

## Guidance on Lung Function Testing: SARS COVID-19

V2 30/03/2020

As community transmission of COVID-19 increases, **only URGENT Spirometry & DLco testing with Full PPE** should be performed\*

(Please see below for further clarification)

### **Infection Control:**

All laboratories should follow [HSE/HPSC](#) Guidelines on Infection Prevention and Control.

All laboratories should follow HSE guidance on hand hygiene and physical distancing.

**Screen for COVID-19 symptoms when arranging appointment and on day of test by telephone  
Dismiss any patient with COVID-19 symptoms**

- Recommend that if patient is confirmed no COVID-19 symptoms on day and testing can proceed; patient should remain in car at given appointment date and time. The Respiratory Physiologist will telephone patient to come to department for testing.
- Hand sanitizer to be available to patients in waiting areas & Patient to use the hand sanitizer or wash hands prior to entering testing room. Maintain 2 metre of distancing at all times where possible.
- Recommend staff to use full PPE (with a FFP2 mask) when testing due to the aerosol generating droplets of exhalation during test and potential coughing of patient as per HSE/HPSC algorithm
- **If full PPE is not available - testing should not take place and test should be cancelled**
- All contact parts of equipment to be wiped with appropriate wipes after each patient.
- Minimum wait time between patients should **be 30minutes**

### **What Tests to perform:**

- Spirometry
- Gas transfer / DLco (Single Breath)\*

\*DLco only in patients who require it (such as Lung Ca, Pre-Chemotherapy patients Pre-Bone Marrow or Stem Cell transplant patients).

\*DLco should only be performed with a Real-Time Gas analyser & No Steady State DLco Gas analyser should be used.

**Tests that are not currently being recommended during COVID-19 outbreak:**

- Lung volumes should not be performed at this time due to Body Box and Helium Dilution issues of rebreathing and inability to disinfect small parts
- CPET should not be performed due to lack of filtration on exhalation port and environmental contamination risk
- Bronchial Provocation Testing (aerosol generating procedure) should be NOT be performed during this time

**Who to test:**

Only absolutely **urgent patients** should be considered for testing and may include:

- RALC outpatients
- CF inpatients
- Pre-Operative Assessment for **urgent** surgery (e.g. lung resection / CABG)
- Immunocompromised Patients for urgent treatment (e.g. Pre-Bone Marrow Transplant, Pre-Lung transplants, Pre-chemotherapy) ideally these patients should be first patient tested first in the day to reduce any cross-infection

**References:**

[Australian and New Zealand Society of Respiratory Science \(ANZSRS\) Guidelines](#)

American Thoracic Society (ATS) Document ['Advice Regarding COVID 19 For Pulmonary Function Laboratories'](#)