Ontario's Critical Care Ventilator Stockpile

Guidance Document
Version 2.1

Critical Care Services Ontario
September 2019

CCSO Critical Care Services Ontario

Ontario's Ventilator Stockpile Guidance Document	
Version 1.0	Created 2009
Version 2.0	Updated September 2013
Version 2.1 [This version]	September 2019 (adjustments to some context and contact information throughout the document, addition of neonatal population, and revision of reporting requirements of host sites)
To be read in conjunction with	▪ Ontario's Surge Capacity Management Plan: ▪ Minor Surge Toolkit ▪ Moderate Surge Response Guide
Approved by	▪ MOH: Health System Emergency Management Branch ▪ Provincial Lead for Critical Care ▪ Director, Critical Care Services Ontario (CCSO) ▪ CritiCall Ontario
For more information contact	Critical Care Services Ontario (CCSO) Email: info@ccso.ca Phone: (416) 340-4800 ext. 5856 Fax: (416) 340-4920

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Introduction

A. Key Stakeholders

Critical Care Services Ontario (CCSO)

Critical Care Services Ontario (CCSO) is committed to the improvement of critical care services across Ontario. CCSO's mandate is to work closely with health service providers to implement programs that improve access, quality and integration of critical care services to meet the needs of critically ill patients. CCSO oversees the release and distribution of the ventilators from the provincial stockpile and assists in coordinating information related to repair needs.

CritiCall Ontario

CritiCall Ontario is a 24-hour call centre used by physicians to facilitate medical consultations and referrals for emergent, urgent and critically ill patients. In addition CritiCall Ontario houses and provides technical support for the Critical Care Information System (CCIS), the province's comprehensive database overseen by CCSO and providing close to real time data on critical care admissions, discharges and resource utilization. CritiCall acts as the first point of contact for hospitals requiring access to the provincial ventilator stockpile following the procedure documented in this *ventilator guidance* document.

Ministry of Health (MOH), Health System Emergency Management Branch (HSEMB)

HSEMB is responsible for maintaining the ministry's emergency management program, which includes working with internal and external stakeholders to strengthen ministry and health sector preparedness and response capability. They coordinate ministry and health sector responses to emergencies through the Healthcare Provider Hotline and the Ministry's Emergency Operations Centre (MEOC). The ministry owns the critical care ventilator stockpile, oversees the relationship with the ventilator manufacturers and supports CCSO in the management of the stockpile.

Host Hospital

A Host Hospital is a hospital that houses ventilators belonging to Ontario's ventilator stockpile within a geographic area. There are 19 Host Hospitals strategically located throughout the province (See Appendix A).

Host Hospital Site Lead

A host hospital site lead is the key point of contact at the host hospital for the tracking and management of the provincial stockpile ventilators housed at the hospital corporation. The host hospital site lead is accountable for regular reporting on the status of the ventilators in the stockpile through submissions to CCSO.

Requesting Hospital

A Requesting Hospital is any Ontario hospital needing additional ventilators because of increased demand and requires access to the provincial ventilator stockpile. Requesting Hospitals liaise

with CritiCall Ontario, Critical Care Local Health Integration Network (LHIN) Leads and Host Hospitals to access the Stockpile.

Note: *Referred to as 'partner' or 'index' hospital in previous version of this guidance document.*

Note: With the passing of Bill 74: The People's Health Care Act, 2019, a new model for health care service delivery is upcoming which may impact these stakeholders or roles.

B. Background

Ontario's battle with Severe Acute Respiratory Syndrome (SARS) revealed significant opportunities for improvement in Ontario's health care system, including the ability to better address potential shortfalls in critical care resources during a sudden spike in demand. Following SARS, the Ministry of Health (MOH) asked a group of system leaders, including hospital administrators and health service providers, to conduct a comprehensive review of Ontario's critical care services. This process culminated in the release of the Ontario Critical Care Steering Committee's Final Report in March 2005. This seminal report set out a blueprint for the transformation of Ontario's critical care services.

Acting on this report, in January 2006, the MOH announced Ontario's Critical Care Strategy to improve access, quality and system integration. As a further evolution of this strategy, CCSO has been supporting the implementation of a provincial program that provides Ontario hospitals with a standardized practice for surge capacity planning and management.

C. Ontario's Surge Capacity Management Plan

The purpose of Ontario's Surge Capacity Management Plan (comprised of the Minor Surge Toolkit and the Moderate Surge Response guide) is to improve access to critical care services by giving hospitals information on strategies and standardized processes for surge capacity planning. This collaborative and consistent approach ensures maximum use of resources within hospitals and across the LHINs. In addition, a standardized approach allows for seamless coordination of patient care during both regular operations and during times of excess demands on the critical care system.

Ontario's Surge Capacity Management Plan defines three types of surge events for critical care: **Minor Surge** (requiring a hospital-level response), **Moderate Surge** (requiring a LHIN-level or multi LHIN-level response) and **Major Surge** (requiring a provincial-level response). A surge by definition is any time where demand exceeds capacity. Each level of surge uses the same principles, but has increasing levels of complexity as demands increase over larger geographic areas and patient populations.

In January 2009, CCSO began working with all Ontario hospitals with critical care units to implement Ontario's Surge Capacity Management Plan. Hospitals committed to completing transformation-mapping activities specifically designed to capture the strategic elements of surge capacity: management, processes, physical space, equipment and human resources, and to partnering with the LHIN and CCSO to develop surge plans for times when demand exceeds their individual hospital capacity.

Ontario's Surge Capacity Management Plan describes common principles and the strategic framework that helps improve partnerships and provide access to services for critically ill patients. In utilizing industrial principles of system analysis and flow mapping methodology the plan quickly identifies process improvement needs of each organization, and throughout the system. In March 2010, Ontario's Surge Management Plan was rolled-out across all 14 LHINs and since, has strengthened capacity and improved responses during surges.

