



Interior Health
Every person matters

FAQ – Needle Tips and Barrels

Harm reduction supply distribution is an evidence-based intervention that is guided by best practice recommendations. Providing access to needles and syringes helps facilitate the use of sterile equipment for each injection and reduces the transmission of blood borne infections (BBI) like human immunodeficiency virus (HIV), hepatitis C (HCV), hepatitis B (HBV), and other pathogens.

It is important to ensure that your program offers a variety of needle and syringe types by gauge and size in order to meet the needs of clients. It is also important for harm reduction providers to understand their client's needs and provide educations on the proper use of different syringes and needles.

The following FAQ has been prepared to provide you with information on the various needles and syringes available.

Why should we offer a variety of needle and syringe options?

People who inject drugs (PWID) have individual preferences for needle gauge, length and syringe volume, depending on their individual situation and the substances they are injecting. PWID may not access harm reduction supplies and services if they cannot obtain their preferred types.

What size needles and syringes are available for ordering?

The BCCDC offers a wide variety of needles and syringes. Needle tips range from 18 gauge to 27 gauge (the higher the number the thinner the needle tip) with lengths ranging from 1/2" to 1 1/2". Syringe barrels are offered in 3ml and 5ml size. One piece syringes (with needle attached) are available in 1/2 cc and 1 cc sizes. The complete list of supplies can be found on the supply order form on the [BCCDC website](#).

Why are there several different gauges (thickness) of needle tips available?

Higher-gauge needles are often preferred by PWID because they can be less painful and less likely to result in vein damage. A smaller gauge needle creates a smaller puncture wound, and therefore less opportunity for infection to occur. Using a smaller gauge needle is also likely to result in less bleeding. However, there are people who will prefer thicker (lower-gauge) needles because these needles are less likely to clog and are better able to pierce through thick scar tissue which may be present in a person who has been injecting for a longer period of time.

People who inject anabolic steroids or hormones also access harm reduction services and supplies. The needs of people who inject steroids or hormones differ from PWID. People who inject anabolic steroids or hormones require low gauge needles because they will be injecting into a muscle (intramuscular) and not a vein. Steroids or hormones may also be more a more viscous (thicker) liquid and are harder to draw up through a higher gauge needle.

Some of the needle tips may also be used for at-home tattooing and piercing. Access to sterile supplies for these purposes is important for prevention of infection and BBI transmission.

Why are different lengths of needle tips offered?

It is important that clients are offered a needle that is long enough to meet their needs. A needle that is too short may miss the vein, and one that is too long may go right through it or be difficult to properly position. Longer needles are more appropriate for intramuscular injections.

Why should we offer one piece syringes as well as two-piece detached needle tips and barrels?

It all boils down to making sure we offer supplies to meet the needs of the clients. PWID may like two piece syringes (with detachable needles) for several reasons, including the ability to remove the needle during the preparation of the drug solution and to replace if the needle becomes clogged.

Other people may prefer permanently attached needles because the lower dead-space¹ may result in less wasted drugs. Importantly, high dead-space syringes present greater risk of BBI transmission while low dead-space syringes may be associated with reduced risk.

Why are there two sizes (1cc and 1/2cc) of one piece syringes?

Many PWID prefer the 1cc syringe, although some people will prefer to use 1/2 cc syringe.

Why are there two sizes of syringe barrels (3ml and 5ml)?

Larger syringe barrels are less frequently used by PWID, but are appropriate for injection of anabolic steroids or hormones which may require a greater volume of liquid when dosing.

Some PWID will use 3ml syringe barrels for preparing pills as more water is required to dissolve them.

Why aren't retractable (safety engineered needles) needles offered?

Generally, safety engineered syringes are not preferred by PWID. Research has shown that there are a number of concerns with these syringes among PWID including the following:

- A faulty mechanism may misfire, resulting in the loss of drugs.
- The retraction mechanism prevents people who inject drugs from aspirating or “registering”, i.e., drawing blood into the syringe to check whether they have found a usable vein and then continuing with injection.
- The retraction mechanism may damage the vein or skin upon retraction.
- The smallest needle barrel available for most safety engineered needles is 3ml with a lower gauge and longer needle tip – this size is meant for intramuscular not intravenous injection.

¹ Dead-space refers to the fluid that remains after the plunger is depressed. Syringes that have detachable needles are usually high dead-space syringes as they retain fluid in the needle, needle hub, and syringe tip. Syringes with permanently attached needles are typically low dead-space syringes as fluid is only contained in the needle when the plunger is depressed. Needle gauge and length also affect the amount of dead space.

- Difficult to re-use syringes prevent “booting” – a process of injecting part of the drug solution, then retracting the plunger to draw blood into the drug mixture and injecting again. It has been anecdotally reported that booting, may be associated with risk for embolism. However, booting may serve to extend the pleasurable effects of drug injection and PWID may want to repeat this process several times.

Given that clients may not like or be able to effectively use safety-engineered syringes, offering these syringes in place of regular syringes could potentially lead to regular syringes being reused and shared. Safety-engineered needles are also more costly than standard syringes.

Where can I access the Harm Reduction Supply requisition form?

If you are an authorised distribution site and want to order supplies, please use the forms available on the [BCCDC harm reduction webpage](#).

Do you have more questions?

Our [harm reduction webpage](#) has lots of resources including information on best practices.

Contact a harm reduction coordinator at harmreduction.coordinator@interiorhealth.ca