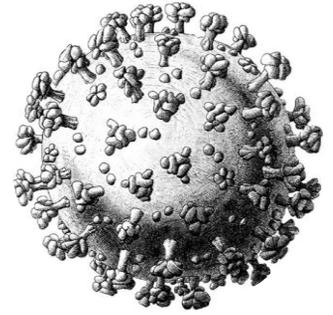


4 STEPS 4 SAMPLING ENVIRONMENTAL RNA VIRUSES Sampling Protocol



The spread of SARS-CoV-2, the RNA virus responsible for CoVID-19, is believed to be transmitted through small droplets (e.g., dispersed by a cough or sneeze).

The virus can remain on some surfaces for several days. In highly impacted CoVID-19 sites, like hospitals and cruise ships, the virus has been detected on some surfaces.

The **goal** of this sampling is to see if SARS-CoV-2 is showing up in less impacted sites.

Remember, you should not do anything that increases your risk level while sampling.
DO NOT go out looking for the virus!

We are most interested in how common/uncommon SARS-CoV-2 is in the environment; not finding SARS-CoV-2 is just as important as finding it.

In a preliminary study in San Diego, we have looked for the virus on surfaces that people touch but aren't routinely sanitized, including surfaces like gas pump handles, ATMs, and handrails. So far, SARS-CoV-2 has not been detected in any of these samples. This may be because there is no SARS-CoV-2 virus on these surfaces or that our detection limit is still not very good (we are currently working on improving the sensitivity of our test).

Assuming you are under quarantine, then sample places in your house over a two-week period.

There are 16 sampling vials in each kit and once the sample is in the *Trizol* any viruses are inactive and can be stored in the cooler.

If you would like to sample surfaces in your local area, please use the provided mask to protect yourself and others while in public. For more detailed instructions about how to use and reuse the masks, please see the accompanying [Mask Guidelines](#) document in this kit.

Your KIT Contains:



Safety Data Sheet
for Trizol



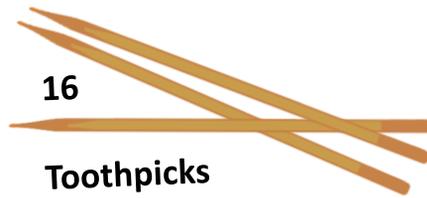
1
KN95 mask



1 Montana Mask
+ 5 reusable filters
(if available)



1 Cooler



16

Toothpicks



16

Pairs of gloves



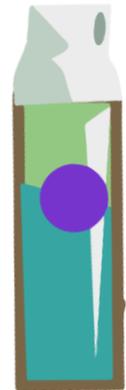
1 Large Ziploc



16 Tubes with
Trizol



16
Polyester
swabs



Hand Sanitizer:
75% Isopropanol
+ 1.5% Glycerol



2
Sodium Dodecyl Sulfate:
common detergent



1 Small
cardboard box



1 Small
Ziploc bag

Step 1. Get ready!

- 1. Transfer** 1 of the 2 provided icepacks to your freezer. Leave 1 ice pack and your sample box in the cooler to keep your sample tubes cold. Rotate the icepacks to keep samples cold until sample pickup.



! Please READ the Safety Data Sheet for *Trizol* (pink solution). Note that *Trizol* is very corrosive; it is meant to rapidly disrupt tissue and kill the virus. If you get it on anything, promptly wash it off with plenty of soap and water. This includes your skin.

! Always wear gloves when opening the *Trizol* tubes. Safety glasses are also recommended. If you get *Trizol* in your eyes, then immediately rinse cautiously with plenty of water for several minutes. Remove any contact lenses!

www.covidsample.org

- 2. Access** the online sampling platform: covidsample.org. We recommend using a smartphone to collect data easily as you move around.

- 3. Sign in** with the same email address you used in your application for a sampling kit. This is important; this is how the system has assigned your samples!

- 4. Click on** **2. Read Sample Collection Protocol**

to watch a video demonstrating the sampling process before you proceed.

www.covidsample.org



Step 2.

#swab4corona

Note: Sampling can be done alone but is faster and more enjoyable between 2 people: 1 to record data, and 1 to do the sampling.



1. Put on a fresh pair of gloves, remove 1 toothpick and 1 polyester swab from the bag.



2. Spray 1 polyester swab with 0.5% SDS (clear solution), soaking it.

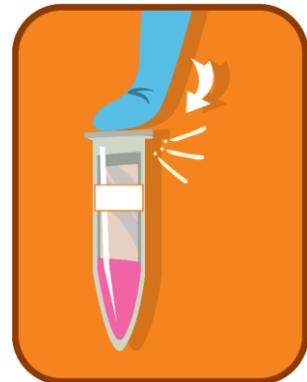


3. Swab surface of interest (10x10 cm, or 4x4 in area).

! Flick the *Trizol* (pink solution) to the bottom of the microcentrifuge tube. You don't want it on the cap when you open the tube in step 4.