D. Role of Ontario's Provincial Ventilator Stockpile

When a hospital experiences a surge in demand for critical care capacity, and the number of patients requiring critical care services increases, the hospital's Surge Capacity Management Plan is put into action. These plans are centered on common elements and principles which are aimed at ensuring all hospitals have a standardized surge response process. Surge response plans allow hospitals to escalate through a seamless, coordinated response from one level of surge to the next.

A subset of the Ontario Surge Capacity Management Plan, is the provincial ventilator stockpile which is intended to help hospitals manage unexpected increases in demand for critical care ventilation resources, ensuring that all patients receive appropriate treatment in a timely manner.

All hospitals must take the proper steps to ensure their internal critical care resources have the functional ability to sustain their own critical care units for four weeks, and their own current supply of ventilators is maintained in proper working order. In circumstances when hospitals have physical bed capacity, but insufficient ventilators to support critical care patients requiring mechanical ventilation, hospitals can access ventilators for temporary periods of time from the province's stockpile. This Ontario's Ventilator Stockpile Guidance Document outlines the process and associated procedures for accessing the provincial ventilator stockpile.

Section I: Procedure for Requesting a Ventilator from the Provincial Stockpile

A. Requesting Hospital Decision to Notify CritiCall Ontario

To ensure all hospitals have equitable access to the provincial stockpile, the access policies and procedures outlined in this guidance document have been aligned with similar processes that exist for the Ontario Surge Capacity Management Plan, where the management of events flows from a hospital (Minor Surge) to the LHIN (Moderate Surge) and finally to the province (Major Surge), as referenced in the Ontario Surge Capacity Management Plan

Before a Requesting Hospital submits their request for additional ventilator(s) from the provincial stockpile, the hospital is required to have engaged in the following:

- The Requesting Hospital will have actively participated in any pre-determined equipment (ventilator) sharing plans that may be in place within its hospital corporation, its LHIN and/or among other partnering hospitals.
- The Requesting Hospital will have activated the hospital Minor Surge plan and explored all reasonable internal options on its premises or owned by the hospital/corporation.
- Once all internal resources have been considered and, if the need for additional ventilators still exists, the Requesting Hospital CEO/senior delegate should **contact CritiCall Ontario at 1-800-668-4357** and follow the ventilator request process outlined below. Appendix B provides a summary of the process for accessing ventilators and Appendix C provides a summary of responsibilities of CCSO, MOH, CritiCall Ontario and Host and Requesting Hospitals.

B. CritiCall Facilitates Teleconference – Critical Care LHIN Lead, Requesting Hospital and Host Hospital

Once notified (by Requesting Hospital CEO/senior delegate), CritiCall will facilitate a teleconference between the Critical Care LHIN Lead and the Requesting Hospital's CEO/senior delegate.

The Critical Care LHIN Leader will assess the request, identify the level of demand for equipment in the LHIN and determine whether additional equipment can be made available to the Requesting Hospital. The Requesting Hospital CEO/ senior delegate should have up-to-date information regarding the situation that led to the ventilator surge event as well as information on the type(s) of ventilator(s) needed.

Once the ventilator release has been approved by the Critical Care LHIN Leader, CritiCall will connect the Requesting Hospital with the Host Hospital for its geographic area to discuss details around the type and number of ventilators to be released, as well as discussing transportation arrangements.

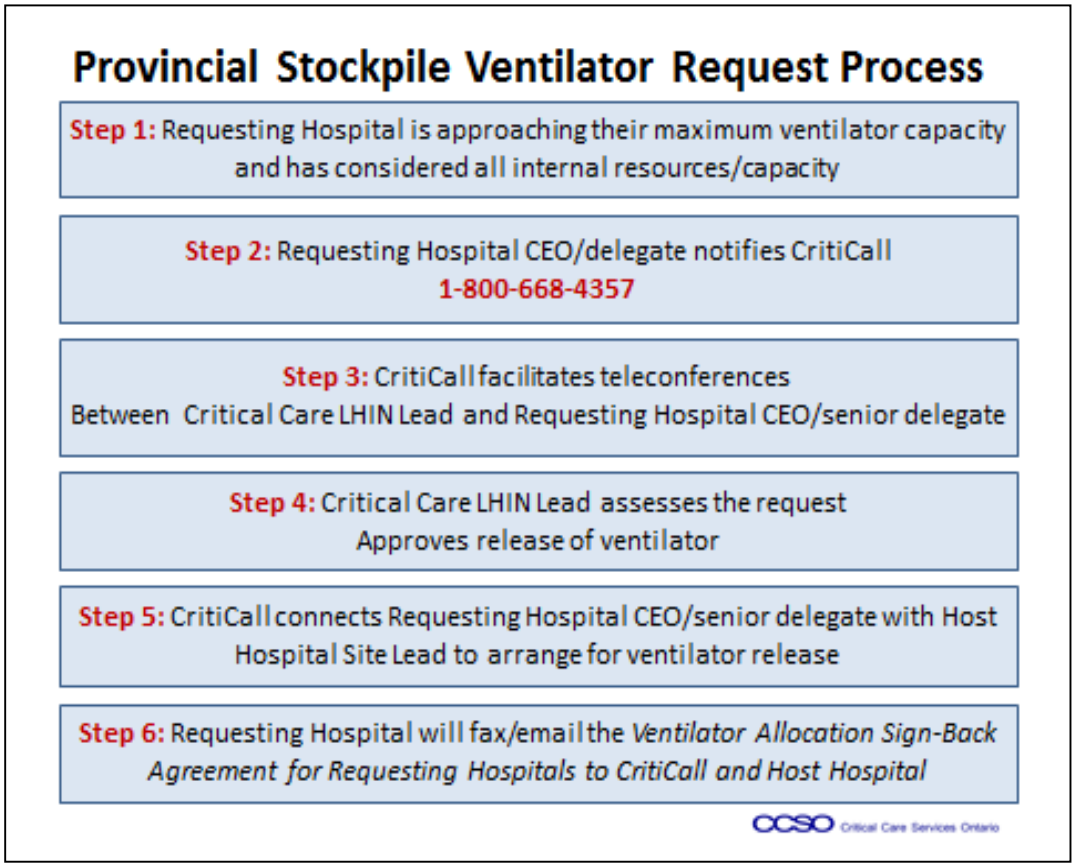
The switchboard operator at the Host Hospital will connect the CritiCall Call Agent with the Host Hospital Site Lead for the ventilator stockpile. Figure 1 below is an example of an information template that switchboards can use to quickly identify the Site Lead for the ventilator stockpile (also in Appendix D). In order to facilitate this communication process, Host Hospitals should ensure that switchboards have up-to-date contact information for their Site Leads.

