

COVID-19

Education Resources for Proning during Pandemic

**Critical Care Strategic Clinical Network
Alberta Health Services**

Note: This education package was created by members of the CCSCN, although contains links to a number of pre-existing documents. Ownership of work is as referenced.

Purpose:

Critically ill COVID-19 patients frequently require advanced ventilator modes and patient management. Prone position is one of the strategies that should be considered to support failing gas exchange in COVID-19 infected patients with ARDS. It has been recognized that prone positioning is an intervention not routinely offered in some ICUs, and that comfort levels with the procedure vary across the province.

Our purpose is to provide a repository of information and resources, to be used as needed to prepare for the likely increased use of prone positioning during the COVID-19 pandemic. We recognize that there is some variation in current zonal policy and procedures. Our intent is not to change existing local practices, but to provide a summary document with available resources for use as each site deems appropriate.

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1. Consensus Guiding Document
2. Policy and Procedures
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1. Consensus Guiding Document	
<ul style="list-style-type: none">• Guiding principles for proning in adult patients with ARDS	
Provincial Guidance: Prone Positioning for Adult COVID-19 Patients	https://site.cmg.io/scnresearch/Prone Positioning for COVID patients-V5.0.pdf

2. Policy and Procedures	
<ul style="list-style-type: none">• Slight variation exists between local processes• Use the process you are most familiar with	
Calgary Zone- Prone Positioning	https://insite.albertahealthservices.ca/main/assets/Policy/clp-calgary-cc-dccm-resp-prone-positioning-p-600.pdf
GS ICU- Prone Positioning Procedure	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Prone/GS%20ICU%20Prone%20procedure.pdf
RDRH ICU- Prone Positioning for Severe Oxygenation Failure Clinical Practice Guideline	https://insite.albertahealthservices.ca/Main/assets/Policy/clp-dthr-emerg-critical-prone-positioning-severe-oxygenation-failure-cc-xix-50.pdf

Grey Nuns CRITICAL CARE Policy & Procedure	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Prone/Grey%20Nuns%20Prone%20Positioning.pdf
Lippincott Prone Positioning	https://advisor-lww-com.ahs.idm.oclc.org/lna/document.do?bid=3&did=844460&searchTerm=proning&hits=prone,proning
Lippincott Prone Positioning Procedure	https://procedures-lww-com.ahs.idm.oclc.org/lnp/view.do?pld=4182754&hits=prone,proning&a=true&ad=false
Care of the Adult Critically Ill COVID-19 Patient	https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-care-adult-critically-ill.pdf

3. Education Materials

- The following resources may be helpful for supporting staff that are new to proning or those that require a review

Prone Positioning FAQ	https://site.cmg.io/scnresearch/Prone_FAQ_v3.1.pdf
Code in Prone Position Quick Facts	https://site.cmg.io/scnresearch/Code_in_Prone_Position_v2.0.pdf
COVID-19 ICU Refresher Booklet Adult Pandemic Education: NMBA excerpt with Clinical Assessment Tips for patients receiving NMBA	https://site.cmg.io/scnresearch/NMBA_Refresher_Factsheet_w_waveform.pdf
Prone Positioning Tips- Allied Health	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/SCN/Prone%20Positioning%20Tips%20updated%20May%206.pdf
Prone Positioning Ergonomics Guide	AHS & WHS https://extranet.ahsnet.ca/teams/CoP/WHIS/SiteAssets/SitePages/Prone/Prone%20Ergonomics%20Guide%20FULL.pdf
WHS Manual Material Handling and Patient Handling – Prone Video	WHS Manual Material Handling and Patient Handling - Prone (ahsnet.ca)
Prone Injury Prevention Poster	In collaboration with WHS and Venting Wisely https://www.albertahealthservices.ca/assets/about/scn/ahs-scn-cc-prone-injury-prevention.pdf

4. Video Resources

- It is highly recommended for staff to review the WHH video when learning and as needed prior to proning
- The 3 person technique video is not recommended practice, and is provided for reference only

5 person technique- WHH Prone Positioning Tutorial	https://www.youtube.com/watch?v=Hd5o4ldp3c0
3 person technique-NEJM YouTube video on Prone Positioning in Severe ARDS	https://www.youtube.com/watch?v=E_6jt9R7WJs

5. Tools and Checklists

- Most of the policy and procedures linked above contain detailed step by step procedures
- The below are addition resources you may find helpful

Pre Prone Checklist	https://site.cmg.io/scnresearch/Pre Turn Check List refs.pdf
Step by Step Prone Positioning Leader Script	https://site.cmg.io/scnresearch/Step by Step Proning Positioning ref.pdf
Post Turn Checklist and Maintenance of the Patient in Prone Position	https://site.cmg.io/scnresearch/Post Turn Checklist and Maintenance of the Prone Patient ref.pdf
Family Teaching Poster	https://site.cmg.io/scnresearch/Family proning poster.pdf
SHC Pre Prone positioning Pause	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/Prone%20Position%20Pause%20PRONING%20%20UNPRONING%20PROCEDURE.pdf
SHC Pre arm / head repositioning Pause	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/Prone%20positioning%20pause%20-%20head%20and%20arm%20reposition.pdf
RDRH proning kit contents	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/Red%20Deer%20proning%20kit.pdf

