Lung function testing (including spirometry, peak flow and other breathing tests) generates aerosolised droplets, and may increase the risk of transmission of respiratory viruses to healthcare workers.

Please make sure that lung function testing is needed at this time for your patient. Remember that asymptomatic patients may be infected with acute respiratory viral illnesses (including COVID-19). Prior to lung function testing, patients should be asked screening questions to assess their risk of having COVID-19, including any new acute respiratory symptoms such as fever, cough, runny nose, sore throat, and loss of sense of smell. Lung function testing should not be performed in patients who have new acute respiratory viral symptoms.

**Remember**

- Lung function testing is an important objective clinical diagnostic tool.
- During the COVID-19 pandemic, testing should only be performed where indicated.
- Lung function testing should be performed using contact and droplet precautions.
- All testing needs to be performed using a bacterial/viral filter.
- During the COVID-19 pandemic, when lung function testing is required outside of the laboratory setting, it should be performed in a negative pressure or single room. If this is not possible and testing needs to occur in the inpatient ward environment, please ensure curtains are drawn around the bed area to reduce the likelihood of any aerosolised droplet dispersion.
- During testing where possible, staff should be positioned ≥1.5 metres away and out of the ‘blast zone’ or line of cough.
- During the COVID-19 pandemic, lung function tests using aerosol generating protocols should be performed only when necessary and with caution. If bronchial challenge tests are required, please refer to the [High Risk Respiratory Therapies- Nebulisers](#) advice document. Asthma can be assessed with spirometry, including bronchodilator reversibility.
- Local sites should also consider [local COVID-19 prevalence data](#) when making decisions about screening questions and the recommencement of lung function testing services.
# Lung function testing: COVID-19 advice

## Document information

<table>
<thead>
<tr>
<th>Version number</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original publication date</td>
<td>4 May 2020</td>
</tr>
</tbody>
</table>

### Developed by

- Dr Catherine Farrow CRFS (Senior Scientist in charge, Respiratory Function Laboratory, Westmead Hospital, Woolcock Institute of Medical Research)
- Dr John Brannan CRFS (Chief Scientist, John Hunter Hospital)
- John Harrington (Clinical Nurse Consultant Airway Disease, John Hunter Hospital, ACI Respiratory Network Nursing Co-Chair)
- Jay Flack (Chief Scientist, St George Hospital)
- Mary Roberts (Clinical Nurse Consultant, Westmead Hospital)
- Phillip Munoz CRFS (Senior Scientist, Royal Prince Alfred Hospital)
- Rocco Mico (Respiratory Services Manager/Physiotherapist, Northern NSW LHD)
- Helen Kulas (Respiratory Network Manager, Agency for Clinical Innovation)

### Consultation

- Professor Peter Wark (Senior Staff Specialist, John Hunter Hospital; Respiratory COVID-19 Community of Practice Clinical Lead ACI Respiratory Network Nursing Co-Chair)
- Professor Christine Jenkins AM (Professor of Respiratory Medicine, Faculty of Medicine, UNSW Sydney Clinical Professor and Head, Respiratory Discipline, University of Sydney)
- Senior Staff Specialist, Department of Thoracic Medicine, Concord Hospital, Chair of the board of the Lung Foundation of Australia)

### Endorsed by

- Nigel Lyons

### Review date

- 6 July 2020

### Reviewed by

- Dr Catherine Farrow CRFS (Senior Scientist in charge, Respiratory Function Laboratory, Westmead Hospital, Woolcock Institute of Medical Research)
- Dr John Brannan CRFS (Chief Scientist, John Hunter Hospital)
- John Harrington (Clinical Nurse Consultant Airway Disease, John Hunter Hospital, ACI Respiratory Network Nursing Co-Chair)
- Jay Flack (Chief Scientist, St George Hospital)
- Mary Roberts (Clinical Nurse Consultant, Westmead Hospital)
- Phillip Munoz CRFS (Senior Scientist, Royal Prince Alfred Hospital)
- Rocco Mico (Respiratory Services Manager/Physiotherapist, Northern NSW LHD)
- Helen Kulas (Respiratory Network Manager, Agency for Clinical Innovation)
- Professor Vanessa McDonald (University of Newcastle)
- Professor Peter Wark (HNELHD, HMRI)

### For use by

- All NSW Health clinical staff administering lung function testing during the COVID-19 pandemic

© State of New South Wales (Agency for Clinical Innovation) 2020. [Creative Commons Attribution-NoDerivatives 4.0 licence](https://creativecommons.org/licenses/by-nd/4.0/). For current information go to [aci.health.nsw.gov.au](http://aci.health.nsw.gov.au). The ACI logo is excluded from the Creative Commons licence and may only be used with express permission.