Speech Pathology Australia guidance for service
delivery, clinical procedures and infection control during
COVID-19 pandemic

17 April 2020

The World Health Organisation (WHO) declared COVID-19 to be a pandemic on 11 March 2020. Speech Pathology Australia is aware that speech pathologists and authorities are seeking
guidance regarding speech pathology practice during the pandemic. This statement aims to
provide in-principle guidance relating to speech pathology service delivery, clinical procedures and
infection control to minimise transmission.

This guidance is provided in the context of a rapidly evolving health care emergency and is subject
to change as new data and information becomes available.

In addition to this in-principle guidance from Speech Pathology Australia, speech pathologists
should also refer to local health department / employer policies, and regularly review the
state/territory and federal government guidelines that are relevant to the context in which they
work.

Coronavirus
The COVID-19 pandemic is associated with a new strain of coronavirus, SARS-CoV-2. This virus
affects the upper respiratory tract and causes an infectious disease named coronavirus disease
(COVID-19).

Common symptoms for COVID-19 include fever, and influenza-like symptoms such as coughing,
sore throat, shortness of breath and fatigue. Emerging data also suggests that changes in taste
and smell may also be early symptoms associated with COVID-19 and there have been reports of
atypical presentations of the virus including neurological manifestations. At present, no vaccine is
available for this new virus.

SARS-CoV-2 is highly contagious. It differs from other respiratory viruses in that it appears that
human-to-human transmission occurs approximately 2 to 10 days prior to the individual becoming
symptomatic. Studies have shown that the viral load (quantity of virus in a given volume) for
SARS-CoV-2 peaks during the 7–10 days after symptom onset.

Modes of transmission
Research to date indicates the virus is mainly transmitted via contact with droplets of infected
secretions. Oral and nasopharyngeal secretions including saliva, and respiratory secretions
including sputum and mucus can be agents for high viral shedding in the initial stages of illness.
The virus can also be transmitted as small particles in the air in an aerosol form (i.e., when the
virus containing secretion is suspended in gas such as air).

These modes of transmission are particularly relevant to speech pathology practice given that
many procedures undertaken by speech pathologists require close proximity to clients, contact with
mucous membranes and potential contact with bodily fluids such as saliva and respiratory droplets.
Speech pathologists need to understand which clinical procedures and activities are associated
with these different modes of transmission in order to know which infection control precautions
apply.
Aerosol generating procedures

An aerosol generating procedure (AGP) is a procedure which results in the release of airborne particles, such as through coughing or sneezing. AGPs can create a risk of airborne transmission of infections that are usually only spread by droplet transmission. It is of note that infection can be by aerosolised secretions or infected droplet contact with mucous membranes (i.e. by breathing in through mouth or nose, by droplets into the eyes, or by droplets picked up on the hands being transferred to mouth, nose or eyes by touching the face).

At this time the following procedures undertaken by speech pathologists, across a range of settings, are considered to be potentially aerosol generating procedures:

- Clinical evaluation of swallowing, including bedside dysphagia assessments which may include delivery of mouth care
- Clinical evaluation of communication and oral motor function
- Videofluoroscopic swallow study (VFSS)
- Nasendoscopy for FEES or flexible laryngoscopy with or without videostroboscopy
- Evaluation of supports required for mealtime assistance
- Cough reflex testing
- Speech pathologist-led laryngectomy care and management, including:
  i. surgical voice restoration (voice prosthesis changes)
  ii. open stoma inspection
  iii. swallowing and communication management/assessment with laryngectomy patients due to risk of coughing via potentially open stoma
- Tracheostomy care and management
  i. with or without mechanical ventilation
  ii. suctioning procedures
  iii. speaking valve trials.
- Swallowing or communication assessment or intervention with clients requiring: Non-invasive ventilation (NIV); high-flow nasal oxygen (HFNO); Respiratory support via nasal cannulae; face mask
- Swallowing or communication assessment or intervention with clients with difficulty with saliva control or who are exhibiting distress (crying/yelling).
Specific guidance for speech pathology led procedures

Speech pathology practice for all clients during the pandemic
Existing evidence indicates that COVID-19 viral density is greatest in the nose and nasopharynx. The following procedures pose an increased risk of exposure associated with high viral load and potential for induce sputum. Speech Pathology Australia recommends the following guidance at this time.

The following procedures / tasks should be CEASED during the COVID pandemic
- Flexible endoscopic evaluation of swallowing (FEES)
- Endoscopic assessment of vocal function (using flexible and/or rigid endoscopes)
- Testing gag reflex
- Voluntary cough task
- Cough reflex testing
- Cervical auscultation.