6. eSim Scenarios

- It is highly recommended that staff simulate proning as much and as soon as possible
- The low fidelity simulation can be run by any staff member, regardless of experience with formal simulation training
- We suggest creating a proning simulation “bucket” to keep on unit for ease of access and to encourage practicing. Include a printed version of the *Low Fidelity in Situ Sim* below.
- Encourage hands on practice with all members of the multidisciplinary team (clinical or non-clinical) who could be used to support proning patients
- **DO NOT USE PPE FOR SIMULATION**

Low fidelity in situ sim	https://site.cmg.io/scnresearch/Low fidelity proning sim v2.0 ref.pdf
FMC ICU admit/code/prone COVID sim (adapt as needed for local context)	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/FMC%20ICU%20COVID%20eSim%20scenario.pdf
eSIM CoVID 19 Response Team-	<p>https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/eSim%20update%20April%201.pdf</p> <p>https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/4%20eSIM%20CoVID%2019%20Sim%20Response%20Team%20Dashboard%20Apr%209%20Final.pdf</p> <p>If you need simulation support, resources, advice- please contact the eSIM CoVID 19 Response Team. Lead: Mirette Dube - Mirette.Dube@ahs.ca Co-Leads: Cherie Serieska - Cherie.Serieska@ahs.ca Andrea Faid, South- Andrea.Faid@ahs.ca</p>

	<p>Christina Eichorst, North - Christina.Eichorst@ahs.ca</p> <p>Theresa Cronin - Theresa.Cronin@ahs.ca</p> <p>Medical Director: Dr. Vincent Grant - Vincent.Grant@ahs.ca</p> <p>Please also reach out to your site based simulation consultants (if you have one).</p> <p>For any pediatric related COVID simulation requests- Dr. Vince Grant and Helen Catena- Helen.Catena@albertahealthservices.ca</p>
eSim resources (prebrief and debrief)	<p>https://site.cmg.io/scnresearch/Prebrief and CRM pocket card.pdf</p> <p>https://site.cmg.io/scnresearch/PEARLS pocket card.pdf</p> <p>https://site.cmg.io/scnresearch/PEARLS scripted debrief pocket card.pdf</p>

7. Equipment

- In preparation for large numbers of patients potentially requiring proning, make a plan for your equipment needs
- Consider your supply of face cushions (gel or foam), peripheral nerve stimulators, ETCO2 monitors/lines, pillows, and flat sheets

EZ Foam Face Cushion (Contact CNEs Ellen Reil or Eugene Mondor for further information)	https://site.cmg.io/scnresearch/Temporary_Cushion_Prone_Positioning_Final.pdf
Gel Face Cushion ordering information	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/Gel%20face%20cushion%20ordering%20info.pdf

8. References and Resources

Prone Positioning in Severe ARDS (PROSEVA Trial - NEJM)	https://www.nejm.org/doi/10.1056/NEJMoa1214103?url_ver=Z39.88-2003&rft_id=ori:rid:crossref.org&rft_dat=cr_pub%3dwww.ncbi.nlm.nih.gov
Prone Positioning Systematic Review (CMAJ)	https://www.cmaj.ca/content/186/10/E381.long
A Comprehensive Review of Prone Positioning in ARDS	DOI: https://doi.org/10.4187/respcare.04271
The Faculty of Intensive Care Medicine Guidance For: Prone Positioning in Adult Critical Care	https://site.cmg.io/scnresearch/Intensive_Care_Medicine_Guidance_for_Prone_Positioning.pdf

9. Pediatric Resources

Pediatric Prone Positioning Consensus Guide	https://site.cmg.io/scnresearch/Prone Positioning for pediatric COVID patients-V3.0.pdf
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ACH Prone Positioning in the PICU	https://insite.albertahealthservices.ca/assets/picuc/tms-picuc-nursing-resources-prone-positioning-protocol.pdf
Prone Positioning Video	https://drive.google.com/open?id=17MIwSfxHfs-V9VxcmYUJSQdwEj3qSqgHK
Lippincott Prone positioning (acute illness), pediatric	https://advisor-lww-com.ahs.idm.oclc.org/lna/document.do?bid=3&did=844649&searchTerm=pediatric%20prone&hits=pediatric,prone,pediatrics,paediatrics,proning
Care if the Pediatric Critically Ill COVID-19 Patient	https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-care-pediatric-critically-ill.pdf
ACH Prone Head and Arm Position Pause	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/Pediatric%20prone%20repositioning%20pause%20arm-head.pdf
ACH Prone Position Pause (prior to proning- supinating)	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/pediatric%20prone-%20unprone%20pause.pdf
The following resources have been developed for the PRone and OScillation PEdiatric Clinical Trial (PROSpect) and may be useful during the COVID-19 pandemic:	
eSim Scenario	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/PROspect%20eSim.pdf
PROSpect Positioning Protocol	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/Positioning%20Module%208May2019.pdf
PROSpect Prone Positioning Checklist	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/PROspect%20Protocol%20checklist.pdf

10. Additional Support

- a. A Critical Care Covid-19 Tele-Support system is being developed to ensure that ICUs around the province have access to timely multidisciplinary advice
- b. This “help-line” can be used if you have questions about proning
- c. This will be available for use by all disciplines

Critical Care COVID Consult Line	https://extranet.ahsnet.ca/teams/HPSP/CTE/cnehub/SiteAssets/Documents/Proning/Provincial%20Critical%20Care%20Tele-support%20for%20COVID-19%20Care%20Advice%20Final.pdf
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