



New Zealand Speech-language Therapists' Association Infection Control Standards

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With acknowledgement and thanks to the Health and Education
SLT leaders for their support

Revised October 2022

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CONTEXT

Speech-language therapists (SLTs) work with adults, children, and infants across many clinical settings – early learning services, schools, hospitals, clinics and day centres, residential care facilities and family's own homes. Infection control standards should be considered a mandatory component of the health and safety protocols in all settings irrespective of whether SLTs work for the Ministry of Health, Ministry of Education or privately. This ensures safety of the individual SLT, their clients and the public.

It is important to remain informed about the country's current risk for infectious diseases and how the government is managing this risk. For those working in Health, please refer to the Ministry of Health health professional's website. For those working in Education, please refer to the Ministry of Education's website (Te Tahuu), which is updated regularly, and to the Ministry's Early Learning and School Bulletins.

INFECTION CONTROL PROCEDURES

General expected practices

- stay away from your workplace and from clients if sick
- follow cleaning and contact tracing protocols (as appropriate for your workplace)
- where recommended, use physical distancing and remote working (see below)
- where recommended, use personal protective equipment (PPE) including face coverings (see below).

Use of equipment

Equipment taken into homes, residential facilities, schools, kura and early learning services must be limited to only that essential for the session. We recommend you:

- wipe down all equipment with disinfection wipes / solution before and after all visits
- use plastic covers that can be removed and cleaned on all electrical equipment including iPads, tablets, and smartphones and wipe down before and after visits
- keep smartphones in pockets.

Essential Care

There are times when in-person care is not advised to avoid the spread of an infectious disease, either at an individual person level or, in the case of a pandemic, at a national level. Essential care is the Ministry of Health's definition of care that cannot be delayed.

The NZSTA considers communication and swallowing intervention to be a health and disability service that provides direct support that maintains a person's basic necessities of life. There are situations where treatment that cannot be delayed or carried out remotely would cause risk of significant harm or permanent and/or significant disability and/or significantly negatively impact quality of life and as such is **essential care**.

'Essential care' for allied health professionals is defined as:

- a condition which is life or limb threatening
- treatment required to maintain the basic necessities of life
- treatment that cannot be delayed or carried out remotely without risk of significant harm or permanent and/or significant disability
- where failure to access services will lead to an acute deterioration of a known condition
- where delay in access to services will impact the consumer's ability to maintain functional independence and significantly negatively impact quality of life
- all treatment that facilitates discharge/transfer to the community
- all treatment that supports and avoids admission into hospital
- treatment which cannot be delivered by a service which is currently operating or by health professionals that are already in contact with the client.

For SLTs, essential care includes:

- Dysphagia assessment or intervention where the client is at risk of deterioration in respiratory status, nutritional status, or significant deterioration in quality of life without that intervention.
- Communication intervention where failure to access that service will impact ability to maintain functional independence or significantly impact quality of life.

For SLTs, there are clients whose health status would be at risk without an in-person consult. SLTs must make clinical decisions about whether a remote assessment is possible and when an in-person consult is needed to gather critical clinical information.

Barriers identified for accessing telehealth and video calling for some clients with dysphagia and/or communication disorders are:

- living remotely with limited internet access
- living alone with minimal family support nearby to assist with technology
- having reduced ability to access telehealth and video calling due to communication or cognitive difficulties
- being unable to complete essential activities of daily living (ADLs) because of their communication impairment (we might need to support another service in joint visiting e.g., Social Worker or Needs Assessment and Service Coordinator to facilitate their essential assessment)
- being from a priority population (e.g., Māori, Pacific) and are at greater risk of poor outcome.

Equity

- Te Tiriti o Waitangi and equity must remain at the centre of the principles of speech-language therapy care.
- Complex layers of history, marginalisation, and socioeconomic situation may result in late engagement of Māori clients and whānau. We must therefore make every endeavour to implement engagement and access to care strategies to overcome late engagement.
- Pacific people may delay accessing care, so every endeavour is to be made to strengthen and maintain engagement and access to care.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal protective equipment (PPE) protects the professional but also protects the patient/ client and their family and close contacts. Health and education professionals can be carriers of infection on their skin, equipment, and clothing to other vulnerable people.

The NZSTA recommends that local policies are developed for all SLTs including access to PPE in line with government, local and NZSTA guidance.