4. Place swab in a microcentrifuge tube containing *Trizol* (pink solution).

Use the toothpick to push the swab to the bottom of the tube until it is fully submerged.



5. Close the tube firmly and discard the gloves and toothpick in the waste bag.

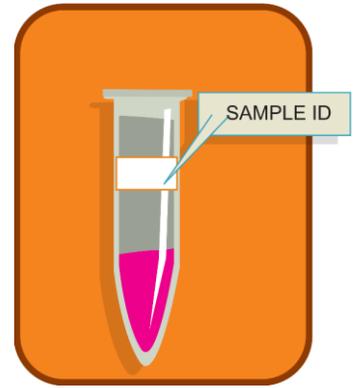
Step 3. Record your Data

1. Click on **3. Submit Sample Data**

at covidsample.org, you will see 16 buttons which correspond to the sample IDs on your sample tubes.



2. Click on the button that matches your sample ID, preceded in your tube by a unique Kit ID, e.g; 'K13'.



! After you click submit, you will not be able to change the data for that sample, verify all fields before submission.

3. Input sample data:

- Time/date
- GPS coordinates
- Description sampled site
- Photo (if possible)

Once the form is filled out, click submit.



4. Return the tube to the box and the box to the cooler with a frozen icepack.



5. Remove your gloves and clean your hands with the hand sanitizer (colored dot).

You have completed your first sample!



6. **Put** on a fresh pair of gloves (to avoid contamination between samples) and **proceed** to your next sample(s).



7. **Place** the sample box in the small Ziploc bag (secondary container) and **return** the box to the cooler. **Rotate** the icepacks daily.

Step 4. Back to the Lab

1. Click on [covidsample.org](https://www.covidsample.org) once you have completed ALL 16 samples. The kit will be picked up within 5-10 business days.

4. Request Sample Kit Pickup

2. Click on [1. Request Sample Kit](#) to get your **NEXT Kit** right away!

1. Request Sample Kit

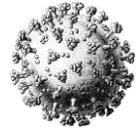


! If you experience problems, send us an email to infocovidsample@gmail.com

You are now a Citizen Scientist! Thank you for your contribution!
Remember to share your experience on social media and use [#swab4corona](#)

Sincerely,
Rohwer Lab

Mask Guidelines for SARS-CoV-2 Environmental Sampling Project



Masks are essential for slowing transmission of the SARS-CoV-2 virus. For your protection, 2 types of masks are provided with your sampling kit: 1 KN-95 mask, and *1 Montana Mask and 5 reusable white filters (*Depending on availability, it may not be included in the kit)

It is essential to wear a mask while sampling. Either the KN95 mask (recommended by the CDC), or the Montana Mask, which comes with 5 white filters. Both are designed to screen out droplets that are believed to be the main mode of transmission of CoVID-19.

To use the Montana Mask, place a white filter around the flat mouthpiece (this looks like a windowpane) and push the piece into the mask. It should lodge in tightly. Another option is to cut the KN95 mask into squares about the same size as the white filters; these can then be used with the Montana Mask. Details and legal disclaimers for the Montana Mask are located at <http://makethemasks.com/>.

For any mask to protect you or other people from viruses, you must breathe *through* it. The mask should cover both your nose and your mouth and must tightly seal against your face. It may feel uncomfortable to breathe, but this means the mask is working.

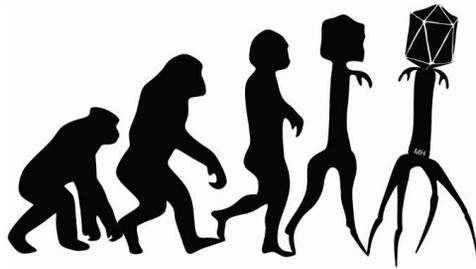
After being in public your mask should be treated as contaminated. When removing the mask, wear gloves. For the Montana Mask, remove the filter and wipe the plastic mask down with the hand sanitizer or other disinfectant.

Reusing masks and filters: The white square filters for the Montana Mask, and the KN95 masks, can be reused. Considering that the SARS-CoV-2 virion falls apart in 4-5 days on surfaces, we suggest using **time** to sterilize the filters between uses.

1. At the entry to your home, have paper bags or envelopes with the date on them. Do not use plastic bags; you want the virus to dry out and fall apart.
2. Wear one of the masks for an outing and then put the filter in the bag/envelope as soon as you return home. Immediately wipe down the Montana Mask and disinfect your hands.
3. Leave the filter in the paper bag/envelope for 4-5 days. This should be enough time to kill the virus.
4. The next day use a different mask filter and put it into a different dated bag/envelope. Do not cross contaminate the masks from one day to another.

How often should you change the filter in the mask? You should change the filter whenever you are around other people.

[#swab4corona](#)



R O H W E R L A B S D S U