

Naloxone Pre-Loading Concerns

The following information addresses concerns with pre-loading naloxone into syringes for administration.

NALOXONE TRAINING AND USE

Naloxone training is important for understanding how to recognize an overdose and how to respond with naloxone. In training, participants discuss how to reduce overdose risk, recognize different types of overdose (i.e. those stemming from stimulants, depressants, etc.), and respond appropriately. Appropriate response to an opioid overdose includes calling 911, performing rescue breathing, placing someone in the recovery position (if you have to leave them, or if breathing has been restored), and administering naloxone. These skills are not a substitute for professional medical care, but can help keep someone alive until an ambulance arrives. Across BC, over 26,000 naloxone kits have been reported as used since program start in 2012.

There have been reports of pre-loading naloxone into syringes for preparation to administer naloxone for overdose response. The reason for this was to avoid difficulties of breaking off the vial in the moment of an overdose event.

SHOULD YOU PRE-LOAD NALOXONE INTO SYRINGES?

Currently, there are no pre-filled syringe products available in Canada. Community use of naloxone is new to British Columbia, which means there are no current pre-loading regulations to inform us of the potential benefits and harms of pre-loading naloxone. **For this reason, pre-loading naloxone into syringes is not recommended for the following reasons:**

Potential risk of infection

Naloxone and syringes, when unopened, are sterile. When naloxone is drawn up and used immediately, there is no risk for bacterial growth. However, when the naloxone ampoule and syringe are opened they are no longer sterile. . There is risk of bacterial contamination when drawing up naloxone or air leaking into the syringe exposing the medication to the environment and potential contamination. If the pre-filled syringe is left for a period of time the bacteria may multiply, increasing the risk of infection. The best way to avoid infection is to load the syringe at the time of administration.

Potential risk of non-naloxone administration

Syringes provided in naloxone kits are not labelled to identify it as naloxone, and with pre-loading without identification label creates uncertainty around what was drawn up. As a result of this uncertainty, it could cause delay in administration of naloxone. A person may be concerned about what the syringe contains and if it may be something other than naloxone, or could be contaminated if pre-loaded.

Inefficient use of naloxone and syringe supplies

Naloxone ampoules are single use only (cannot be re-used). If drawn up in advance and not used, both naloxone and the syringe will need to be disposed of. This does not make a cost-effective use of supplies, and may increase the chance that naloxone is not available when actually needed to respond to an overdose.

Naloxone potency concerns

Naloxone is stored in a tinted ampule to protect it from the light. Due to its storage requirements, pre-loading naloxone into transparent syringes could compromise the dosing resulting in ineffective overdose reversal.