The following speech pathology practice is recommended with clients who are suspected or confirmed COVID-19 positive:
- Consultations must be conducted in an appropriate location only and with approval / knowledge of local organisation and health care authorities
- If possible, delay any Aerosol Generating Procedure
- VFSS should not be undertaken
- If appropriate PPE equipment cannot be supplied, voice prosthesis changes or inspection of voice prosthesis / open stoma by a speech pathologist should not be undertaken
- Tracheostomy: Inner tube changes / cleaning by speech pathologists should not be undertaken
- Where possible, the use of speaking valves and leak speech should be delayed until over acute infection and the risk of transmission is reduced.

Principles to guide speech pathology practice across sectors
The following guidance applies to all speech pathology services during this pandemic. Australia is currently in a suppression phase, which will result in some modifications to ‘usual’ practice as a result. Speech pathologists should:
- Use expertise and clinical judgement in applying a risk assessment to their own clinical context and client cohort
- Adhere to local policy/organisational directives and stay updated re latest government advice
- Identify appropriate modifications to practice according to risk assessment and context
- Have regular, scheduled communication with colleagues to remain up to date with local issues and changes and provide support to each other
- Receive training and/or support to ensure safe and effective practice
- Use professional judgement to assess what is safe and effective practice in context.
Using a risk assessment framework to guide clinical practice during the COVID-19 pandemic

Speech Pathologists should reflect on the following principles when considering how to proceed with providing services to their clients during this pandemic.

Speech pathologists need to use their expertise and judgement to apply a risk: benefit decision making process for each individual client that also considers all factors such as the specific intervention activity to be undertaken, the environment where services are provided, risk level within cohort and health status and risk tolerance of clinician.

A clinical risk assessment undertaken before provision of clinical services, should determine the appropriate actions to take in each case to reduce transmission of COVID-19.

Key actions to be considered:

- Triage, & prioritisation
- Risk identification
- High risk – modifications and additional precautions
- Lower risk – modifications and standard precautions
- Documentation.
Considerations around the risk assessment of the COVID-19 status of the client and others in their environment

Prior to consideration of face to face contact, the following should be considered:

1. **Confirm current known COVID-19 status**
   Check status of any COVID testing and the result
   Check with person, contacts, colleagues as appropriate / where applicable

2. **Confirm the person’s and their family members/close contacts recent travel history**
   Note any overseas travel in the last 28 days

3. **Confirm if the person has had any contact with a confirmed or suspected case of COVID-19**

4. **Confirm if the person has, or reports experiencing in the last 10-14 days the onset of any clinical symptoms such as**
   - Fever or chills
   - Shortness of breath, cough
   - Sore throat
   - Headache
   - Muscle and joint aches and pains
   - Acute confusion
   - Changes to smell/ taste.

**Consider positive, or high risk if yes to any of the above**

The above screening should always be completed again on the day of scheduled face to face contact.

Where COVID-19 status is unknown and clients report the above clinical signs / symptoms, they should be advised to seek medical advice as soon as possible.
### Further advice on actions to undertake prior to speech pathology service delivery

#### Triage and Prioritisation

<table>
<thead>
<tr>
<th>Objective</th>
<th>To identify clients for whom face-to-face contact is essential</th>
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<tbody>
<tr>
<td></td>
<td>To identify COVID-19 risk factor status of clients.</td>
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<td></td>
<td>To limit non-essential face-to-face clinical interactions to prevent transmission</td>
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<td>To limit face-to-face clinical interactions to conserve the use of critical PPE resources</td>
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<table>
<thead>
<tr>
<th>Practice Considerations</th>
<th>Decide if face to face consultation is essential/necessary</th>
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<tr>
<td></td>
<td>What are the risks of not undertaking the assessment or intervention now? Is it urgent / can it be delayed?</td>
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<td></td>
<td>Is it clinically necessary to undertake this consultation face to face or can it be achieved safely and effectively remotely? eg telehealth</td>
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<td>What are the risks of undertaking the intended specific activities with that specific client? – are the activities / client cohort low risk? what are the modifications that will further mitigate risk?</td>
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<td></td>
<td>Determine the client’s COVID-19 status before any face-to-face consultation as per previously outlined risk assessment</td>
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#### Risk Identification

