Recommeded best practice policies to facilitate use of a sterile needle and syringe for each injection and reduce transmission of human immunodeficiency virus (HIV), hepatitis C (HCV), hepatitis B (HBV), and other pathogens:

- Provide sterile needles in the quantities requested by clients without requiring clients to return used needles
- Place no limit on the number of needles provided per client, per visit (one-for-one exchange is not recommended)
- Encourage clients to return and/or properly dispose of used needles and syringes
- Offer a variety of needle and syringe types by gauge, size, and brand that meet the needs of clients and educate clients about the proper use of different syringes
- Educate clients about the risks of using non-sterile needles
- Provide pre-packaged safer injection kits (needles/syringes, cookers, filters, ascorbic acid when required, sterile water for injection, alcohol swabs, tourniquets, condoms and lubricant) and also individual safer injection supplies concurrently

Key messages

Injection with a used needle puts people who inject drugs at risk for infections such as HIV, HCV, and HBV, and can also damage the skin, soft tissue, and veins. HIV, HCV, and HBV can survive in used needles and syringes, and can be transmitted when needles and syringes are shared. Most new HCV infections in Canada are attributed to injection drug use. Needle sharing rates vary across Canada and have declined in some communities in recent years. While this decline is encouraging, continued efforts to reduce needle sharing and reuse are needed to reduce disease transmission and other harmful effects.

NSPs need to distribute enough needles to ensure that clients use a new needle for each injection. One-for-one exchange policies – that is, one new needle for each used needle returned to an NSP – reflects outdated and unsatisfactory practice. Studies of NSP policies show that limiting the number of needles distributed to clients may reduce program effectiveness. For programs, calculating the number of needles necessary is challenging because the number of people who inject drugs is often unknown and the frequency of injection varies from person to person. It has been estimated that approximately 1000 needles are required per person per year.

Access to a variety of types of needles and syringes is recommended. Clients may prefer different types of needle gauge, syringe volume, and brand, and may not use NSP services if they cannot obtain their preferred types. When selecting needles to distribute, NSPs need to consider avoiding needles/syringes with a lot of “dead-space” because this is associated with increased risk of HIV and HCV transmission. Safety-engineered syringes may offer some benefits, but a number of concerns have been raised. More research is needed before a recommendation can be made for or against these types of syringes.

According to evidence, bleach is not an effective way to disinfect needles and does not reduce the transmission of HIV, HCV, and other viruses or bacteria. This reinforces the importance of using a new needle for every injection. Therefore 100% or greater needle coverage is an important goal.

To see the full version of the Best Practice Recommendations, go to:
**Cooker distribution**

**RECOMMENDED BEST PRACTICE POLICIES** to facilitate use of a sterile cooker for each injection and reduce transmission of human immunodeficiency virus (HIV), hepatitis C (HCV), and other pathogens:

- Provide individually pre-packaged, sterile cookers with flat bottoms for even heat distribution and heat-resistant handles in the quantities requested by clients with no limit on the number of cookers provided per client, per visit
- Offer a sterile cooker with each needle provided
- Offer a variety of cookers that meet the needs of clients
- Provide pre-packaged safer injection kits (needles/syringes, cookers, filters, ascorbic acid when required, sterile water for injection, alcohol swabs, tourniquets, condoms and lubricant) and also individual safer injection supplies concurrently
- Dispose of used cookers and other injection equipment in accordance with local regulations for biomedical waste
- Educate clients about the risks associated with sharing and reuse of cookers and the correct single-person use of cookers
- Educate clients about the proper disposal of used cookers
- Provide multiple, convenient locations for safe disposal of used equipment

**Key messages**

Some drugs need to be mixed with water and sometimes an acidifier to make a solution that can be injected. A container – often called a “cooker” because the drug solution may also need to be heated – is needed for this mixing process. Sharing and reusing someone else’s cooker can put people at risk for infections such as HIV and HCV. Exact risk of transmission from using a used cooker is not known. People may share cookers more often than needles and other injection equipment, so it is important for needle and syringe programs (NSPs) to educate clients about the potential risks of sharing cookers.

