

How to choose a water filter for emergencies

A filter can make doubtful water safer, but the right type depends on what you need to remove. Check the pore size and certification on the label, and remember that most filters do not remove viruses, so add a disinfectant or boil the water.

What to look for

- ☐ For parasites such as *Cryptosporidium* and *Giardia*, choose a filter labelled with an absolute pore size of 1 micron or smaller, or certified to NSF/ANSI Standard 53 or 58 for cyst reduction.
- ☐ Prefer 'absolute' over 'nominal' pore size: absolute means every pore is that size or smaller, nominal is only an average.
- ☐ To remove bacteria too, choose an absolute pore size of 0.3 micron or smaller, or ultrafiltration, nanofiltration or reverse osmosis.
- ☐ Only nanofiltration and reverse osmosis are listed as removing viruses.
- ☐ Look for NSF certification on the label and check the specific product in NSF's online database.
- ☐ For chemicals such as lead, check the label for the exact chemicals the filter is certified to reduce: filters that remove germs often do not remove chemicals.

Avoid

- Do not rely on a jug (pitcher) or fridge filter to make unsafe water safe: most are not designed to remove germs.
- Do not treat a portable filter as enough on its own: it will not remove viruses, so add a disinfectant such as chlorine, iodine or chlorine dioxide after filtering.
- Do not assume a disinfectant alone is enough for *Cryptosporidium* or *Giardia*: disinfectants do not work as well as boiling against them.

After you buy

- Replace cartridges as often as the manufacturer recommends.
- Wear gloves when changing a filter and wash your hands afterwards; people with weakened immune systems should not change filters themselves.
- When in doubt and you can heat water, boiling is the best way to kill germs.