



**POSITION STATEMENT FROM THE CANADIAN THORACIC SOCIETY (CTS)
SLEEP DISORDERED BREATHING (SDB) ASSEMBLY STEERING COMMITTEE**

**Helping Canadian Health Care Providers to Optimize SDB Management for their Patients during the
COVID-19 Pandemic**

UPDATED RECOMMENDATIONS FOR RESUMPTION OF SLEEP CLINIC AND LABORATORY TESTING

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Update – July 12, 2020

This represents an update to the “**Sleep Clinic/Laboratory Testing**” section of our original CTS position statement (April 16, 2020)¹. This position statement aims to provide rapid guidance to sleep practitioners and other health care providers for management of these patients during the COVID-19 pandemic. This document was based on the consensus of the authors, many of whom are members of the SDB Assembly of the Canadian Thoracic Society. The recommendations are informed by a very limited body of evidence. These recommendations are subject to change as information regarding COVID-19 and its effects are further understood. We plan to update this guidance as new information becomes available, and recommend periodically checking the Canadian Thoracic Society website (<https://cts-sct.ca/covid-19>) for updates.

Sleep Clinic/Laboratory Testing

Overview

In many regions in Canada, there is partial resumption of societal and medical activities that were put on hold during the early stages of the pandemic. Currently, there is a need to enable access to sleep services to maintain health, balanced against the need to reduce community transmission and to protect staff. There was general consensus that sleep apnea testing should be restarted. However, local practices and policies may differ depending on the extent of community spread, prevalence of disease, availability of COVID-19 testing, and provincial/ facility guidelines. We recognize the diverse circumstances of different jurisdictions across Canada and between health care facilities. Guidance from the Public Health Agency of Canada, local/provincial public health or infection control units regarding health care facility capacity to re-open and recommended public health measures should supersede this document. Facility specific re-opening plans should include consultation with a multi-disciplinary team of all relevant stakeholders.

At this time, testing should be limited to urgent/semiurgent patients (as per locally applicable criteria) who do not have suspected/confirmed COVID-19, with rigorous screening, and measures to protect staff with personal protective equipment (PPE). The extent of the testing required (i.e., home sleep apnea testing (HSAT) vs. diagnostic polysomnography (PSG) vs. positive airway pressure (PAP) titration) should be determined in an individual patient by balancing the risk of delayed therapy (including PAP) with the potential risk of COVID-19 to staff.

The extent of PPE required by staff may differ regionally depending on local/provincial risk assessment/infection control recommendations. PAP titration is higher risk as an aerosol generating medical procedure (AGMP) than face-to-face clinical interactions like HSAT teaching, PSG setup or clinic visits. If adequate PPE cannot be sourced, PPE training is unavailable, or technicians lack the ability to use PPE appropriately, testing should not be restarted.

Children may have a higher rate of mildly symptomatic/asymptomatic COVID-19 disease. This fact should be considered in the screening process (e.g., mandating COVID-19 testing prior to in-laboratory studies², for example).

In-Person Visits

For urgent/semiurgent patients in whom virtual visits are inadequate, in-person visits should be resumed. Screening for COVID-19 should be performed for all patients within 72 hours of the scheduled test. The type of screening should be consistent with practices according to local infection control. At minimum, this should include screening based on a questionnaire (e.g., symptoms, COVID-19 risk factors such as exposure or travel), but could also include COVID testing and/or temperature check. Patients who screen positive should not be seen.

A COVID-19 screening questionnaire such as the one developed by [Vancouver Coastal Health](#) can be used or contact local public health offices for screening tools.

Level 3/4 Studies (HSAT):

- Prior to HSAT, patients should be screened for COVID-19 within 72 hours of the scheduled test; the type of screening should be consistent with practices according to local/provincial infection control. At minimum, this should include screening based on a questionnaire, but could also include COVID-19 testing and/or temperature check. Patients who screen positive for COVID-19 should not undergo sleep study testing.
- Home testing should preferably be done with fully disposable equipment. However, if this is not feasible, then proper cleaning of the non-disposable components (e.g., monitor) should be instituted according to local/provincial infection control guidelines. Appropriate PPE should be used for all staff (e.g., surgical mask) during patient contact and cleaning of equipment. Nasal cannulas should have a manufacturer-approved filter. There is currently little data about if/how long virus may survive within the devices (which might not be easily cleaned). Timing and handling of the reuse of nondisposable components of the devices should be directed by infection control and consultation with the manufacturers.