Distributing cookers is an important way for NSPs to reduce the risks associated with sharing or re-using cookers. While cookers are becoming available from a growing number of NSPs in Canada, availability of cookers may not be the same across the provinces/territories. Distributing 1000 cookers per person per year would match coverage suggestions that have been made for needles.

Transmission of HIV, HCV, and other viruses or bacteria. This reinforces the importance of using a new needle for every injection. Therefore 100% or greater needle coverage is an important goal.

To see the full version of the Best Practice Recommendations, go to:
Recommended Best Practice Policies to facilitate use of a sterile filter for each injection and reduce transmission of human immunodeficiency virus (HIV), hepatitis C (HCV), hepatitis B (HBV), and other pathogens, and to prevent other health complications, such as deep vein thrombosis (DVT), from the non-use and/or reuse of filters:

- Provide pre-packaged, sterile .22 μm filters that retain as little drug solution as possible in the quantities requested by clients with no limit on the number of filters provided per client, per visit
- Offer a filter with each needle provided
- Provide pre-packaged safer injection kits (needles/syringes, cookers, filters, ascorbic acid when required, sterile water for injection, alcohol swabs, tourniquets, condoms and lubricant) and also individual safer injection supplies concurrently
- Dispose of used filters and other injection equipment in accordance with local regulations for biomedical waste
- Educate clients about the risks associated with not using filters, sharing filters, making ‘washes’ from filters, the risks of bacterial contamination and DVT if a new filter is not used, and the correct single-person use of filters
- Educate clients about the proper disposal of used filters
- Provide multiple, convenient locations for safe disposal of used equipment

Key messages

Filters are used on the tips of the needles to prevent any undissolved particles of the drug, other debris (e.g., wax or talcum powder from crushed pills), and bacteria in the drug solution from being drawn up into the syringe and potentially injected. People sometimes use common items (e.g., cigarette filters) as filters for injection drug use, but these items may not be clean and will not filter out small organisms like bacteria. Sometimes people make ‘washes’ from used filters that have been collected because these filters may contain leftover drug solution. Sharing and reusing someone else’s filter can put people at risk for infections like HIV, HCV, and HBV. Exact risk of transmission from using a used filter is not known. People may share filters more often than needles, so it is important for needle and syringe programs (NSPs) to educate clients about the potential risks of sharing and reusing filters.

Proper filter use is important to help prevent other health complications such as ‘cotton fever’, bacterial infection and abscesses, deep vein thrombosis (DVT), and talc deposits in the blood vessels (from crushed pills). Distributing filters of a small pore width is an important way for NSPs to reduce the risks associated with sharing or reusing filters and the risks associated with using large and non-sterile filters. While filters are becoming available from a growing number of NSPs in Canada, availability of filters may not be the same across the provinces/territories.
RECOMMENDED BEST PRACTICE POLICIES to facilitate use of ascorbic acid to dissolve drugs (e.g., crack cocaine, some forms of heroin) and to reduce the risk of vein damage and bacterial and fungal infections associated with use of other types of acidifiers:

- Ask clients if ascorbic acid is required to dissolve the drug(s) to be injected
- If needed, provide single-use sachets of ascorbic acid in the quantities requested by clients with no limit on the number of sachets provided per client, per visit
- If needed, offer acidifiers with each needle provided
- Provide pre-packaged safer injection kits (needles/syringes, cookers, filters, ascorbic acid when required, sterile water for injection, alcohol swabs, tourniquets, condoms and lubricant) and also individual safer injection supplies concurrently
- Educate clients about the potential HIV- and HCV-related risks associated with sharing acidifiers, the risks of fungal infections associated with using spore-contaminated lemon juice and other acids like acetic acid, and the correct single-person use of acidifiers including instruction on how to determine the amount of acid that is needed to dissolve the drug of choice
- Educate clients about the proper disposal of used acidifiers
- Provide multiple, convenient locations for safe disposal of used equipment

Key messages

Acidifiers are added to some drugs (e.g., crack cocaine, some forms of heroin) to make it easier to dissolve the drug in water so that it can be injected. People sometimes use common acids such as lemon juice, but use of these acids may lead to infection. There is no evidence in the literature that using vinegar as an acidifier to dissolve some drugs is harmful. Multiple-person use of the same acidifier source may put people at risk for infections like human immunodeficiency virus (HIV) and hepatitis C (HCV). Exact risk of transmission from sharing acidifiers is not known.