Figure 1: Hospital Switchboard Notification Tool

C. Ventilator Allocation Sign-Back Agreement for Requesting Hospitals

Once the request for a provincial ventilator has been approved, CritiCall will fax/email the Ventilator Allocation Sign-Back Agreement for Requesting Hospitals (Form One) to the Requesting Hospital. The Requesting Hospital is then required to complete, sign and fax/email the agreement to CritiCall and the Host Hospital prior to release of a ventilator from the provincial stockpile. Both the Host and the Requesting Hospitals are responsible for ensuring that the Ministry Ventilator Usage Criteria and Terms and Conditions are met (attached with the Sign-Back Agreement). Figure 2 below summarizes the algorithm that should be used to initiate the ventilator request process.

Figure 2: Provincial Stockpile Ventilator Request



D. Key Messages

- As is consistent with the Minor Surge plan, all Requesting Hospitals are expected to first utilize their internal and corporation-level resources prior to escalating to a Moderate Surge (requiring LHIN-level response).
- Staff at the Requesting Hospital must ensure that their CEO/senior delegate is made aware of the need for additional ventilator(s). The Requesting Hospital CEO/ senior delegate will notify CritiCall.
- Host Hospitals must ensure 24/7 delegate coverage is available to respond to ventilator requests when the Site Lead is not available. The notification tool should be distributed to switchboard operators and updated as required to ensure a seamless call transfer.
- Host Hospitals are expected to follow the same process to access the Provincial Ventilator Stockpile. This is to ensure that an up-to-date ventilator inventory is maintained and critical care resources are sustained across the province.

Section II: Procedure for Releasing a Ventilator from the Provincial Stockpile

A. Ventilator Testing at Host Hospital

The Host Hospital is responsible for conducting and documenting the results of the following tests prior to using the ventilators in clinical settings as per the asset agreements:

1. **Standard Biomedical Check** (performed by Biomedical Engineering Department or appropriate equivalent)
2. **Electrical Safety Test** (performed by Biomedical Engineering Department or appropriate equivalent), and
3. **Acceptance/Functionality Test** (performed by Respiratory Therapy Department or appropriate equivalent).

The *Host Hospital Checklist for Sending/Receiving Ventilators* (Form Two) was developed to ensure that all associated equipment (including consumables) required to safely operate the ventilator(s) is accounted for, and to document the physical condition of the ventilator(s) prior to release. The Host Hospital must complete the checklist prior to shipping the ventilator(s) to the Requesting Hospital.

B. Transportation of Ventilator from Host to Requesting Hospital

Many hospitals have pre-determined processes and arrangements with transport companies for safe transportation of ventilators between hospitals. Hospitals should follow their standard operating procedures for transporting a ventilator. Hospitals should ensure that staff are aware of standard operations procedures for transport and have the contact details of transport companies readily available. The host hospitals may also be able to provide guidance on a process for transport of stockpile ventilators. **It is the Requesting Hospital's responsibility to arrange for transportation to and from the Host Hospital and to cover any transportation cost.** It is important for Requesting Hospitals to use transportation methods which provide appropriate insurance for damages during transportation.

C. Ventilator Testing at Requesting Hospital

Once the ventilator arrives at the Requesting Hospital, the Requesting Hospital is responsible for completing the *Requesting Hospital Sending/Receiving Checklist* to ensure consistent recording on the condition of the ventilator(s), that all required equipment was received with the ventilator(s), and that no damage occurred during transport.

The Requesting Hospital is also required to complete the *Requesting Hospital Checklist for Sending/Receiving Ventilators* (Form Three) upon receipt of the ventilator(s). Any malfunction or damage to the ventilator(s) noted while completing the checklist at the Requesting Hospital must be reported immediately to the Host Hospital Site Lead to begin discussion on how best to coordinate timely repair of the ventilator(s).

Both the Host Hospital and Requesting Hospital should retain copies of these completed checklists for their records, and to provide if requested by CCSO or MOH.

D. Key Messages

- The safety checklists should be retained by the host and requesting hospitals respectively for record keeping purposes. CCSO may request these checklists at any time.

- It is the Requesting Hospital's responsibility to arrange for safe transportation of ventilators. Requesting Hospitals which choose to use transport methods without sufficient coverage (e.g. local taxi providers) will be liable for damage occurred during transport.

Section III: Procedure for Returning a Ventilator to the Provincial Stockpile

A. Requesting Hospital Responsibilities

When the surge in demand for critical care capacity is decreasing and ventilator(s) accessed from the Provincial stockpile are no longer needed, or at the request of the Critical Care Lead or CCSO, the ventilator(s) must be returned to the Host Hospital in a timely manner.

Before the ventilator(s) is/are returned to the Host Hospital, the Requesting Hospital should complete the Requesting Hospital Sending/Receiving Checklist to ensure that there was no damage to the ventilator(s) during the time it was in use at their hospital. The Requesting Hospital is required to retain completed checklists for record keeping purposes as these can be requested by CCSO or MOH at any time.

