

Instructions for taking samples in RECOVERY

Two kinds of samples are collected from patients in RECOVERY; serum samples and viral swabs. These will help us identify which, if any, patients respond to the treatments being tested and will tell us more about the effects these drugs have. The sampling scheme depends on the type of viral infection, as shown below.

Patients in SARS-CoV-2 antiviral comparisons (*including those allocated usual care*)

- Baseline serum sample & nose swab (day 1), plus follow-up nose swabs on days 3 and 5.
- As of December 2022 these are the sotrovimab, molnupiravir and Paxlovid comparisons.

Patients in any influenza comparison (*including those allocated usual care*)

- Baseline nose swab (day 1) plus a follow-up nose swab on day 5.
- Note the RECOVERY influenza comparisons are only open at selected sites.

	SARS-CoV-2		INFLUENZA	
	Serum sample	Nose swab	Serum sample	Nose swab
Baseline (Day 1) Take <u>after</u> consent, and <u>before</u> randomisation	✓	✓	✗	✓
Day 3	✗	✓	✗	✗
Day 5	✗	✓	✗	✓

If patients are discharged before day 5, they should be asked to collect any remaining swabs themselves if possible and post them in a post-box. Instructions for how to do this are at recoverytrial.net/for-site-staff/site-teams under 'RECOVERY self-swabbing instructions'. Patients with co-infection who are in comparisons for both viruses should have swabs taken and packaged separately for both (so two swabs taken on day 1, and again on day 5).

New treatments may be introduced, and the sampling plan may change slightly as the trial progresses, so please refer to the webpage above for current information.

How and when to take samples

All samples should be taken using the serum sampling or viral swab kits provided. A stock of these will be held by the local research team, and replenished by the central co-ordinating team when running low. If more supplies are needed e-mail recoverytrial@ndph.ox.ac.uk.

The same swab kits can be used for SARS-CoV-2 or influenza. Older kits may contain outdated instructions applying just to SARS-CoV-2, which can be disregarded if using them for influenza swabbing. **As we are using the same packaging for influenza and SARS-CoV-2 swabs, please write "FLU" or "COVID" in large letters on the front of the box, even if your site is only open to patients with one of these infections. This should be written near the participant ID and collection date/time, to let the lab know which type of testing is needed.** Newer kits will have tick-boxes to record this.

The baseline nose swab +/- serum sample should be taken after consent has been given but before randomisation. Sites should make local arrangements for taking these at the weekend. If research staff are unavailable, consider arranging for a ward nurse to take swabs. No training is required to follow these swabbing & postage instructions. If it's not possible to do this, please take swabs as close as possible to the intended sampling time (e.g. Friday afternoon for swabs due on Saturday, or Monday morning for swabs due on Sunday).

If a 'day 3' sample has not been taken by the end of day 3, take this soon as possible the following day. If a 'day 3' sample has not been taken by the end of day 4, ignore this sample and just take the day 5 sample. If a 'day 5' sample has not been taken by the end of day 5, take this as soon as possible afterwards. Samples do not need labelling with 'd1/d3/d5', but please ensure collection dates & times are accurately written on each sample box.

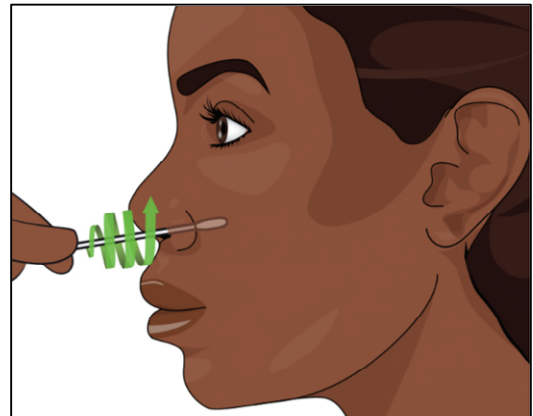
Procedure for taking VIRAL SWABS

The viral swab kit contains everything you need to take the swabs:

- One swab
- A collection tube containing 2ml of viral transport medium
- A larger screw top container which is used to transport the collection tube
- A cardboard box, which is used to transport the screw top container
- A plastic envelope with pre-printed return label, which the box is posted in

It is important that swabbing is done as consistently as possible for each patient so that changes in viral carriage can be detected (ideally by the same person, but this is not essential). Nose swabs here are mid-turbinate swabs, *not* swabs of the anterior nostril as often used in self-swabbing.