It is important for needle and syringe programs (NSPs) to educate clients about proper acidifier use to help reduce various health complications. Lemon juice – fresh and from plastic bottles – can promote the growth of bacteria and fungi that can potentially infect the heart (causing endocarditis) and the eyes. Acidifiers in the bloodstream can cause irritation and vein damage, and for this reason it is important to use as little acid as needed when preparing a drug solution. Ascorbic acid is less irritating to veins and is considered to be safer than citric acid. Distributing single-use, airtight, and water-resistant sachets of ascorbic acid is an important way for NSPs to reduce the risks associated with multiple-person use of the same acidifier source and risks from using other acid sources. While acidifiers are becoming available from a growing number of NSPs in Canada, availability of ascorbic acid in particular may not be the same across the provinces/territories.
Sterile water distribution

**RECOMMENDED BEST PRACTICE POLICIES** to facilitate use of injection-grade sterile water for each injection and reduce transmission of human immunodeficiency virus (HIV), hepatitis C (HCV), hepatitis B (HBV), and other pathogens, and to prevent bacterial infection from the use of non-sterile water and other fluids:

- Provide single-use, 2 mL plastic vials with twist-off caps of sterile water for injection in the quantities requested by clients with no limit on the number of vials provided per client, per visit. If 2 mL vials of sterile water for injection are not available, distribute the smallest size of vial available.
- Offer a sterile water vial with each needle provided.
- Provide pre-packaged safer injection kits (needles/syringes, cookers, filters, ascorbic acid when required, sterile water for injection, alcohol swabs, tourniquets, condoms and lubricant) and also individual safer injection supplies concurrently.
- Dispose of empty water vials in accordance with local regulations for biomedical waste.
- Educate clients about the HIV- and HCV-related risks associated with sharing mixing and rinse waters, the risks of using non-sterile water (such as tap, bottled, rain, puddle, and urinal water) and other fluids (such as saliva and urine), and the correct single-person use of mixing and rinse water.
- Educate clients about the proper disposal of used water.
- Provide multiple, convenient locations for safe disposal of used equipment.

**Key messages**

Drugs in powder, solid, or tablet form need to be mixed with water to make a solution that can be injected. Although we do not recommend the practice, people who inject drugs may also use water to rinse out their needles or other injection equipment. Sometimes people use non-sterile sources of water for these purposes which can lead to infection. Sharing and reusing someone else’s mixing or rinse water can put people at risk for infections like HIV, HCV, and HBV. Exact risk of transmission from using a used water source is not known. People may share water sources more often than needles, so it is important for needle and syringe programs (NSPs) to educate clients about the potential risks of sharing and reusing water.

Using sterile, injection-grade water is important to help prevent health complications such as bacterial infections and soft-tissue abscesses. Distributing water vials that are small enough (e.g., 2 mL) to promote single use is an important way for NSPs to reduce the risks associated with sharing or reusing mixing and rinse water and the risks associated with using non-sterile water. While water vials are becoming available from a growing number of NSPs in Canada, availability of water vials may not be the same across the provinces/territories. Most programs do not yet have access to supplies of 2 mL vials of sterile water for injection and instead distribute 3 mL vials of sterile water for inhalation. Although sterile water for injection is available in larger 10 mL vials, this format may not effectively reduce water sharing and reuse.

