



# Ascorbic acid distribution

**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.