The NZSTA recommends that, prior to in-person contact, that the SLT confirms the client's and the workplace's infection status, infection risks and PPE requirements.

The NZSTA recommends that where infection risk of an individual or a workplace is considered low (i.e., an individual is well and there is no known contact with someone with an identified infectious disease), that standard PPE guidelines are always followed (see below).

The NZSTA recommends that where an infection risk of an individual or a workplace is identified that government and local infection control guidance is sought, and recommended PPE standards are always followed (see below).

The NZSTA recommends that where an infection risk of an individual or a workplace is identified, and recommended PPE equipment are NOT available that the SLT does not visit that client/ patient until the appropriate PPE is sought. Where a SLT feels ill-prepared or un-safe with regards to the infection risk of a patient / client / family or workplace, the NZSTA recommends that the SLT delays contact until the required procedures are in place.

The NZSTA recommends that where an infection risk of an individual or a workplace is identified, that the SLT should, in the first instance, consider telephone or remote working options to avoid the need for in-person contact.

The NZSTA recommends that where an infection risk of an individual or a workplace is identified, this is documented for the purposes of monitoring infection.

The NZSTA recommends that where a SLT is feeling unwell, it is their responsibility to NOT return to work until well.

STANDARD PPE GUIDELINES

- practice appropriate hand hygiene
- use gloves for all contact procedures including dysphagia assessments and communication aid / hearing aid handling
- limit equipment / personal items/ toys taken into a patient bed space / client's home / educational facility to only those essential for the procedure / session
- wipe down any reusable equipment with a disinfection wipe / solution before *and* after all procedures. e.g., food boxes, FEES stack, reusable assessment materials, toys
- daily routine cleaning / sanitizing / disinfection of work surfaces including high touch items like handles and light switches is expected – see <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a4.htm> for more details
- consider plastic shields for equipment trolleys e.g., FEES stacks to reduce risk of infection spread on electronics
- local protocols for handling and storing food safely must be followed at all times
- use plastic covers that can be removed and cleaned on all electrical equipment (including iPads, tablets, and smartphones) and keep smartphones in pockets
- ensure you have a well ventilated workplace. Whatever space you are working in, you may want to read the government [property workplace guidelines](#) including the guidance on good ventilation. The UK [Breathe Freely information and ventilation tool](#) is a great resource to review the safety of your workplace.

ADDITIONAL REQUIREMENTS

Additional infection control practices may or may not include:

- gowns,
- eye protection / face visor and
- a range of face masks /face coverings depending on the workplace and client / patient's infection status.

SLTs must ensure they have the required equipment available to them prior to a client /patient visit.

SLTs must ensure they have the required training in putting on and removing PPE to reduce risk of contamination including appropriate disposal of used PPE.

RISK PROFILE FOR DIFFERENT PROCEDURES

The exposure risk for many SLTs to airborne transmitted diseases is specifically increased due to i) an inability for the patient to wear a face covering, ii) requirement of close proximity to the airway, and iii) prolonged duration of exposure.

The NZSTA classifies risk under two categories:

1. Risk of infectious disease

Low-risk clients - clients who are well and have had no contact with a person with an infectious disease.

High-risk clients - confirmed infectious disease or high index of suspicion (i.e., close contact with infectious disease and not yet confirmed negative to the disease).

2. Level of contact and type of procedure

Physical distancing is defined as more than 1 metre distance between therapist, tamariki/client and their whānau / carer / support person. In some cases, this is not practical for SLTs in clinical practice.

Close contact is defined as within 1 metre of tamariki/client, whānau / carer / support person for over 15 minutes.

Direct contact is defined as being in physical contact with a person's saliva, respiratory secretions, food/drink or their nose, mouth, or eyes.

An **aerosol generating procedure or behaviour** is a procedure that may stimulate coughing and/or sneezing, and/or result in nasal, nasopharyngeal or pharyngolaryngeal secretions becoming particulated, resulting in the release of airborne particles [aerosols].

For consults with physical distancing and close contact, no PPE is required if the tamariki/client and their whānau / carer / support person are considered at low risk of an airborne infectious disease.

PPE should always be considered if there is a chance of any direct contact with the tamariki/client's saliva, respiratory secretions, food/drink or their nose, mouth, or eyes.