To see the full version of the Best Practice Recommendations, go to: http://www.catie.ca/sites/default/files/bestpractice-harmreduction.pdf
**RECOMMENDED BEST PRACTICE POLICIES** to facilitate use of sterile alcohol swabs for each injection to reduce transmission of human immunodeficiency virus (HIV), hepatitis C (HCV), and other pathogens, and to prevent bacterial infection from the reuse or non-use of swabs:

- Provide single-use, individually pre-packaged, and sterile alcohol swabs in the quantities requested by clients with no limit on the number of swabs provided per client, per visit. If clients request large quantities of alcohol swabs, make efforts to ensure that the swabs are being used for injection and not for the consumption of the non-beverage alcohol in the swabs.
- Offer sterile alcohol swabs with each needle provided
- Provide pre-packaged safer injection kits (needles/syringes, cookers, filters, ascorbic acid when required, sterile water for injection, alcohol swabs, tourniquets, condoms and lubricant) and also individual safer injection supplies concurrently
- Dispose of used alcohol swabs and other injection equipment in accordance with local regulations for biomedical waste
- Educate clients about the HIV- and HCV-related risks associated with sharing swabs, the risks of bacterial infection if the injection site is not cleaned with an alcohol swab prior to injection, and the correct single-person use of swabs
- Educate clients about the proper disposal of used swabs
- Provide multiple, convenient locations for safe disposal of used equipment

### Key messages

Alcohol swabs are used by people who use drugs to clean an injection site before injection. People also sometimes use a swab to clean their fingers and thumb before an injection and to remove any blood from the injection on their fingers and other surfaces. Sharing and reusing someone else’s swabs can put people at risk for infections like HCV. Exact risk of transmission from reusing a swab is not known. People who inject drugs sometimes share swabs, so it is important for needle and syringe programs (NSPs) to educate clients about the potential risks of sharing and reusing swabs.

Proper alcohol swab use is important to help prevent other health complications that may result from not cleaning the skin before injection, such as skin and soft-tissue abscesses and other bacterial infections. Although cleaning the skin with soap and water is effective, people who inject drugs in community settings may not have access to soap and clean water. Distributing sterile alcohol swabs is an important way for NSPs to reduce the risks associated with sharing or reusing alcohol swabs and the risks associated with not cleaning the skin. NSP clients should also be reminded that alcohol swabs are to be used on the skin before injection only; clean, dry, and absorbent pads should be used to stop blood flow after injection.

To see the full version of the Best Practice Recommendations, go to: [http://www.catie.ca/sites/default/files/bestpractice-harmreduction.pdf](http://www.catie.ca/sites/default/files/bestpractice-harmreduction.pdf)
RECOMMENDED BEST PRACTICE POLICIES to facilitate use of a clean tourniquet for each injection and reduce the potential for contamination of tourniquets with bacteria that can cause illness and abscesses (e.g., MRSA), and to reduce trauma to veins and blood circulation impairment:

A tourniquet is considered unclean and needs to be replaced when:

- There is visible blood and/or dirt
- It has ever been used by someone else
- There is a loss of elasticity
- Provide thin, pliable, easy-to-release, non-latex tourniquets with non-porous surfaces in the quantities requested by clients with no limit on the number of tourniquets provided per client, per visit
- Offer tourniquets with each needle provided
- Provide pre-packaged safer injection kits (needles/syringes, cookers, filters, ascorbic acid when required, sterile water for injection, alcohol swabs, tourniquets, condoms and lubricant) and also individual safer injection supplies concurrently
- Dispose of used tourniquets and other injection equipment in accordance with local regulations for biomedical waste
- Educate clients about the risks of bacterial contamination and HIV- and HCV-related risks associated with the reuse and sharing of tourniquets, the risks of tissue and vein damage and blood circulation impairment if a clean, quick-release tourniquet is not used, and the correct single-person use of tourniquets
- Educate clients about the proper disposal of used tourniquets
- Provide multiple, convenient locations for safe disposal of used