Additionally, the ventilator(s) should be returned to the Host Hospital in a manner that allows for their immediate use by the next hospital. This includes ensuring that the ventilator(s) is returned with cleaned **re-usable equipment,** with all components in working order, including:

1. Heated humidifier
2. Temperature probe
3. Humidifier cable
4. Reusable expiratory filter

Disposable equipment consumables must also be returned in sufficient quantities allowing for immediate use, including:

1. Circuits
2. Humidifier pots
3. Disposable expiratory filters

B. Ventilator Testing at Host Hospital

Once returned, the Host Hospital is responsible for completing the *Host Hospital Sending/Receiving Checklist* prior to returning the ventilator(s) to storage to ensure that all equipment was returned, and that the ventilator(s) did not sustain any damages/malfunctions while in the use by the Requesting Hospital or during transport. Damages detected must be investigated by the Host Hospital and appropriate repairs conducted in a timely manner. The hospital is responsible for repairs from damages that occurred during transport or as a result of negligence while the ventilator is under the care of the hospital.

The Host Hospital is required to retain completed checklists for record keeping purposes as these can be requested by CCSO or MOH at any time.

C. Key Messages

- Requesting Hospital must complete the Requesting Hospital Sending/Receiving Checklist prior to returning the ventilator(s).
- Requesting Hospital must return ventilator and associated items in a condition such that the ventilators can be used immediately upon their return.
- Host Hospital must also complete the Host Hospital Sending/Receiving Checklist prior to returning the ventilator back to storage, to ensure it is in proper working condition.

Section IV: Ventilator Stockpile Composition and Distribution

A. Ventilators in the Provincial Stockpile

In August 2009, the MOH began work to augment the existing ventilator resources in Ontario. This work started with distribution of a survey to all Ontario hospitals to identify the type and number of available ventilators in each hospital. This process, along with data from the Critical Care Information System (CCIS) and consultation with field experts, facilitated the development of a comprehensive ventilator stockpile strategy for all Ontario hospitals.

There are three models of ventilators included in the provincial stockpile for Ontario. A listing of these three ventilator models and appropriateness for different patient populations is found below in Table 1.

Table 1- Overview of Ventilators in the Provincial Stockpile

Ventilator	Vendor	Special Considerations
Avea	Trudell	• Capable for use in some neonates (patients weighing between 400g and 5kg)
Evita XL	Draeger	
Puritan Bennett (PB) 840	Covidien	

B. Allocation of Ventiliators at Host Hositals

In 2010, the Ministry procured 216 new ventilators, which make up the provincial stockpile. Since the inception of the stockpile, some ventilators have been decommissioned due to damage with 209 ventilators in the stockpile at the time this document was finalized (August 2019). Ventilators are stored in 19 Host Hospitals across all fourteen LHINs in the province.

Table 2 below shows the location of ventilators across the province as well as identifying the point of contact for neonatal capable ventilators for LHINs without AVEA ventilators within their inventory. This information is also presented in Appendix A.

Table 2- Host Hospital Sites and Location of Ventilators in the Provincial Stockpile

LHIN	Hospital Name, Site	Total Vent Numbers (Aug. 2019)	Type of Ventilators		
			AVEA	Evita XL	PB 840
1 - Erie St. Clair	Windsor Regional Hospital, Ouellette Site	10	3	3	4
2 - South West	London Health Sciences Centre, University Campus	15	3	5	7
	Grey Bruce Health Services, Owen Sound	2	2	-	-
3 - Waterloo Wellington	Grand River Hospital	9	- (Contact LHIN 4 for neonates)	3	6
4 - Hamilton Niagara Haldimand Brant	Hamilton Health Sciences Centre, General Site	22	9	13	-
5 - Central West	William Osler Health System, Brampton Site	7	3	-	4
6 - Mississauga - Halton	Halton Healthcare Services Corporation, Milton District Hospital	10	5	-	5
7 - Toronto Central	University Health Network, Toronto General Hospital	23	3	10	10
	Sunnybrook Health Sciences Centre	19	3	8	8
	Unity Health, St. Michael's Hospital	22	4	10	8
8 - Central	North York General Hospital	10	2	3	5
9 - Central East	Lakeridge Health Corporation, Oshawa Site	13	- (Contact LHIN 7 for neonates)	5	8
10 - South East	Kingston General Hospital	8	- (Contact LHIN 11 for neonates)	6	2
11 - Champlain	The Ottawa Hospital, General Campus	17	5	5	7
12 - North Simcoe Muskoka	The Royal Victoria Hospital	5	2	2	1
13 - North East	Sault Area Hospital	4	-	-	4
	Timmins and District Hospital	2	-	2	-
	Health Sciences North	4	3	1	
14 - North West	Thunder Bay Regional Health Sciences Centre	7	3	4	-
	TOTAL	**209**	**50**	**80**	**79**

Each Host Hospital has a signed agreement with MOH outlining their accountabilities with respect to the provincial stockpile. The ventilators are stored within the Host Hospitals for distribution to surrounding hospitals when a request for ventilators has been received.

Section V: Host Hospital Accountabilities, Maintenance, and Tracking

A. Host Hospital Responsibilities

Host hospitals have the following responsibilities:

- The Host Hospital will have identified a **Site Lead** to act as the key administrator for the ventilator stockpile. The Site Lead is responsible for ensuring proper procedure is followed when a ventilator is released and, will also be the point of contact for all stockpile ventilator requests and any information requests from CCSO as and when required.

- The Host Hospital will ensure the Site Lead or delegate can be contacted 24 hours-a-day, 7 days-a-week, 365 days-a-year.

- The Site Lead will ensure that preventative maintenance checks on stockpile ventilators are conducted every six months, and/or as required under the terms and conditions of the equipment operating manual.

- The Host Hospital will ensure there is staff scheduled on every shift that have the ability to test the provincial ventilator(s) to ensure they are fully functional prior to sending to a Requesting Hospital

- The Host Hospital is subject to the accountabilities for the use, storage and maintenance of the ventilators as outlined in the Ministry Ventilator Usage Criteria and Terms accountability agreement.