PPE should always be considered if the tamariki/client or their close contacts have a confirmed or suspected infectious disease. See Ministry of Health guidance for more details e.g., <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-resources-health-professionals/case-definition-covid-19-infection>).

Examples of tasks conducted by SLTs and recommended PPE requirements

Low-risk clients (client who are well and have had no contact with a person with an infectious disease)	High-risk clients (confirmed infectious disease or high index of suspicion)
<p>PPE 0 for all physical distanced activities e.g., a distanced conversation with a client, family, or residential care staff member</p> <p>PPE 0 or PPE 1* for all close and direct contact activities e.g., close play, communication interventions</p> <p>PPE 1 or PPE 1+* for potential aerosol generating behaviours</p> <p>PPE 1 or PPE 1+* for all classified AGPs</p>	<p>Defer or provide remote support / tele-practice wherever possible</p> <p>PPE 0 for all physical distanced activities e.g., a distanced conversation with a client, family or residential care staff member</p> <p>PPE 1+ or PPE 2 for close and direct contact activities (please PPE table below and follow local infection control instructions)</p>

**it is at the discretion of the SLT and their workplace to decide on level of PPE required depending on the vulnerability of the client, the setting and activity being conducted.*

RISK ASSESSMENT

While different services have different processes for infectious disease risk status of clients/tamariki and whānau, risk assessment is essential as part of triaging and classifying clients by their infection risk. For those working in Education, please refer to the Ministry’s risk assessment questions.

Risk assessment screening questions:

<https://www.health.govt.nz/covid-19-novel-coronavirus/covid-19-information-health-professionals/infection-prevention-and-control-recommendations-health-and-disability-care-workers>

If a client or anyone in their household answer ‘yes’ to either of the above questions, an in-person consult should be avoided. If the consult meets MoH criteria for essential care, enhanced PPE must be used.

AEROSOL GENERATING PROCEDURES (AGPs)

An aerosol generating procedure is one that may stimulate coughing, sneezing and/or result in nasal, nasopharyngeal or pharyngolaryngeal secretions becoming particulated, resulting in the release of airborne, virus laden particles [aerosols]. AGPs increase the risk of airborne transmission due to larger amounts of potentially infectious aerosols generated than from typical speaking and breathing.

Airborne precautions must be implemented when performing AGPs on clients with a known airborne infection. In addition to hand hygiene and gloves, airborne precautions may include gowns and face protection. Infection control recommendations should be sought before commencing any of these procedures.

The following procedures are all considered AGPs and require airborne precautions to be in place:

Classified AGPs

High-risk AGPs are identified in situations where the proximity to the airway and the risk of aerosolised virus is high. Laryngectomy and tracheostomy are high-risk, classified AGPs. Local infection control procedures should be followed for clients with laryngectomy, tracheostomy, and clients who are intubated or on high flow oxygen. Telephone consults and virtual appointments should be considered but in person sessions should be provided where clinically indicated for best clinical care.

The classified AGPs are listed below:

- a. cardiopulmonary resuscitation
- b. intubation, tracheostomy care and management
 - i. with or without mechanical ventilation
 - ii. sputum induction / suctioning procedures
 - iii. deflating cuff, digital occlusion and speaking valve use
- c. non-invasive ventilation (NIV) and high-flow nasal oxygen (HFNO)
- d. respiratory support via nasal cannulae, high flow nasal cannulae, and face mask
- e. laryngectomy care and management, including:
 - i. surgical voice restoration (voice prosthesis changes; and open stoma inspection)
 - ii. communication management/assessment with laryngectomy patients due to risk of coughing
- f. nebulization and therefore cough reflex testing

For low-risk clients, where SLT intervention is clinically indicated by the multidisciplinary team, PPE 1 or PPE 1+ should be used as appropriate for the setting.

For high-risk clients, all in-person interventions should be avoided and, where deemed **essential** by the team, PPE 2 should be used.

POTENTIAL AEROSOL GENERATING BEHAVIOURS (AGBs)

Any examination or procedure performed on the aerodigestive tract (middle ear, nose, pharynx, oral cavity, oropharynx, hypopharynx, or oesophagus) may stimulate coughing and/or sneezing, and/or result in nasal, nasopharyngeal or pharyngolaryngeal secretions becoming particulated, resulting in the release of airborne particles [aerosols]. These are termed aerosol generating behaviours (AGBs).