<table>
<thead>
<tr>
<th>Objective</th>
<th>To identify relevant risks and required actions for each client interaction</th>
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<thead>
<tr>
<th>Practice Considerations</th>
<th>High risk: clients, procedures, contexts</th>
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<tbody>
<tr>
<td></td>
<td>Clients who are COVID-19 positive or exhibiting any of the above clinical signs/symptoms should not be seen face to face wherever it is possible / clinically appropriate to defer treatment or use another modality such as telehealth.</td>
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<td></td>
<td>Speech pathologists should delay any procedures for clients who are awaiting test results for COVID-19 wherever possible.</td>
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<td></td>
<td>Procedures which pose a risk of droplet or aerosolised exposure in particular should be deferred, or modified wherever possible</td>
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<td>Appropriate precautions and use of Personal Protective Equipment (PPE) should be adhered to, in line with guidelines and responsive to local policy / organisational directives – refer to Additional Precautions below</td>
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<td>Speech Pathologists should consider their own health risk levels in considering overall risks</td>
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<tr>
<th>Practice Considerations</th>
<th>Lower risk clients, procedures, contexts</th>
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<td></td>
<td>Is the client COVID-19 negative, in low risk cohort, undertaking low risk clinical activity etc?</td>
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<td></td>
<td>Refer to Standard precautions below</td>
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**GENERAL Considerations:**

Gather information prior to, or in-lieu of face-to-face interaction.

For example, via phone or consultation with other health professionals involved in the client’s care, comprehensive review of the client’s history.

If face-to-face interaction is essential/necessary, decide in advance which clinical procedures will need to be undertaken.

Identify the potential risks of transmission associated with these clinical procedures.

Determine whether the procedure poses risk of droplet and/or aerosolised exposure.

The oral-peripheral /oro-motor examination is considered a high risk procedure given the possible contact with mucous membranes, virus droplets and possibly aerosol (if client were to sneeze or cough). Consider whether this examination is essential to the care of the client. Refer to Additional Precautions – droplet below.

Determine which Personal Protective Equipment (PPE) is required to conduct these clinical procedures and understand the sequence for donning and doffing PPE.

Speech pathologists need to be prudent in their use of PPE and be responsive to local policy/requirements regarding use.

**Australian government Department of Health advice:**


If appropriate PPE is not available, determine how the clinical procedure could be modified to obtain essential clinical information to guide the client’s management.

If clinical procedure cannot be modified, and if appropriate PPE is not available, the clinical interaction should not proceed.

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**High Risk – Modifications / Additional Precautions**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Maintain health and safety by preventing exposure to droplet and/or aerosolised form of virus</th>
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<tbody>
<tr>
<td><strong>Practice Considerations</strong></td>
<td>Standard Precautions should be used at all times Additional precautions should be used for all COVID-19 positive clients, high risk clients as per risk assessment or if pending test result Additionally, ALL procedures performed (regardless of known COVID-19 status of the client) that are aerosol generating or pose risk of droplet exposure should use appropriate PPE., or else be modified to reduce risk</td>
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**Droplet precautions**

Droplet precautions are to be used when procedure/consultation may involve contact with mucous membranes or contact with bodily fluids.

- Specific examples include but are not limited to: Oral-peripheral/oromotor examination (OPE/OME) poses a risk of exposure via droplets. speech pathologists must consider whether OPE/OME procedure is essential to the management of the client.

- Oral trials conducted as part of a swallowing assessment (Clinical Swallowing Examination

**PPE for droplet exposure:**

- standard surgical mask
- disposable single-use apron
- disposable single-use gloves
- fluid resistant eye protection