Key messages

Tourniquets are used by some people who inject drugs to “tie off” the vein; they provide pressure which causes the preferred vein to swell and therefore help with injection. People sometimes use common items (e.g., rope, shoelaces, condoms) as tourniquets. However, these types of items may not be clean and may get splattered with blood. Also, these items may not be elastic enough for quick and easy release and may cause damage to skin/veins and blood circulation problems. Sharing and reusing someone else’s tourniquet may put people at risk for infections like human immunodeficiency virus (HIV) and hepatitis C (HCV), but the risk of transmission may not be as high as with other injection-related equipment. Tourniquets may become contaminated with bacteria such as MRSA that can lead to abscesses and other infections. It is therefore important for needle and syringe programs (NSPs) to educate clients about the potential risks of sharing and reusing tourniquets.

Distributing thin, elastic, easy-to-release tourniquets with non-porous surfaces is an important way for NSPs to reduce the risks associated with sharing or reusing tourniquets and risks from using improper items as tourniquets. While tourniquets are becoming available from a growing number of NSPs in Canada, availability of tourniquets may not be the same across the provinces/territories.

To see the full version of the Best Practice Recommendations, go to:
Safer crack cocaine smoking equipment distribution

**RECOMMENDED BEST PRACTICE POLICIES** to facilitate smoking with a pipe – stem, mouthpiece, and screen – which is made from materials that are non-hazardous to health and have never been shared.

- Provide safer smoking equipment - stems, mouthpieces, screens, and push sticks - in the quantities requested by clients without requiring clients to return used equipment
- Make available both pre-packaged kits and individual pieces of equipment
- Integrate distribution of safer smoking equipment into existing harm reduction programs and services, including within needle and syringe programs (NSPs)
- Provide safe disposal options, including personal sharps containers, and encourage clients to return and/or properly dispose of used or broken pipes
- Provide other harm reduction supplies, such as condoms and lubricant, in the quantities requested by clients with no limit on the number provided
- Educate clients about safer use of equipment, safer smoking practices, the risks of sharing smoking supplies, and safer sex
- Educate clients about the proper disposal of used safer smoking equipment
- Provide multiple, convenient locations for safe disposal of used equipment

Equipment is considered unsafe and needs to be replaced when:
- The pipe and/or the mouthpiece have been used by anyone else
- The pipe is scratched, chipped or cracked
- The mouthpiece is burnt
- The screen shrinks and is loose in the stem

**Key messages**

Smoking crack cocaine puts people at higher risk for infection by human immunodeficiency virus (HIV), hepatitis C (HCV), and other viruses and bacteria. Burns and lesions in the mouth (including lips), along with behaviours such as pipe (and mouthpiece) sharing and “shotgunning” can increase the risk of becoming infected or transmitting diseases. Crack cocaine can reduce the body’s ability to fight infections and levamisole, an adulterant sometimes found in crack cocaine, increases this risk. Viruses and bacteria may also survive on pipes and can be transmitted between people if pipes are shared. Using damaged (i.e., hazardous) pipes increases the risk for getting cuts to the lips and hands which can increase the chances of infection.

Studies on Canadian safer smoking equipment programs show that greater distribution of safer smoking supplies can reduce equipment sharing and increase service access for people who smoke crack cocaine. Offering safer smoking supplies beside safer injecting supplies can benefit people who may use multiple drugs in different ways. Distribution of supplies should be sensitive to client needs. For example, the length of mouthpieces should be decided with input from people who smoke crack cocaine. No limits should be placed on the quantities of supplies distributed.

Four items are considered to be “core” supplies for safer crack cocaine smoking:

a) Heat-resistant glass (Pyrex or Borosilicate) stems
b) Mouthpieces – Composed of food-grade material
c) Push sticks – Composed of a non-scratching material
d) Screens – High heat resistance, pliable, and with no chemical coatings.

Other supplies including condoms and lubricant may also be distributed for clients according to local needs.