Medium-risk AGBs

Medium-risk AGBs require sustained periods of expiratory behaviours and as such have potential to produce significantly greater aerosols into this room.

Medium-risk AGB examples are listed below:

- a. endoscopy, including SLT-led flexible endoscopic evaluation of swallowing (FEES)
- b. laryngoscopy, stroboscopy, or transnasal endoscopy (TNE)
- c. respiratory muscle strength training (expiratory muscle strength training [EMST], inspiratory muscle strength training [IMST])
- d. Lee Silverman Voice Treatment (LSVT)
- e. pharyngeal-oesophageal manometry and pH-MII procedures
- f. all interventions requiring contact with the aerodigestive tract
- g. high-flow oxygen requirement

For low-risk clients: ventilation, physical distancing and PPE 1 or PPE1+ is recommended for medium-risk AGBs as appropriate for the setting.

For high-risk clients: medium-risk AGBs should be delayed if possible but where deemed **essential** by the team, PPE1+ or PPE 2 should be used as appropriate for the setting. If in person SLT intervention is considered essential, clients should be offered low risk AGBs **first** (i.e., clinical swallow assessment rather than instrumentation) wherever possible.

Low-risk AGBs

Low-risk AGBs spread respiratory droplets and potentially aerosolise viruses, however, it is controversial as to whether coughing alone is sufficiently aerosolising to increase risk of transmission when two-metre distancing and PPE 1 is being used (Miles et al., 2021). Low-risk AGBs should be conducted with appropriate infection control procedures. including ventilation, sanitation, and appropriate PPE. Examples of low-risk AGBs include:

- a. clinical evaluation of swallowing, including oro-motor/cranial nerve examination, trial swallows, and oral care
- b. voice therapy
- c. communication management
- d. videofluoroscopic swallow study (VFSS)

For low-risk clients: PPE 0 or PPE 1 is required for low-risk AGBs depending on level of distancing/direct contact with the client during the activity and as appropriate for the setting.

For high-risk clients: all in-person interventions should be avoided and where deemed **essential** by the team, PPE1+ or PPE 2 should be used as appropriate for the setting.

Cough reflex testing (CRT)

CRT is a medium risk AGP due to the use of 15 second bursts of the nebulizer.

For low-risk clients: CRT should be used with PPE 1 or 1+ as appropriate for the setting.

For high-risk clients: CRT should be avoided.

In the event of future COVID or other airborne infection outbreaks, please refer to Ministry of Health Guidance and the NZSTA COVID Guidelines from January 2022. These will be updated as needed.

Reference:

Miles, A., Connor, NP., Desai, R., Jadcherla, S., Allen, J., Brodsky, M., Garand, K.L., Malandraki, G.A., McCullough, T.M., Moss, M., Murray, J., Pulia, M., Riiquelme, L., Langmore, S. (2021) Dysphagia care across the continuum: A multidisciplinary Dysphagia Research Society taskforce report of service-delivery during the COVID-19 global pandemic. Dysphagia, 36(2):170-182. 10.1007/s00455-020-10153

NZSTA PPE for SLTs

PPE Type	Requirements
PPE 0 (standard care)	Pre- and post- surface / equipment sanitation practices Good hand hygiene practices Gloves for all activities requiring direct contact with the client
PPE 1 (droplet precautions)	Pre- and post- surface / equipment sanitation practices Good hand hygiene practices Surgical mask Limit belongings and resources taken into procedure / session Gloves for all activities requiring direct contact with the client Face shield or goggles (for close proximity oral / airway examination only) Disposable fluid repellent gown (for close proximity oral / airway examination only)
PPE 1+ (droplet precautions with added respiratory precautions to be used, for example where close contact is required or, on high risk wards and there is significant community spread of a respiratory disease e.g. COVID-19*) * follow local guidance	Pre- and post- surface / equipment sanitation practices Good hand hygiene practices N95 mask Limit belongings / resources taken into procedure / setting Gloves for all activities requiring direct contact with the client Face shield or goggles Disposable fluid repellent gown (for close proximity oral / airway examination only)
PPE 2 (airborne precautions)	Pre- and post- surface / equipment sanitation practices Good hand hygiene practices Gloves Face shield or goggles N95 mask Disposable fluid repellent gown Limit belongings / resources taken into procedure / session Limit number of people present at procedure / session Physical distancing within room wherever possible Closed single room where possible