When needed, CCSO or MOH may access the ventilators from the provincial stockpile directly. The Host Hospital may not lend, pledge, sell or otherwise dispose of the provincial ventilators except as permitted by CCSO and MOH.

B. Ventilator Tracking and Storage

Ongoing Tracking

It is imperative that each of the provincial ventilators can be located at all times. In order to assist with the tracking of the stockpile, each ventilator has a unique asset tag for identification. All hospitals must ensure that the asset tag is not removed or defaced at any time. If the asset tag becomes detached or modified in any way, the hospital must notify CCSO immediately by contacting Info@ccso.ca.

Host Hospitals must use the **computerized tracking log** provided to them during initial deployment of ventilators. Each tracking template was pre-populated with the ventilator asset tags that are unique to each Host Hospital. Figure 3 shows a sample of the *Ventilator Stockpile*

Tracking List displaying information regarding the location of the ventilators. This tool allows Host Hospitals to assess the location and accessibility of each ventilator at any given time.

In the same file, an individual tracking worksheet was included, shown as a sample in Figure 4. When the status or action of a specific ventilator changes, the Site Lead is responsible for updating the tracking worksheet. Once this information has been updated on the ventilator-tracking worksheet the location change will be immediately reflected on the Inventory Summary Worksheet. Each Host Hospital received a CD that contained a copy of the tracking log pre-populated with the asset tags for their LHIN.

Figure 3: Ventilator Stockpile Tracking List – Inventory Summary

Site Lead: <Name, contact number>
Site Alternate: <Name, contact>

<Host Hospital Name> VENTILATOR STOCKPILE TRACKING LIST		
Manufacturer and Model	**Asset Tag Number**	**Location: Storage, Internal Use, External**
Drager Evita XL	Tag 1	Internal, Storage
Covidien Puritan Bennett 840	Tag 2	Internal, in use
Cardinal AVEA	Tag 3	External

Figure 4: Ventilator Tracking Worksheet

Draeger Evitia XL Tag #											
Location	Location Details	Request Date dd/mm/yy	Release Date / Date in Storage dd/mm/yy	Sending Checklist Complete	Were there any deficiencies noted?	External Transportation Provider	Contact Details for Receiving Site (Name, location, position, contact phone number, contact email)	Date Returned dd/mm/yy	Receiving Check List Completed	Were there any deficiencies noted?	If deficiencies what follow up steps were completed
Internal, Storage		9/12/09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

Quarterly Ventilator Tracking Form Submissions

Accurate tracking of the ventilators is crucial as it ensures that the availability of the ventilators can be assessed at any time. It also ensures that the ventilators are maintained according to the vendor's maintenance and care schedule.

A REVISED *Quarterly Ventilator Tracking Form (2019)* has been created by CCSO (Form Four) for completion and submission by Host Hospitals to CCSO at the end of every quarter.

Storage

When not in use, the ventilators must be kept in storage at the Host Hospital. The Requesting Hospitals must return the ventilator(s) immediately after use as the Host Hospital is liable to the MOH for any loss, theft or damage of or to the ventilators that may occur when the ventilators are under the care of the Host Hospital or its employees, agents and subcontractors.

C. Maintenance , Spare Parts and Damage

Maintenance

The Host Hospital is responsible for maintenance of the ventilators and accompanying equipment in accordance with the vendor's maintenance schedule and equipment operating manual. MOH coordinates preventative maintenance agreements with vendors for each of the 3 types of ventilators in the stockpile. Table 3 below outlines the preventative maintenance services offered by the vendors.

Table 3: Preventative Maintenance (PM) Schedule for Ventilators

Vendor	PM Schedule	Services Offered
Trudell (AVEA)	Annually	Site visits to conduct PM
Draeger (Evita XL)	Every 6 months	Basic testing every 6 months Detailed PM annually
Covidien (PB840)	Annually	Site visits to conduct PM

Spare Parts

Each ventilator comes equipped with **supporting equipment** including a heated humidifier, temperature probe and humidifier cable, as well as **disposable equipment** such as circuits and humidifier pots. Disposable expiratory filters need to be **purchased from each vendor** by ***any*** hospital that requires a ventilator from the stockpile.

The ventilator vendors (Covidien, Trudell, and Draeger) have their own products and/or recommended products that can be purchased for use with the ventilators. Hospitals may also choose to purchase their preferred types of disposable equipment if it is compatible with the Provincial Ventilator Stockpile models.

Each time a ventilator is used by either the Host Hospital or a Requesting Hospital, the hospital is required to return the ventilators to storage at the Host Hospital with re-usable equipment components cleaned and in working order, including:

- Heated humidifier
- Temperature probe
- Humidifier cable
- Reusable expiratory filter

Disposable equipment consumables including:

- Circuits
- Humidifier pots
- Disposable expiratory filters

Damages

Host Hospitals and Requesting Hospitals shall at all times use reasonable care when handling, storing, and/or transporting ventilators. To assist with monitoring the condition of the ventilators, the CCSO requires the use of the sending/receiving checklists which are to be completed by both the Host and Requesting Hospitals.

In completing the checklists, hospitals will have the ability to easily assess the ventilator to note any damages and to ensure they can be dealt with in an appropriate and timely manner. Any damages detected must immediately be investigated by the Host Hospital and appropriate repairs conducted. The MOH nor CCSO is responsible for repairs from damages that occurred during transport or as a result of negligence while under the care of the hospitals, its employees, agents or subcontractors.

D. Education and Support

Hospitals should contact the vendors directly for education and support. Contact information for vendors is available in Appendix E. Vendors will be able to link hospitals to available resources and online tools. Please ensure that hospital staff have the knowledge and ability to provide proper patient care using the ventilators that comprise the stockpile.

E. Key Messages

- Host Hospital(s) must ensure that preventative maintenance checks are conducted in a timely manner and have processes in place to easily identify and access ventilators during a surge event.

