

Laboratory pathways for COVID and respiratory viruses testing

Microbiology/Virology @ UHS-East

Important changes to microbiology forms for Royal Sussex County and Princess Royal Hospitals

Rapid PCR SAMBA (TRT <3 hours)

Microbiology is planning to go live with the duplex (COVID/flu) or triplex (COVID/flu/RSV) rapid SAMBA PCR tests on single sample from **Monday 10 October 2022**.

From then there will be **two** pathways for COVID testing in SAMBA rapid PCR for patients requiring admission with respiratory symptoms (**regardless of LFT result**)

- Patients to be admitted with respiratory symptoms (**regardless of LFT result**):
 - Adult (>16 years of age) will have the duplex (COVID/flu) SAMBA rapid PCR test on their swab. The request form should state clearly that the test required is duplex by specifying the word “duplex” on the request form
 - Children (≤16 years of age) will have the triplex (COVID/flu/RSV) rapid SAMBA PCR test on their swab. The request form should state clearly that the test required is triplex by specifying the word “triplex” on the request form

Please ensure the correct test is requested on the form accompanying the sample as we will not be able to amend the request.

Standard PCRs (TRT 24-48 hours)

Please note that Microbiology will still provide the standard PCR (TRT within 24-48 hours) in **two** formats:

- Standard single COVID PCR
- Standard comprehensive respiratory panel excluding COVID (all respiratory viruses excluding COVID)

These **two** formats of the standard PCRs are reserved for in-patients as per the examples below;

Standard single COVID PCR:

- Patients with no respiratory symptoms AND immunosuppressed AND negative on LFT will have the single COVID **Standard** PCR test
- If required as part of a discharge package
- If required as part of an outbreak investigation for COVID

Standard comprehensive respiratory panel PCR excluding COVID (all respiratory viruses excluding COVID):

- Admitted symptomatic child patient **who is negative for (COVID/flu/RSV) triplex rapid SAMBA PCR**
- Admitted symptomatic immunosuppressed adult patient who is negative for both (COVID/flu) in the duplex rapid SAMBA PCR

Please ensure the correct test is requested on the form accompanying the sample as, we will not be able to amend the request.

Royal Sussex County & Princess Royal admissions: (ADULT) **Swab for LFT on DTA**

Patient with respiratory symptoms with ? infection

Continue on COVID pathway

LFT COVID +ve

LFT COVID -ve

Positive for flu, move to the appropriate pathway

Take green viral throat swab AND Request duplex (COVID/flu) rapid SAMBA PCR

If negative

If Immunocompetent

If the patient is still symptomatic, please discuss with the consultant virologist or microbiologist

If Immunocompromised, severely unwell/critical care, severe CAP, high clinical suspicion of viral or atypical pneumonia

Take green viral throat swab AND Request standard comprehensive respiratory PCR excluding COVID

Asymptomatic patient / No respiratory symptoms

If immunocompetent:

LFT COVID -ve

Treat as negative

LFT COVID +ve

Continue on COVID pathway

If immunosuppressed:

LFT COVID -ve

Take green viral throat swab AND Request single COVID Standard PCR

Protective isolation (if required), Await single COVID Standard PCR

Take green viral swab AND request standard single COVID PCR;
If required as part of a discharge package OR
If required as part of an outbreak investigation for COVID

Royal Alexandra Children Hospital (RACH) : (<16 years of age) Swab for LFT on DTA

Patient with respiratory symptoms with ? infection

Continue on COVID pathway

LFT COVID +ve

LFT COVID -ve

Positive for flu and/or RSV, move to the appropriate pathway(s)

Take green viral throat swab AND Request triplex (COVID/flu/RSV) rapid SAMBA PCR

If negative

Take green viral throat swab AND Request standard comprehensive respiratory PCR excluding COVID

Asymptomatic patient / No respiratory symptoms

If immunocompetent:

If immunosuppressed:

LFT COVID -ve

Treat as negative

LFT COVID +ve

Continue on COVID pathway

LFT COVID -ve

Take green viral throat swab AND Request single COVID Standard PCR

Protective isolation (if required), Await single COVID Standard PCR

Take green viral swab AND request standard single COVID PCR; If required as part of an outbreak investigation for COVID

Isolation management of patients with viral respiratory symptoms

Send viral throat swab as per guidance

Result of test pending

Isolate in a side room

If no side room available cohort with other viral respiratory patients ensuring there is good ventilation, encourage mask wearing, distancing as the bay allows and aim to transfer as soon as possible

Result available

Negative

Can be cared for in a bay as long as no immunocompromised patients and not severely unwell

Positive

Depends on pathogen detected

COVID

Must be cared for in a side room or cohorted with other patients with COVID

If was previously in bay, bay should be shut, and contact patients need to be traced and observed for incubation time.

Flu A/B

Must be cared for in a side room or cohorted with other patients with Flu. Consider prophylaxis for remaining patients

2 or more of COVID, FluA/B and RSV

Side room only, no cohorting

RSV/HMPV/Paraflu/Enterovirus

Patient should be transferred to a side room /cohorted with patients with the same organism

No new patients into the bay until index patient in a side room. New patients can then be admitted but should any develop respiratory symptoms a viral throat swab should be sent