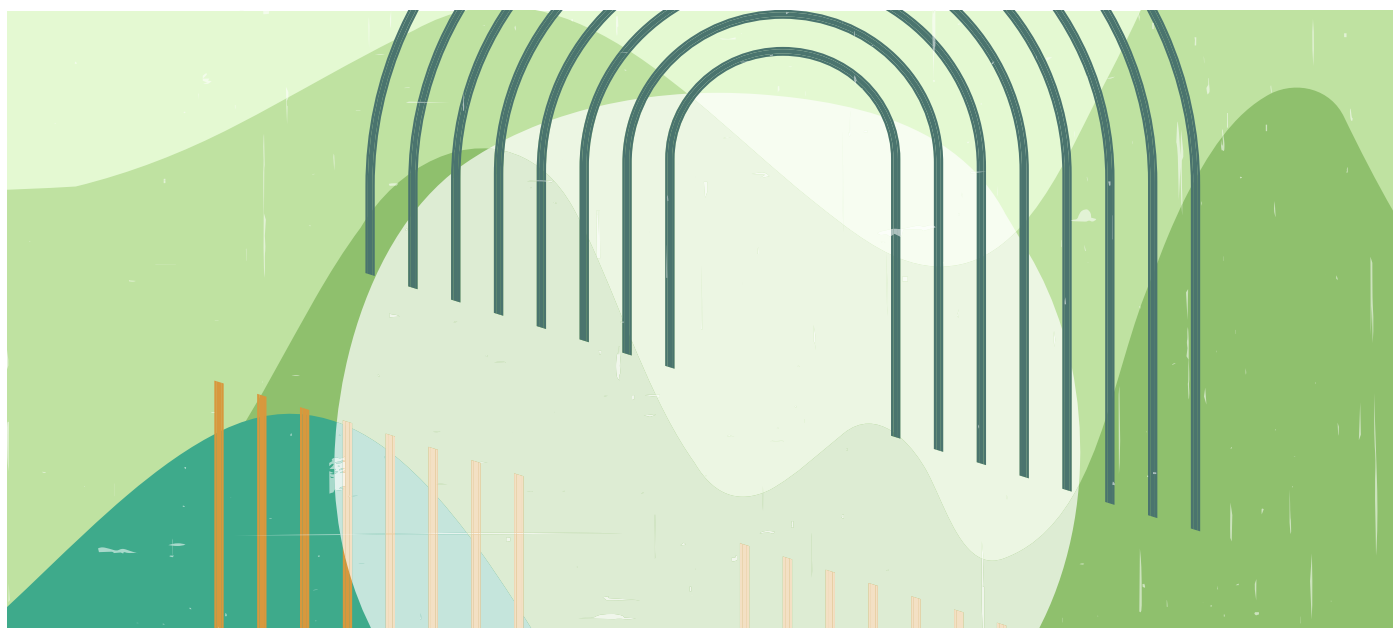
**Hygiene kits** can include toothbrushes, toothpaste, socks, tissues, soap, shampoo, washcloths, deodorant, sanitizing wipes, ChapStick, lotion, nail clippers, tampons, and menstrual pads. These items address personal care needs that can be difficult for people to meet when experiencing homelessness or housing instability, and they help prevent illness, improve self-esteem, and promote dignity.

**Other potential supplies** include gun locks, snacks, water, medication lock bags, and medication disposal bags.

# Considerations for implementation

## Access and Location

Questions to Consider	Tips
<ul style="list-style-type: none"> <li>• Who is your target population?</li> <li>• Will the machine be located near this population?</li> <li>• Will the machine be available to the public?</li> <li>• Do people need an established relationship with an SSP or other service provider?</li> <li>• Will an individual need to enter a building to access the machine?</li> <li>• If so, is entry limited during certain business hours?</li> <li>• Is the location easily accessed by public transport?</li> <li>• Are the supplies free or inexpensive?</li> <li>• Will the machine and its supplies be exposed to changing temperatures?</li> </ul>	<ul style="list-style-type: none"> <li>• Some organizations require individuals to connect with program staff during their first visit to the machine. Staff then provide a code or access key, allowing individuals to dispense supplies freely in the future. Other programs offer unrestricted access without requiring prior interaction with staff.</li> <li>• If your program aims to reach a specific population, co-locating machines in relevant locations can enhance accessibility. For example, placing machines in drop-in centers or shelters can expand outreach to people experiencing homelessness.</li> <li>• To lower barriers, it is best to provide supplies at no or a very low cost.</li> <li>• Some materials may be affected by extreme weather or temperature changes. When determining machine placement and selecting supplies, consider potential environmental impacts.</li> </ul>