- Host Hospitals are responsible for maintaining the computerized tracking log provided during initial deployment of ventilators as per their asset agreements.

- CCSO or MOH may request reports on the status, usage and location of ventilators at any time.

- CCSO has created an updated Ventilator Tracking Form (2019) to monitor utilization and movement of the Provincial Stockpile (see Form Four).

- **Site Leads at Host Hospitals are required to submit the Quarterly Ventilator Tracking Form to CCSO by email: info@ccso.ca or by fax (416) 340-4920, using the submission dates below.**

    - By 31 July for Q1 [April-June]
    - By 31 October for Q2 [July-September]
    - By 31 January for Q3 [October-December]
    - By 30 April for Q4 [January-March]

- Hospitals should contact the vendors directly for education and support.

- Host Hospitals are responsible for maintenance of the ventilators and accompanying equipment in accordance with the vendor's maintenance schedule.

- Damage to ventilator(s) must be reported to CCSO via damage reporting form.

Section VI: Provincial Ventilator Stockpile Rotation Plan

A. Purpose

The purpose of the rotation plan is to expand the utilization of ventilators in the provincial stockpile, housed in Host Hospitals. Table 4 shows ventilator requests by LHIN for the years 2010 to 2018.

Expanding the use of the stockpile will:

- Improve the life expectancy of the ventilators [through regular use];
- Improve staff competencies on ventilator models, and increase their knowledge for training others in the LHIN; and
- Give patients and staff the chance to benefit from these ventilators.

Ventilators have longer life expectancy and perform better when they are being used and maintained regularly. To ensure the ventilators are utilized and to extend their life expectancy, a centrally organized rotation plan is being introduced, where 50% of the stockpile in a Host Hospital will be rotated each year, hence getting all the ventilators circulated over a two-year period within a Host Hospital.

A number of rotation options were considered and presented to the Critical Care LHIN Leader Committee. The option of rotating the stockpile over a two-year period was chosen as it enables the entire stockpile to be rotated and it reduces the administrative burden on Host Hospitals, with less frequent release/return points compared to other options presented.

Each Host Hospital is responsible for making the necessary arrangements for rotation to suit individual hospital need i.e. selecting the type of ventilator(s) and the designated ICU for rotation.

B. Benefits

Rotating the stockpile will:

- Ensure that unit staff are familiar with functionality of stockpile ventilators on an ongoing basis and develop trouble-shooting skills;
- Ensure routine testing, maintenance and repair of ventilators resulting in longer life expectancy of working ventilators; and
- Give hospitals the opportunity to use this equipment.

Table 4: Ventilator Stockpile Distribution

LHIN	Total # Ventilators in the Stockpile (2010)	Total # of Ventilator Requests FY2010-2018
4 - Hamilton Niagara Haldimand Brant	25	241
1 - Erie St. Clair	10	96
9 - Central East	13	55
8 – Central	11	44
7 - Toronto Central	65	35
11 – Champlain	17	13
12 - North Simcoe Muskoka	6	12
2 - South West	18	10
13 - North East	10	5
6 - Mississauga Halton	10	4
10 - South East	8	8
14 - North West	7	4
3 - Waterloo Wellington	9	4
5 - Central West	7	0
Total	**216**	**531**

C. Process for Rotating the Stockpile Ventilators

Year one of rotation: Host Hospitals should arrange for 50% of the ventilators to be placed in the selected critical care units for rotation starting between July 1 and August 30. Details of ventilators circulated for rotation must be documented and updated in the Revised Quarterly Tracking Form (2019) (Form Four).

Year two of rotation: Host Hospitals should replace the 50% of the ventilators that were in rotation with the remaining 50% of ventilators in storage starting between July 1 and August 30 of the subsequent year (year two).

All parts of the ventilator must be rotated (e.g. heaters that are mounted on the vent).

A key responsibility during the controlled rotation will be monitoring of ventilators by Site Leads. As rotation will occur within the Host Hospitals, Site Lead responsibilities will include:

- Testing the ventilator(s) prior to release from stockpile
- Monitoring vents while in rotation
- Updating Quarterly Ventilator Tracking Form, adding/updating details of ventilators in rotation

- Being the main point of contact for CCSO
- Ensuring testing of ventilators is conducted upon return to stockpile

The following safety tests are to be completed prior to the ventilator(s) being released for rotation, and upon return to storage; results must be documented by the Host Hospital using the checklist (Form Two):

- Standard Biomedical Check (completed by vendor or hospital Biomedical Engineering Department if accredited to perform)
- Electrical Safety Testing by hospital Biomedical Engineering Department
- Acceptance/Functionality Testing by Respiratory Therapy Department

As per the requirements set out in the Ministry's *Ventilator Usage Criteria and Terms,* each Host Hospital will remain responsible for maintaining and preparing the remaining ventilators in the stockpile for transfer if they are required by another hospital or their own facility. These accountabilities include but are not limited to the following points:

- Verifying the functionality of all ventilators in storage;
- Updating ventilator tracking logs;
- Ensuring that the asset tag assigned to the ventilator is not removed or defaced at any time. If the asset tag becomes detached or modified in any way, the hospital must notify CCSO within a 24 hour period;
- Keeping records relating to the storage and transfer of the ventilators, and providing accurate reports on the usage and location of the ventilators to CCSO every quarter.

Unauthorized use of the provincial stockpile ventilators outside of the rotation plan will be considered a breach of the stockpile agreement and the Host Hospital or hospital corporation may lose all stockpile privileges.

D. Key Messages

- The Provincial Stockpile will be circulated for rotation, within the Host Hospital ONLY. This is to ensure ready access to the full stockpile if needed.

- The stockpile will be rotated over a two-year period. 50% of the stockpile will be rotated in Year 1 starting between 1 July – 31 August. The remaining 50% of the stockpile will be rotated in year 2 starting between 1 July – 31 August of the subsequent year.

- Each Host Hospital will decide which types of ventilators are circulated for rotation within critical care units in their hospital.