NB: These are minimum recommendations. Speech pathologists must be trained in donning and doffing PPE, and must refer to local health department / employer policies, and regularly review the state/territory and federal government guidelines that are relevant to the context.
<table>
<thead>
<tr>
<th>CSE</th>
<th>Videofluoroscopic Swallowing Study [VFSS]</th>
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<tr>
<td>Conducting evaluation of mealtime supports may also pose a risk of exposure to bodily fluids. Consider whether this activity can be conducted by maintaining physical distancing.</td>
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<tr>
<th>Airborne precautions</th>
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<tr>
<td>Airborne precautions are to be used when procedure/consultation may involve contact with aerosolised respiratory droplets. Current advice suggests that the following procedures can be considered ‘aerosol-generating’ procedures (AGP):</td>
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<tr>
<td>- Laryngectomy management</td>
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<tr>
<td>- If appropriate PPE cannot be accessed, speech pathologists must not undertake any procedures involving inspection of stoma or management of tracheoesophageal puncture (including use of catheter or voice prosthesis).</td>
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<tr>
<td>- Tracheostomy management – with or without mechanical ventilation</td>
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<tr>
<td>- If appropriate PPE cannot be accessed, speech pathologists must not undertake any procedures involving inspection or contact with tracheostomy including the pilot balloon (connected to the cuff), tracheal suctioning, inner cannula, above-cuff devices, and/or speaking valves.</td>
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<tr>
<td>- Non-invasive ventilation and high flow oxygen</td>
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<td>- Respiratory support via nasal cannulae</td>
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<tr>
<td>Procedures involving children and adults who have difficulty with saliva control and who exhibit distress (e.g., crying/yelling)</td>
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<tr>
<th>PPE for aerosol exposure:</th>
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<tr>
<td>- N95 mask/P2 mask</td>
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<tr>
<td>- disposable apron</td>
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<tr>
<td>- disposable gloves</td>
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<tr>
<td>- eyewear</td>
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<tr>
<td>NB: speech pathologists must be trained in donning and doffing PPE</td>
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<tr>
<th>Lower Risk – Modifications / Standard Precautions</th>
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<tbody>
<tr>
<td>Objective</td>
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<tr>
<td>To maintain appropriate infection control through standard precautions</td>
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<tr>
<td>Practice Considerations</td>
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<tr>
<td>Standard Precautions should be used with all clients as much as possible, throughout this pandemic</td>
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<td>This may include:</td>
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<td>Maintain physical distancing for all consultations, where possible.</td>
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<tr>
<td>- Sit/stand beside the patient rather than across from the patient.</td>
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<tr>
<td>- Consider strategies for limiting interaction to 15 minutes or less. Encourage clients to feed themselves where possible.</td>
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<tr>
<td>- Arrange waiting room and consult room furniture to maintain physical distancing.</td>
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Limit personnel involved in the clinical procedure/consultation where possible
Exclude all non-essential staff and visitors from consultations/procedures (e.g. speech pathologists undertaking skills training, speech pathology therapy assistants, students).

Practice standard precautions

- Routine environmental cleaning between consultations and clinical procedures.
- SAS-Cov-2 can survive on surfaces for up to 5 days.
- Perform appropriate hand hygiene, refer to The World Health Organisation ‘My 5 Moments for Hand Hygiene’: https://www.who.int/infection-prevention/campaigns/clean-hands/5moments/en/
- Clean and reprocess any equipment that is shared between clients.
- Ask clients to use hand sanitiser before entering the consult room.
- Use single patient use/disposable items where possible e.g., disposable cups, spoons.
- Handle and dispose of waste safely.
- Follow respiratory and cough etiquette.
- Wear clothing to be bare below the elbows.
- No jewellery including rings, watches, bracelet.
- Ensure long hair is tied away from the face.
- Wash work clothes daily.
- Consider wearing different clothing / shoes during client contact

### Documentation

<table>
<thead>
<tr>
<th>Objective</th>
<th>To provide a record of changes and modifications to usual client care due to the COVID-19 pandemic</th>
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| Practice Considerations | Documentation should be completed in the client’s clinical file to indicate that clinical procedures have been modified and varied as part of risk management approach to Covid19 pandemic. A standard entry may be used, for example:

“Speech pathology practice was modified in accordance with physical distancing and infection control requirements relevant to all health care activities at this time.” |
### Example modifications to speech pathology practice during the COVID-19 pandemic