## Data Collection

Questions to Consider	Tips
<ul style="list-style-type: none"> <li>• What information do you want to collect? How often?</li> <li>• What information is required? What is optional?</li> <li>• How can you anonymize the data collected?</li> <li>• How will you collect data?</li> </ul>	<ul style="list-style-type: none"> <li>• Collecting data is an effective way to monitor usage and impact. To lower barriers to access, consider what information is necessary and what information could be optional.</li> <li>• Programs can increase participation and broaden impact by allowing machine users to skip questions they do not want to answer and by ensuring that surveys are brief and easy to complete.</li> <li>• Additionally, programs can simplify machine access for the user by ensuring that individuals do not need to complete the entire survey each time they access the machine. Many programs provide users with an individual code to use when accessing the machine after completing the survey during their first visit.</li> <li>• All data collected should be confidential, and programs can increase participation by allowing users to remain anonymous during data collection. Using the machine itself to collect data or a virtual survey conducted via phone call, text, or QR code ensures that individuals can protect their identity.</li> </ul>

## Maintenance and Supplies

Questions to Consider	Tips
<ul style="list-style-type: none"> <li>• How will you acquire the machine?</li> <li>• Where will you source supplies?</li> <li>• Who can provide maintenance on the machine?</li> <li>• Who will monitor supplies and restock the machine?</li> <li>• What kind of funding will you utilize?</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a plan to ensure machines remain in good working condition.</li> <li>• Some “smart” machines can automatically report information to staff, including what and when items are dispensed and what items are running low. Otherwise, you may need to allocate staff time to monitor the supply and restock machines.</li> <li>• When sourcing a machine, programs can choose to purchase new, specially designed machines or to retrofit existing snack machines to accommodate supplies of various sizes. It can be helpful to browse resale sites like Craigslist or contact other programs that may be willing to sell their old machines.</li> <li>• Consider partnerships with local organizations already providing these supplies in brick-and-mortar settings, such as SSPs, harm reduction centers, community centers, and health clinics.</li> <li>• Consider how you may use donated supplies.</li> </ul>

## Education and Referrals

Questions to Consider	Tips
<ul style="list-style-type: none"> <li>• What kind of educational materials will you provide?</li> <li>• What information about other organizations can you provide to help individuals access additional support or treatment options?</li> <li>• In what languages can materials be provided?</li> </ul>	<ul style="list-style-type: none"> <li>• Educational materials can include the following:               <ul style="list-style-type: none"> <li>• Overdose reversal instructions</li> <li>• Safer injection tips</li> <li>• Safer smoking tips</li> <li>• Reproductive and sexual health information</li> <li>• Wound care fact sheets</li> <li>• Drug testing instructions</li> </ul> </li> <li>• It's important to consider the commonly used languages where the machine will be installed and provide translated resources.</li> <li>• It can be helpful to include QR codes linked to various resources, particularly when instructional videos may be helpful. However, it's important to remember that some individuals may not have a phone capable of scanning the code.</li> </ul>

## Funding and Sustainability

When considering funding for harm reduction vending machines, it is important to consider a broad range of partnership possibilities. Programs nationwide have successfully launched vending machine programs in partnership with local colleges, jails, health departments, emergency rooms, and more. These partners can help with identifying locations, acquiring machines or supplies, and maintaining the machine. HHRC's [Guide to Resource Mapping and Assessing Community Needs](#) can help identify potential partners—your program does not have to do it alone!

Additionally, some federal grants from HRSA and SAMHSA can be utilized for harm reduction supplies. Each federal agency has developed its own guidance for its funding recipients.<sup>6</sup>

Harm reduction services and supplies allowed by some SAMHSA grants include the following:<sup>7</sup>

- Overdose reversal supplies, such as the purchase of naloxone kits (this may include syringes for the purpose of administering injectable naloxone only)
- Substance test kits, including fentanyl test strips and xylazine test strips
- Safer sex kits, including condoms
- Sharps disposal and medication disposal kits
- Wound care supplies
- Medication lock boxes
- Sterile water and saline
- Ascorbic acid (vitamin C)
- Nicotine cessation therapies

- Food (e.g., snacks, protein drinks, water)
- Supplies to promote sterile injection and reduce infectious disease transmission through injection drug use—excluding sterile needles, syringes, and other drug paraphernalia
- Safer smoking kits to reduce infectious disease transmission—excluding pipes or pipettes and other drug paraphernalia
- FDA-approved home testing kits for viral hepatitis (i.e., HBV and HCV) and HIV
- Written educational materials on safer injection practices and HIV and viral hepatitis and prevention, testing, treatment, and care services
- Distribution mechanisms (e.g., bags for naloxone or safer sex kits, metal boxes or containers for holding naloxone) for harm reduction supplies, including stock as otherwise described and delineated on this list

#### Learn more:

[Boosting the Power of Harm Reduction](#) | [Homeless and Housing Resource Center \[HTML\]](#)

[Expanding Harm Reduction through Increased Syringe Access](#) | [Homeless and Housing Resource Center \[HTML\]](#)

## Program Examples

### Pennsylvania

**Penn State Health to Go**—The Pennsylvania State University College of Medicine has partnered with local organizations to support two harm reduction vending machines: one located outside an emergency department and the other inside a YMCA. Both machines provide a wide array of supplies, including naloxone kits, test strips, personal care items, wound care kits, and safe sex and reproductive health kits. These vending machines automatically collect usage data and report it back to staff while anonymously gathering information on users’ demographics, experiences, preferences, and needs.