- *Revised Quarterly Ventilator Tracking Form* (2019) must be submitted quarterly to CCSO, see Tracking Form submission dates below:
  By 31 July for Q1 [April-June]
  By 31 October for Q2 [July-September]
  By 31 January for Q3 [October-December]
  By 30 April for Q4 [January-March]

  Please submit by email to Info@ccso.ca or by fax (416) 340-4920

Appendices

Appendix A: Provincial Stockpile Distribution

Provincial Ventilator Stockpile Distribution List

Note: *Toronto Central LHIN has the largest stockpile to ensure a central location for additional distribution to anywhere in the province.*

LHIN	Hospital Name, Site	Total Vent Numbers (Aug. 2019)	Type of Ventilators		
			AVEA	Evita XL	PB 840
1 - Erie St. Clair	Windsor Regional Hospital, Ouellette Site	10	3	3	4
2 - South West	London Health Sciences Centre, University Campus	15	3	5	7
	Grey Bruce Health Services, Owen Sound	2	2	-	-
3 - Waterloo Wellington	Grand River Hospital	9	- Contact LHIN 4 for neonates	3	6
4 - Hamilton Niagara Haldimand Brant	Hamilton Health Sciences Centre, General Site	22	9	13	-
5 - Central West	William Osler Health System, Brampton Site	7	3	-	4
6 - Mississauga - Halton	Halton Healthcare Services Corporation, Milton District Hospital	10	5	-	5
7 - Toronto Central	University Health Network, Toronto General Hospital	23	3	10	10
	Sunnybrook Health Sciences Centre	19	3	8	8
	Unity Health, St. Michael's Hospital	22	4	10	8
8 - Central	North York General Hospital	10	2	3	5
9 - Central East	Lakeridge Health Corporation, Oshawa Site	13	- Contact LHIN 7 for neonates	5	8
10 - South East	Kingston General Hospital	8	- Contact LHIN 11 for neonates	6	2
11 - Champlain	The Ottawa Hospital, General Campus	17	5	5	7

LHIN	Hospital Name, Site	Total Vent Numbers (Aug. 2019)	Type of Ventilators		
			AVEA	Evita XL	PB 840
12 - North Simcoe Muskoka	The Royal Victoria Hospital	5	2	2	1
13 - North East	Sault Area Hospital	4	-	-	4
	Timmins and District Hospital	2	-	2	-
	Health Sciences North	4	3	1	
14 - North West	Thunder Bay Regional Health Sciences Centre	7	3	4	-
	TOTAL	**209**	**50**	**80**	**79**

Appendix B: Process for Accessing Provincial Ventilator Stockpile

Appendix C: Ventilator Stockpile Responsibility Summary

CCSO	MOH (HSEMB)
• Oversee the management and distribution of the Provincial Ventilator Stockpile. • Update policies and processes for access to ventilator(s). • Track movement of ventilators by receiving the following documents: *- quarterly Ventilator Tracking Form from Host Hospitals,* *- Ventilator Allocation Sign-Back Agreements from CritiCall*.	• Oversee service contracts, warranty extensions and preventative maintenance agreements with vendors. • Work with CCSO to respond to ventilator damage/repair reports that are beyond warranty. • Maintain/update contractual asset agreements with Host Hospitals.
HOST HOSPITAL	**REQUESTING HOSPITAL**
• Responsible for storage, maintenance and tracking inventory of their stockpile. • Ensure Site Lead/delegate is identified and accessible for coordinating release of ventilators. • Complete the necessary safety checks before release and upon return of ventilator(s). • Ensure Preventative Maintenance checks are conducted on time. • Responsible for repair of damages that result from manufacturer's defect. • Make arrangements for rotation of ventilators within the Host Hospital. • Submit quarterly Tracking Form to CCSO (Form Four).	• Ensure all internal resources have been utilized prior to accessing the Provincial Stockpile. • Critical Care Unit staff must ensure that hospital CEO/senior delegate is made aware of the need for additional ventilators. • Submit *Ventilator Allocation Sign-Back Agreement* to CritiCall and Host Hospital. • Make suitable arrangements for the transport of ventilator from Host to Requesting Hospital. • Complete the necessary safety checks upon receipt and return of ventilator(s).

CRITICALL ONTARIO
• Connects Requesting Hospital to Critical Care LHIN Lead • If vents approved, connects Requesting Hospital to Host Hospital • Faxes *Ventilator Allocation Sign-Back Agreement* to Requesting Hospital • Faxes signed *Ventilator Allocation Sign-Back Agreement* to CCSO

Appendix D: Host Hospital Notification Tool

If you receive a call from
CRITICALL ONTARIO: (800) 668-4357

Regarding the Provincial Ventilator Stockpile, please **immediately** connect the CritiCall Call Agent to:

Site Lead/<Appropriate Delegate>:

- Extension: xxxx
- Pager: xxxx
- Cellular: (xxx) xxx-xxxx

Should <Site Lead> be unavailable, please connect operator to <Appropriate Delegate>

Note: CritiCall Ontario does not arrange for transportation of equipment

CRITICALL ONTARIO

CCSO Critical Care Services Ontario

Appendix E: Contact Information

MOH and CCSO

CCSO	Tel: (416) 340-4800 ext. 5856 Fax: (416) 340-4920 Email: info@ccso.ca
MOH Health System Emergency Management Branch	Tel: (866) 212-2272 Fax: (416) 212-4466 Email: emergencymanagement.moh@ontario.ca

Vendors

Puritan Bennett 840 (Covidien)

16720 TransCanada Hwy Kirkland, QC, H9H 4M7	Toll Free: 1-(877) 664-8926 www.medtronic.ca

Draeger Evita XL

2425 Skymark Ave, Mississauga, ON L4W 4Y6	Tel: 1-866-343-2273 www.draeger.com

AVEA (Trudell)

758 Third Street, London, ON N5V 5J7	Tel: 1-800-265-5494 www.tmml.com

Forms

FORM ONE: Ventilator Allocation Sign-Back Agreement for Requesting Hospitals

To be completed by each site requesting ventilator(s)

PRINT FORM

Ventilator Allocation
Sign-Back Agreement for Requesting Hospitals

On behalf of the hospital, I acknowledge that our organization will receive [ ] ventilator(s) and supporting equipment.