| General Dysphagia and Communication assessment and management | Elements of the clinical bedside swallow assessment, dysphagia therapy, mouth care and motor speech assessment and/or therapy may be considered aerosol generating procedures. When a face to face assessment is required, modification may be necessary such as:  
- make visual and perceptual observations when standing/sitting 1.5m from the patient.  
- Instead of laryngeal palpation, observe how many swallows the patient does.  
- Listen for changes in vocal quality.  
- Ask the patient themselves for their impressions.  
- Observe respiratory rate.  
- If essential to developing a clinical impression, ask the patient to open their mouth to check the oral cavity is cleared. Maintain distance of 1.5m.  
- Consider use of protocols such as Yale Swallow Protocol  
- Aim to be conservative in assessment, e.g. to avoid coughing, start with more modified textures first  
- Undertake discussion with medical and nursing teams and review of medical notes.  
- Sit/stand beside the patient rather than across from the patient and maintain a safe distance  
- Consider strategies for limiting interaction to 15 minutes or less |
| --- | --- |
| Video-fluoroscopic Swallow Study (VFSS) | Due to risk of transmission in moving the individual to the radiology suite and the potential need to decontaminate equipment, the following should be considered:  
- Risk assess each VFSS request to determine if the assessment is essential  
- Consider only providing service to urgent VFSS referrals where there is a high risk to pulmonary safety and high risk to malnutrition / dehydration due to dysphagia and inability to commence non-oral nutrition.  
- Encourage the patient to self-feed where possible  
- Consider scheduling VFSS procedures at the end of sessions to minimise impact of cleaning times  
Existing evidence indicates that COVID-19 viral density is greatest in the nose and nasopharynx.  
**All Speech Pathologist-led, primary contact and joint endoscopy procedures should be discontinued during the pandemic.** (FEES, endoscopic evaluation of voice clinics using flexible laryngoscopy with or without videostroboscopy) due to the high risk of virus transmission until the current emergency has passed. |
| Endoscopic procedures (FEES, endoscopic voice assessment) |  |
| Cough Reflex Testing | Cough Reflex Testing is a high-risk aerosol generating procedure.  
**This procedure should be discontinued during the pandemic.** |
| Radiation Oncology | Attempts should be made to minimise all but urgent attendances by:  
- Offering consultations via telephone or video consultation wherever possible  
- Ceasing non-essential follow up appointments  
- Home delivery of supplies etc where suitable / available. |
| Laryngectomy | Laryngectomy care and management, including voice prosthesis changes, open stoma inspection and communication management / assessment are considered high-risk aerosol generating procedures.  
- Use telehealth / phone consultations in place of face to face consults as required. |
• Inform patients they must contact the speech pathology service in the first instance if they have any issues and they should not present without an appointment.

• Clients are not to be seen if presenting with respiratory symptoms

• Appointments should only be arranged for urgent issues (i.e. leaking valve that cannot be managed at home)

• Urgent voice prosthesis changes or any communication assessments for laryngectomy patients with confirmed or suspected COVID-19 must be conducted in appropriate location and the Speech Pathologist equipped and wearing appropriate PPE in line with local recommendations.

• Counsel patients on home-management for emergency management of voice prosthesis leakage using either plug insert devices for the appropriate voice prosthesis, and/or use of thickener powders with full instructions.

• Ensure patients have the relevant emergency equipment at home with them. This might include:
  o catheter or plug for home management of central leak
  o access to thickened fluids if needed or family support that can assist with this if needed
  o catheter to insert into TEP in case of accidental dislodgement
  o an adequate supply of HME equipment (if required),
  o access to a ‘back up’ means of communication if the voice prosthesis was to fail or be dislodged

**Tracheostomy**

The presence of a tracheostomy and related procedures are potentially aerosol generating.

• Speech Pathologists should discuss the need for any invasive or AGP procedures (e.g. cuff deflation), whether these can be delayed and if they are essential.

• Speech Pathologists should discuss risks and the appropriate PPE requirements for each patient with local infection control teams for tasks including cuff deflation and speaking valve trials.

• To minimize staff exposure risk and potential transmission, alternative models of care should be considered such as providing remote advice and guidance to the team.

• If speech pathology tracheostomy care is deemed essential, then appropriate PPE must be worn.

• Cuff deflation trials and can be aerosol generating, appropriate PPE is required

• The use of speaking valves and leak speech should be delayed for clients who are COVID-19 positive, where possible, until over acute infection and the risk of transmission is reduced.

Further information regarding identification and management of risks associated with procedures with potential droplet and aerosol exposure can be found:


Personal Protective Equipment (PPE)
Speech pathologists should utilise PPE appropriate for the procedure being undertaken. Access to limited supplies of PPE and resource allocation must be taken into consideration when planning for procedures with clients.

Speech pathologists should seek advice from their local infection control service within their organisation in the first instance. Currently, Primary Health Networks are responsible for the supply of PPE to primary care settings such as community-based speech pathology. Speech pathologists are advised to contact their local Primary Health Care Network for further information re access to PPE in the community: (map of locations available here: https://www1.health.gov.au/internet/main/publishing.nsf/Content/PHN-Home)

Speech pathologists can also seek advice re PPE from national and international sources:

- Australian Government Department of Health

- UK – Public Health England

- Efficacy of face masks

International speech pathology association guidance
RCSLT
ASHA
https://www.asha.org/About/Coronavirus-Updates/

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References


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Appendix 1 – Example Triage Process in adult acute setting