**AICDAC**—To expand naloxone availability in rural Pennsylvania, the Armstrong-Indiana-Clarion Drug and Alcohol Commission (AICDAC) has partnered with the Indiana Regional Medical Center (IRMC) to provide a harm reduction vending machine outside an emergency room. This machine provides free fentanyl test strips and overdose kits, which include two doses of naloxone, instructions for use, and information about accessing treatment for substance use disorders.

### Delaware

**Delaware Division of Public Health**—Delaware has five vending machines stocked with four main materials: Narcan, Detera bags for safe medication disposal, test strips, and wound care kits. Other types of supplies are available through donations. These machines require users to input only a ZIP code to dispense supplies. If an individual does not have a Delaware ZIP code, each machine displays a designated access code that can

be used instead. Additionally, the machines are brightly colored and feature instructions on recognizing and responding to opioid overdoses.

## Wisconsin

[Milwaukee County Health & Human Services](#)—Milwaukee County operates 12 harm reduction vending machines in locations such as community centers, recovery services, fire departments, police stations, and counseling and health centers. The county website features an easy-to-use map showing each machine's location, along with a booklet containing instructions for various supplies, video demonstrations, dashboards displaying overdose trends and vending machine usage, and information about funding and partnerships.

[Milwaukee Veterans Affairs](#)—Inspired by the Milwaukee County program, the Milwaukee VA placed a harm reduction vending machine in its cafeteria. This machine dispenses test strips, naloxone, and gun locks, as well as harm reduction safe boxes that Veterans can use to store their supplies.

## California

[San Francisco Veterans Affairs](#)—The VA Health Care System's Harm Reduction and Syringe Services Program in San Francisco co-locates harm reduction vending machines with free supplies at the main VA medical center, seven community-based outpatient clinics, and six Bay Area Veterans' housing facilities.

## Ohio

[Caracole](#)—In Cincinnati, Caracole, a nonprofit dedicated to preventing the spread of HIV/AIDS, operates a harm reduction vending machine to complement its other harm reduction services. This machine contains a wide variety of supplies, including intramuscular naloxone, nasal naloxone, test strips, HIV self-test kits, safer injection and smoking kits, safer sex kits, and wound care kits. First-time participants must call a dedicated phone number or visit during open hours to complete a confidential sign-up survey. After registration, individuals receive a personal access code that allows them to use the machine once per week for 90 days. After this period, participants must check in with staff to renew their access.

### ADDITIONAL RESOURCES

[Naloxone](#) | NEXT Distro [HTML]

[Expanding Harm Reduction through Increased Syringe Access](#) | Homeless and Housing Resource Center [HTML]

[Fact Sheet on Naloxone \(Narcan\) in HCV and Public Housing](#) | U.S. Department of Housing and Urban Development [PDF]



## Endnotes

- 1 Center for Substance Abuse Prevention. (2023). *Harm Reduction Framework*. Substance Abuse and Mental Health Services Administration.
- 2 U.S. Department of Health & Human Services. (2024). *Overdose Prevention Strategy*. Retrieved from U.S. Department of Health & Human Services: <https://www.hhs.gov/overdose-prevention/>
- 3 U.S. Centers for Disease Control and Prevention. (2024, April 2). *Lifesaving Naloxone*. Retrieved from U.S. Centers for Disease Control and Prevention: <https://www.cdc.gov/stop-overdose/caring/naloxone.html>
- 4 Substance Abuse and Mental Health Services Administration. (2024, January 31). *Fentanyl and Xylazine Test Strips*. Retrieved from Substance Abuse and Mental Health Services Administration: <https://www.samhsa.gov/substance-use/treatment/overdose-prevention/fentanyl-xylazine-test-strips>
- 5 World Health Organization, U. N. (2013). *Implementing Comprehensive HIV/STI Programmes with Sex Workers: Practical Approaches from Collaborative Interventions*. Geneva: World Health Organization.
- 6 U.S. Centers for Disease Control and Prevention. (2024, February 8). *Syringe Service Programs (SSPs)*. Retrieved from U.S. Centers for Disease Control and Prevention: <https://www.cdc.gov/syringe-services-programs/php/funding/index.html>
- 7 Substance Abuse and Mental Health Services Administration. (2024, October 29). *Harm Reduction*. Retrieved from Substance Abuse and Mental Health Services Administration: <https://www.samhsa.gov/substance-use/harm-reduction>



## Learn More about the Homeless and Housing Resource Center

Providing high-quality, no-cost training for health and housing professionals in evidence-based practices that contributes to housing stability, recovery, and an end to homelessness.

### Contact Us:

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