To see the full version of the Best Practice Recommendations, go to: http://www.catie.ca/sites/default/files/bestpractice-harmreduction.pdf
Disposal and handling of used drug use equipment

**RECOMMENDED BEST PRACTICE POLICIES** to facilitate disposal of all used injection equipment (i.e., needles/syringes, cookers, filters, swabs, tourniquets) and non-injection equipment (i.e., stems, mouthpieces, screens, other smoking and inhalation devices) in accordance with local, provincial/territorial, and federal regulations regarding disposal of biomedical waste and to prevent needlestick and/or sharps-related injuries to staff members, clients and others:

- Regular review and assessment of compliance with local, provincial/territorial and federal regulations regarding collection, storage, transportation, security and disposal of biomedical waste
- Educate clients and staff members on how to properly handle, secure and dispose of used injection and non-injection equipment
- Encourage clients to return and/or properly dispose of used injection and non-injection equipment
- Provide clients with tamper resistant sharps containers in a variety of sizes
- Provide multiple, convenient locations for safe disposal of used equipment in rural and urban settings. Do not penalize or refuse to provide new equipment to clients who fail to return used drug equipment.
- Visually estimate the amount of returned equipment; staff should not touch used equipment and neither staff nor clients should manually count used equipment
- Encourage staff and clients to be vaccinated against hepatitis B (HBV)
- Provide access to safety devices for staff and procedures for first aid and post-exposure prophylaxis (PEP)

**Key messages**

Needle and syringe programs (NSPs) and other harm reduction programs play a key role in the collection and disposal of used syringes, stems, screens, and other drug use equipment. Removing used equipment from circulation helps to reduce the risk of transmission of human immunodeficiency virus (HIV), hepatitis C (HCV), HBV, and other blood-borne pathogens associated with accidental needlestick or sharps injuries and equipment reuse. Evidence shows that strict exchange policies such as “one-for-one” are not necessary, or desirable, to achieve high return rates; therefore, such policies are discouraged. Lack of knowledge of correct practices or convenient locations can prevent clients from safely disposing of used supplies. Evidence shows that intense police presence and “crackdown” programs can be access barriers for new equipment and disposal services. A variety of options exist to increase access to safe disposal methods including:

- drop boxes
- syringe vending machines
- residential pick-up
- alley and street patrols
- increasing hours of operation of NSPs and harm reduction programs
- community clean-up initiatives
- supervised injection facilities

“Routine Practices” are a thorough approach to handling of used supplies and assume that all body fluids and soiled items present a risk for disease transmission. “Routine practices” also include procedures and standards for immunization, vaccination, training, and first aid to ensure safe management of used materials. Training for such practices and vaccinations should also be offered to clients. Programs are encouraged to use this kind of approach to address handling and disposal of used supplies.

To see the full version of the Best Practice Recommendations, go to:
Safer drug use education

**RECOMMENDED BEST PRACTICE POLICIES** to facilitate knowledge and application of drug consumption practices that reduce or eliminate the risk of transmission of human immunodeficiency virus (HIV), hepatitis C (HCV), hepatitis B (HBV), and other pathogens; drug overdose; soft tissue injuries; and other drug consumption related harms.

- Provide educational interventions targeted toward reduction of injection-related risk behaviours (e.g., needle and other injection equipment reuse and sharing) associated with HIV and HCV transmission, drug overdose, soft tissue injuries, and other drug consumption related harms.

- Provide educational interventions targeted toward reduction of crack cocaine smoking risk behaviours (e.g., pipe reuse and sharing) to reduce smoking-related harms, such as injuries to the mouth and lips, associated with HIV and HCV transmission.

- Provide safer drug use education in a variety of formats including one-on-one education, workshops and group education, skills-building sessions, information pamphlets, instructional videos, demonstrations, and other formats as necessary.

- Provide peer-delivered, brief interventions, and longer interventions to reach a broad range and diversity of clients.

- Develop and evaluate programs to train peers to deliver safer drug use education.

- Involve clients in the design and evaluation of educational materials and interventions to ensure message acceptability, relevance, and comprehension. Tailor education for the populations and contexts served by the program.

