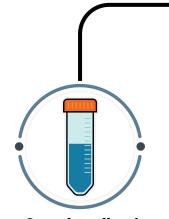
Wastewater Surveillance Sampling Supplies and Equipment

Sampling Supplies

Wastewater utility partners require sample collection supplies to participate in wastewater surveillance programs. Providing sampling "kits" with everything needed for sample collection and packaging to your utility partners will enable their participation in your program. Although the contents of your sampling kits will depend on the nature of your jurisdiction's program, they might include 2 to 3 sterile sample tubes, 1 to 2 ice packs, 1 to 2 self-locking plastic biohazard bags, an absorbent pad, a bubble mailer, a shipping box, and a shipping label.



Sample collection tubes (2-3)

of tubes will depend on your program needs, most jurisdictions use 50 mL conical vials with screw caps. You can consider including parafilm to wrap around the outside of the cap to guard against spills.



Ice pack(s) (1-2) Ideally, 2 ice packs are Although the quantity and size provided to be able to place one on top/in

front of the samples and one under/behind the samples. Ice packs should fit within the bubble mailer.



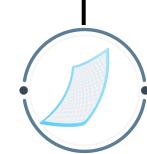
Shipping box (1) and shipping label (1)

The shipping box size should enable the contents to fit snugly and securely to prevent spills. Include a pre-paid shipping label if you won't be using a courier service to pick up the samples.



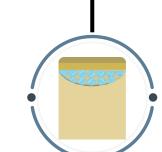
Biohazard bag(s) (1-2) These sealable bags

should be large enough to contain the the sample collection tubes and the absorbent pad. If 2 bags are provided, then the samples can be double-contained to guard against spills.



Absorbent pad (1) A single absorbent pad,

which should be placed within the inner biohazard bag if 2 are provided, is adequate for absorbing any spilled sample, thereby protecting the safety of the lab technician.

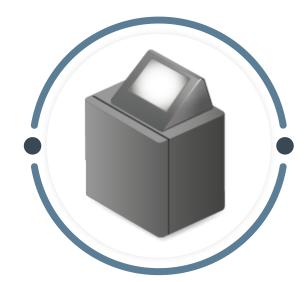


Bubble mailer (1)

Bagged samples will be placed in the bubble mailer before being placed in the shipping box. The mailer, which will act as a cushion for the samples, should be large enough to fit all sample tubes.

Sampling Equipment

Depending on the needs of your program, an autosampler, flow meter, or other equipment may be required for sample collection at a particular location.



Autosampler

An autosampler is a necessary piece of equipment for collecting composite samples of untreated wastewater. The type of autosampler appropriate for your utility partner's sampling location will depend on whether the location is indoors or outdoors, whether it has power or not, and the range in ambient conditions the location experiences throughout the year.



Flow meter

Flow meters generate the metadata required to normalize viral concentrations. There are many types of flow meters, and it is likely that your utility partner already meters flow at their treatment facility influent. If not, providing a flow meter that integrates with an autosampler may be possible, but this will depend on the sampling location specifics.



Other required equipment

Any other equipment required will depend on the specifics of your wastewater surveillance program but may include vacuum pumps and manifold, membrane filters, and funnels if samples need to be filtered through a membrane filter before shipping. Although this is not a common practice, it may reduce shipping costs and extend sample stability. The sampling kit above would need to be modified to account for this type of processing.

 st Check nwbe.org for information on WEF's free autosampler and flow meter program to see if your utility partners are eligible st

