What kills hepatitis C?
Harm reduction and prevention tips

Hepatitis C (Hep C or HCV) is a tough virus. Bleach kills hep C nearly all the time. Other cleaners can also kill it, but it may take several rinses to do it effectively.

In a perfect world, you never have to worry about cleaning a syringe and other injecting equipment (“works” such as cookers, water, cotton and so on): You always have access to new and unused syringes and works. But, we don’t live in such a world and sometimes you don’t have any other option but to re-use one. That’s where harm reduction comes in: We do what we can to reduce the risk of infection as best we can!

If your only option is to clean it, recent research on the effectiveness of several disinfectants shows that they can kill hep C.

How long can hep C live in syringes and on surfaces?
Hepatitis C can live for awhile on surfaces and in injecting equipment, like cookers, cotton and water:

16 days on surfaces— or even longer

1 in water up to 21 days

In a syringe up to 63 days

Cotton filter: 24 hours—48 hours, if wrapped in foil

NEW SYRINGES EVERY TIME

The gold standard for hep C prevention is to use a new syringe and other injecting equipment for each injection for each person. If you have no other alternatives, you can use the following products to potentially kill HCV and disinfect the works. Do it slowly and thoroughly, and create a plan to get new, unused equipment as soon as you can for future use.
A FEW THINGS FIRST ...

**SYRINGES:**
The type of syringe matters. All syringes have a thing called “dead space” or “void” that is a small amount of space where fluid—in this case blood—remains even when the plunger is fully depressed. You may be using low-dead space (or low-void) or high-dead space (or high-void) syringes when you inject. Ask your local syringe access program or pharmacy where you get syringes for specifics about the syringe you get. In general, syringes with a fixed needle are low-dead space and ones with a detachable needle are high-dead space. Low-dead space ones are easier to clean if you have to re-use them. If you’re not sure what type of syringe you have, bleach works really well on either type. For other disinfectants, check out the instructions below for the number of times you need to use them and rinse and repeat to kill hep C.

**SURFACES:**
The research on surfaces is on things like tables or counters. Wiping them down with bleach or other cleaners will kill hep C. They haven’t really studied how well you can disinfect a cooker, but cleaning it with bleach should be good enough to do the trick if you have to re-use one.

**WATER:**
If you get HCV-infected blood in water, it can contaminate the container it’s in. The type of container matters: Plastic and aluminum material can hold the hep C infected blood in its pores even if you dump out the water. If you place clean water back in that plastic or aluminum container, that water will get contaminated with hep C. Recycle the plastic or can and get a new one. However, glass won’t do this. If blood gets in the water of a glass container, then dump the water, clean the glass with bleach and rinse it out well with soap and water. You’ll be able to put fresh water for use in drug prep.

**COTTON:**
There’s no way to disinfect a cotton filter if it gets hep C infected blood in it.
What about heat? Does it kill HCV?
It does, but this isn’t very practical and not really something that can help you. Heat will kill HIV very quickly, so that’s good. Cooking dope for around 10 seconds will kill HIV. But you need heat of at least 136 degrees for around 80-95 seconds (a minute and a half) to kill hep C. First off, it’s impossible to know if you get to that temperature. Second, that much heat will ruin the drug. So, heat is not an effective way to kill hep C.

Rubbing alcohol, hydrogen peroxide and Lysol
Rubbing alcohol—check the label for 70% isopropanol—can kill hep C. Draw up alcohol, discard, rinse with water and then repeat twice more for a total of 3 times. You can do the same with hydrogen peroxide and Lysol. The length of time doesn’t seem to matter. You just have to do the draw-up and water rinse at least 3 times.

Kitchen Sink Detergents
Recent research has shown that common household cleaners, such as Dawn Ultra, can kill hep C. Put the detergent into some water to dilute it and make it easier to draw into the syringe. Rinse and repeat at least one more time. The length of time doesn’t seem to matter: You just need to draw up and rinse with water at least 2 times.

In addition to these cleaners, there are industrial grade disinfectants like Barbicide (that blue stuff they use in barbershops and nail salons), Cavicide or Clorox Quaternary Cleaner (both used in medical settings). These can be used on surfaces and for cleaning up blood spills, but should not be used in injecting or other drug equipment. They can be rough on skin too, so wearing gloves with using these types of cleaners will protect your hands.

Wiping down surfaces with bleach where drug preparation and blood occur is also a good thing to do to avoid blood contact from surfaces.

Bleach
Bleach has been shown to kill hep C in more than 99% of HCV-contaminated syringes. In 2015, a group of researchers from Yale proved that when you draw up the bleach slowly and carefully, making sure the bleach covers all areas inside the syringe, and then rinse it out, you’ll disinfect the syringe and kill hep C and HIV. If you see blood in the syringe, rinse it out with cold water to dilute and clear out the blood, and then do the bleach. After you’ve rinsed out the bleach, rinse out the syringe with lots of water.

Over time, bleach can damage the syringe and needle. After 20 rinses with bleach, there’s a lot of damage to the syringe and it becomes unusable. Besides, the more you have to use a syringe, the duller the needle point becomes and the greater the risk for abscesses and damaged veins. Get a new, unused syringe as soon as possible: Ideally, you just use one syringe (and other equipment) for each injection.

Alcohol, hydrogen peroxide, and kitchen sink detergent (for example, Dawn Ultra) can kill hep C also, and are less damaging to the syringe. But they are all less effective than bleach, and require multiple rinses to kill hep C. They are good options when an unused syringe or bleach is not available.
Get two clean cups. Fill them with clean cold water (not hot). Pour out a capful of thin bleach.

1. **FLUSH ONCE WITH WATER**
   - Draw up water from the first cup
   - (Fill syringe completely to rinse and clean it.)
   - Empty the syringe into the sink

2. **ONCE WITH BLEACH**
   - Draw up the thin bleach
   - (Make sure the outside of the needle gets dipped in bleach to kill any virus that is on the outside.)
   - Empty the syringe into the sink

3. **ONCE WITH WATER**
   - Draw up water from the second cup
   - Empty the syringe into the sink
   - Carefully put the cap back on the syringe
   - Pour contaminated water, bleach down sink

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**Cleaning Agents** | **Effectiveness** | **Number of Rinses to Kill HCV**
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Bleach | Most effective | 1
Dawn Ultra | Effective | 2
Rubbing Alcohol | Effective | 3
Lysol | Effective | 3
Hydrogen Peroxide | Effective | 3
Water | Not effective | Won’t kill hep C
Beer or wine | Not effective | Won’t kill hep C

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- **Rubbing Alcohol**
  - Effective
  - 3 rinses

- **Lysol**
  - Effective
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- **Hydrogen Peroxide**
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