- Integrate evaluation of educational interventions into programming to ensure desired impact and to build evidence.

**Key messages**

The general lesson from a variety of well-designed studies and reviews is that providing HIV and HCV educational interventions to people who inject drugs leads to reductions in injection-related risk behaviours, such as sharing and reusing needles. Educational interventions may contain combinations of any of the following topics: information on HIV and/or HCV routes of transmission; HIV and/or HCV counselling and testing; information on injection-related risk behaviours; information on safer injection techniques; information on safer sex practices; self-efficacy and skills-building; and peer training on how to deliver safer drug use education. Few studies have evaluated safer crack smoking educational interventions; additional research is greatly needed in this area.

Guiding principles for designing educational interventions in harm reduction settings may include (Bryan et al., 2009):

1) The rationale for the learning or knowledge may need to be explained to the target audience.
2) Existing problems can motivate people to learn.
3) Previous experiences must be recognised and incorporated into education.
4) Modes of content delivery need to reflect the person's background.
5) The audience needs to be involved in the design and delivery process.

Research shows that single-session, brief interventions are sometimes as effective as longer or multi-session interventions. Brief interventions are likely more cost-effective for programs than longer interventions. However, more research is needed to identify what components or processes are essential to make educational interventions effective. There is a wide array of online reports, policies, program descriptions, tip sheets, drug use "recipe cards", and many other materials that address a broad range of safer drug use education topics. However, evaluation of the accuracy and effectiveness of these types of educational materials is typically not available. For programs, this means a need to find a balance between providing services based on the highest-quality evidence versus addressing emerging real-world risks where evidence is lacking. Across Canada, there are likely regional and local variation in the populations served and harms experienced. Therefore, a “one-size-fits-all” set of safer drug use guidelines is not possible. Although programs may want such guidelines for teaching clients the finer details of safer drug use (e.g., how to find a vein), programs may need to tailor or develop their own educational interventions from the materials currently available to best meet the complex, changing, and unique characteristics of their clients.


To see the full version of the Best Practice Recommendations, go to:
Opioid overdose prevention: education and naloxone distribution

**RECOMMENDED BEST PRACTICE POLICIES** to facilitate knowledge and application of opioid overdose prevention strategies, and how to appropriately respond in the event of an overdose (including the use of naloxone if available).

- Educate clients about opioid overdose prevention techniques
- Educate clients about the signs and symptoms of opioid overdose
- Provide first aid and CPR training to clients
- Educate clients about how to respond to an opioid overdose, including chest compressions, rescue breathing and calling 911
- Assess feasibility and acceptability of a naloxone distribution program
- Partner with multiple community stakeholders to prevent mortality from opioid overdose
- Where naloxone is available, ensure eligible and at risk clients are trained on appropriate use of naloxone and offer kits and training in a variety of locations. Evaluate opioid overdose prevention and response interventions to ensure desired impact and to build evidence

**Key messages**

Overdose is the most common cause of death among heroin and opioid users worldwide. In response, overdose prevention and naloxone programs are being developed and implemented as part of larger harm reduction strategies. These programs train people who use opioid drugs how to avoid overdose events and how to respond if they witness another person experiencing an overdose. Training includes recognizing signs of overdose, knowing when to call 911, providing recommended bystander first response techniques, and administering naloxone. Naloxone is a fast acting, safe, and effective opioid reversal agent with the potential to decrease morbidity and mortality from overdose. Naloxone distribution began in the United States in the late 1990s and, as its use in the community is a relatively new intervention, the literature on its effectiveness is limited yet growing. Existing evidence shows that naloxone distribution likely reduces mortality and is cost-effective. In addition, the training opioid drug users receive in overdose prevention programs improves self-reported knowledge, confidence, and willingness to intervene in an overdose. However, more research is needed before further conclusions can be drawn. More rigorous studies about opioid overdose prevention and response interventions, including naloxone distribution, are needed.