- 1) Explain the procedure to the patient
- 2) Take the swab out of its packet.
- 3) Ask the patient to tilt their head back slightly.
- 4) If the patient is on nasal oxygen, pull the cannula slightly away from the side being swabbed for a few seconds whilst the swab is taken.
- 5) While gently rotating the swab, insert about 2 cm into one nostril pointing directly backwards (not upwards) until resistance is met. Do not use force.
- 6) Rotate the swab five times against nasal wall.
- 7) Repeat in the other nostril using the same swab.
- 8) Place the swab tip first into the collection tube, break off plastic end, and replace lid.



Labelling and returning swabs

- 1) Patients should be randomised as soon as possible after baseline sample collection, which will create a participant ID. If this is not done straight after collection, keep a temporary identifier with the sample so it does not get mixed up with others before labelling (e.g. write patient details on a piece of paper kept with the sample). Do not write anything on the swab tube or box at this stage.
- 2) As soon as you have a 7-digit participant ID, label the swab tube with this. Do not add any other identifiers.
- 3) Place the swab tube inside the larger screw top tube and close the lid tightly.
- 4) Place the larger tube inside the box and write participant ID and collection date & time on the front of the box in the spaces provided. Older kits have '2022' pre-printed in the year space, which can be ignored and does not represent an expiry date. Discard any temporary identifiers.
- 5) **Write "FLU" or "COVID" in large letters on the front of the box, depending on which comparison the patient is taking part in (or tick the appropriate box if using a newer kit).**
- 6) Place the box in the plastic pre-addressed envelope. Do not mix up the envelopes for serum samples and viral swabs, which are sent to different labs (viral swab envelopes are marked with a lilac sticker saying 'Covid 19 Test Kit'). Note the same envelopes are used for SARS-CoV-2 & influenza swabs, as these go to the same lab.
- 7) Put the envelope in the internal hospital post, please **do not** send it to a local clinical lab. At some sites other arrangements may be made for sample postage, which will be explained to those collecting samples. Samples can remain at room temperature if collection is delayed (e.g. over the weekend if there are no Royal Mail collections), but if it is convenient to keep these samples at 4°C whilst awaiting collection this is preferable.

Procedure for taking SERUM SAMPLES (COVID-19 comparisons only)

The serum sample kit contains material for postage of serum samples, but **does not** contain a blood tube or any equipment for phlebotomy. These must be obtained from the ward, so that staff are using equipment they are familiar with. The kit contains:

- A plastic screw top container which is used to transport the blood tube
- A cardboard box, which is used to transport the screw top container
- A plastic envelope with pre-printed return label, which the box is posted in

- 1) Explain the procedure to the patient
- 2) Take blood into a 5-6ml serum tube (yellow top SST or red-top serum tube like those shown here, or local equivalent).



For children, the blood volume and tube type should be the same as the usual local procedure for collection of a serum sample.

Labelling and returning serum samples

- 1) Patients should be randomised as soon as possible after baseline sample collection, which will create a participant ID. If this is not done straight after collection, keep a temporary identifier with the sample so it does not get mixed up with others before labelling (e.g. write patient details on a piece of paper kept with the sample). Do not write anything on the blood tube or box at this stage.
- 2) As soon as you have a 7-digit participant ID, label the blood tube with this. Do not add any other identifiers.
- 3) Place the blood tube inside the screw top container and close the lid tightly.
- 4) Place the screw top container inside the box and write participant ID and collection date & time on the front of the box in the spaces provided. Older kits have '2022' pre-printed in the year space, which can be ignored and does not represent an expiry date. Discard any temporary identifiers.
- 5) Place the box in the plastic pre-addressed envelope. Do not mix up the envelopes for serum samples and viral swabs, which are sent to different labs (viral swab envelopes are marked with a lilac sticker saying 'Covid 19 Test Kit').
- 6) Put the envelope in the internal hospital post, please **do not** send it to a local clinical lab. At some sites other arrangements may be made for sample postage, which will be explained to those collecting samples. Samples can remain at room temperature if collection is delayed (e.g. over the weekend if there are no Royal Mail collections), but if it is convenient to keep these samples at 4°C whilst awaiting collection this is preferable.