Diagnostic In-Laboratory PSG, Multiple Sleep Latency Test (MSLT), Maintenance of Wakefulness Test (MWT):

- Prior to any of these procedures, patients should be screened for COVID-19 within 72 hours of the scheduled test; the type of screening should be consistent with practices according to local/provincial infection control and local capacity. At minimum, this should include screening based on a questionnaire,

but could also include COVID testing and/or temperature check. Patients who screen positive for COVID-19 should not undergo sleep testing.

- Patients who have tested positive for COVID-19 should NOT be permitted in the sleep laboratory until symptoms have resolved, and/or two consecutive COVID-19 PCR swabs collected ≥ 24 hours apart that are negative.³ Viral shedding can occur after 10 days, therefore, resolution of symptoms and a minimum period of three weeks after symptom onset is recommended when negative tests cannot be obtained.^{4,5} Those with pending COVID-19 test results should not undergo sleep testing until COVID-19 can be ruled out.
- **These procedures require close proximity between technicians and patients. Proper PPE for all staff and cleaning precautions for the physical space and equipment should be instituted in all cases.** We recognize that different regions and provinces may have varying infection control recommendations in place due to differences in prevalence rates, access to testing, screening procedures, etc. Except in extenuating circumstances (or in the case of pediatric patients), patients should attend the sleep test alone, measures should be undertaken to assure adequate physical distancing between patients, and consideration should be given for patients wearing a mask for close interactions with staff or in common areas (e.g., hallways) where there may be interaction with other patients. For pediatric PSGs, attendance should be limited to one caregiver who does not require PAP themselves during the night.
- Staff with symptoms should not report to work as per local occupational health policies. Staff and patients should follow appropriate hand hygiene measures.

PAP Titration Polysomnogram (PAP PSG):

- **There are potential additional risks of aerosol generation with PAP titration studies.** As such, the decision to restart these studies must be consistent with local/provincial infection control guidelines
- Prior to PAP PSG, patients should be screened for COVID-19 within 72 hours of the scheduled test and upon entrance into the clinic or hospital on the day of testing; the type of screening should be consistent with practices according to local infection control and local capacity. However, the greater risks associated with PAP should be recognized, as PAP devices aerosolize droplets. At a minimum, this should include screening based on a questionnaire, but could also include COVID-19 testing and/or temperature check if locally feasible. Patients who screen positive for COVID-19 should not undergo sleep testing. Except in extenuating circumstances, patients should attend the sleep test alone.
- Proper PPE for all staff and cleaning precautions for the physical space and equipment should be instituted in all cases. Based on the available evidence⁶ and to err on the side of caution, during peak pandemic and post peak pandemic phases, ***fit-tested N95 masks (or equivalent), face shields, gowns, and protection appropriate for AGMP should be employed by all staff.***
- Patients and staff should follow appropriate hand hygiene measures.
- Staff should be educated and trained on correct donning and doffing technique for PPE.
- Cleaning should include wiping down of all surfaces contacted by patients and/or staff with antiviral sanitizer, cleaning of the mask with a viricidal wipe, and cleaning of the hose with sterilizing solution (e.g., sodium hypochlorite solution of 0.1% or 1000 ppm).

- Studies should be done in a private room. Sufficient time between appointments should be scheduled to allow time for aerosols to dissipate and for cleaning. Time between patients should consider the number of air exchanges for the testing room (determined by each facility) to ensure 99.9 % removal of airborne microorganisms. See CDC guidance for time required per air exchange rate.⁷
- These measures may not be necessary in the post pandemic phase, when community spread is minimal. In addition, local/provincial public health or infection control recommended measures should supersede this document.

PAP Prescriptions:

- New PAP prescriptions should be limited, and delayed if it is safe to do so. The best option is the sale of new machines/masks (e.g. auto-titrating devices, remote titration), preferably sent by mail or courier rather than picked up in person.

Please also see the following sites for additional resources for patients and practitioners:

<http://www.cpsa.ca/wp-content/uploads/2020/05/CPSA-SMD-Advice-to-Facilities-Resumption-of-Services-FINAL.pdf>

<https://aasm.org/covid-19-resources/covid-19-mitigation-strategies-sleep-clinics-labs/>

<https://www.sleep.org.au/common/Uploaded%20files/Public%20Files/COVID-19%20docs/Updated%20FINALCovid-19%20%20update%20PSG%20FINAL%20040520.pdf>

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