Legal Name of Health Service Provider/Corporation: [ ]

Hospital & Site Name: [ ]

Ventilator Type Requested	Number
PB840 Ventilator	[ ]
Avea Ventilator	[ ]
Evita XL Ventilator	[ ]
TOTAL	[ ]

We agree that this/these ventilator(s) and supporting equipment must be utilized in accordance with and subject to the criteria and terms outlined herein. This allocation will be subject to audit, report back and reconciliation.

_____ _____

CEO/Delegate Name (at Requesting Hospital) Signature

_____ _____

Email/Phone Contact Date

Please return a signed copy of this form to (1) your Host Hospital AND (2) CritiCall using one of the following methods:
By Fax: (905) 388-6377, or scanned copy by email: Vent_Distribution@criticall.org

Ministry Ventilator Usage Criteria and Terms

1. In these criteria and terms:
   - "Hospital" means the hospital named above, that is subject to these criteria and terms;
   - "LHIN" means the relevant local health integration network established or continued under the Local Health System Integration Act, 2006.
   - "Critical Care LHIN Lead" means the individual designated as such by the Ministry and the LHIN from time to time.
   - "Province" means Her Majesty the Queen in Right of Ontario as represented by the Minister of Health and Long-Term Care; and
   - "Ventilators" shall mean the ventilators and any associated equipment, including humidifiers, loaned to the Hospital hereunder.

2. The Hospital acknowledges that it should not have access to the Ventilators unless the following process has been undertaken:
   - The Hospital must deploy its Minor Surge plans and explore all reasonable surge capacity management options for adding capacity using Ventilators on its premises or owned by the Host Hospital.
   - The Hospital will notify CritiCall Ontario, who in response will facilitate a teleconference between the Critical Care LHIN Lead and the Hospital Delegate.
   - The Hospital will actively participate in any pre-determined ventilator-sharing plan that may be in place within its LHIN and/or among the hospital and other partner hospitals.
   - The Critical Care LHIN Lead will identify potential equipment that can be made available to the Hospital by other institutions within the LHIN.
   - The Critical Care LHIN Lead will notify the Province prior to authorizing the deployment of Ventilators from the provincial stockpile, and the Province will send an agreement relating to the Ventilators to the Hospital.

3. The Hospital will verify the functionality of all Ventilators upon receipt and as requested by the Province, and will perform and document the results of the following tests prior to clinical use of the Ventilators:
   - Standard biomedical check by the hospital Biomedical Engineering Department
   - Electrical safety testing by the hospital Biomedical Engineering Department
   - Acceptance/functionality testing by Respiratory Therapy Department

4. Each Ventilator will have an asset tag attached which will be utilized as means of identifying the Ventilator as part of the provincial stockpile. The Hospital shall ensure that the asset tag is not removed or defaced, and shall promptly notify the Ministry in the event that the assets tag is detached or otherwise modified in anyway.

5. The Ventilators shall at all times remain the property of the Province, and despite anything to the contrary in these criteria and terms, shall be returned to the Province upon request of the Province. The Hospital may not lend, pledge, sell or otherwise dispose of the Ventilators except as permitted herein or otherwise in writing by the Province. The loaning of the Ventilators to the Hospital does not in any way signify an intention to renounce or abandon title to the Ventilators by the Province.

6. If the Province requests that the Hospital return the Ventilators, or if the Hospital determines that it no longer requires the Ventilators, the Hospital shall return the Ventilators to a place and in a manner that is satisfactory to the Ministry, in such condition that allows for the

immediate use of the Ventilators by other hospitals. For greater certainty, the Hospital shall return the Ventilators with re-usable equipment components including: heated humidifier, temperature probe, humidifier cable, and reusable expiratory filter; and, disposable equipment consumables including: circuits, humidifier pots, and disposable expiratory filters. These items must be in sufficient quantities required in order for a hospital to use the Ventilators.

7. The Hospital shall not provide the Ventilators to any other party (including, for greater certainty, other hospitals) without the express written permission of the Province.

8. The Hospital shall provide accurate reports on the status, usage and location of the Ventilators to the Province upon request of the Province and shall grant the Province or its authorized representative(s) access to the Ventilators, any documentation related to the Hospital's use or storage of the Ventilators or otherwise to the subject matter of these criteria and terms, and to any building or premises where the Ventilators or such documentation may be kept or stored, for the purpose of assessing the condition of the Ventilators, the Hospital's compliance with these criteria and terms, or in order to take possession of the Ventilators.

9. The Hospital shall promptly notify the Province of any malfunctions of or damage to the Ventilators by contacting Critical Care Services Ontario, and shall take any steps reasonably required by the Province in connection with such malfunction or damage.

10. The Hospital shall at all times use reasonable care when handling, storing, transporting and otherwise dealing with the Ventilators. Subject to any applicable warranty protection that may be available to the Province in connection with the Ventilators, the Hospital shall be liable to the Province for any loss, theft or damage of or to the Ventilators that may occur when the Ventilators are under the care of the Hospital or its employees, agents and subcontractors.

11. The Province shall not be liable in any way to the Hospital in connection with the use or handling of the Ventilator by the Hospital or any other party, or otherwise in connection with the subject matter of these criteria and terms.

12. The Hospital hereby agrees to indemnify and hold harmless her Majesty the Queen in right of Ontario, her Ministers, agents, appointees and employees from and against any and all liability, loss, costs, damages and expenses (including legal, expert and consultant fees), causes of action, actions, claims, demands, lawsuits or other proceedings, by whomever made, sustained, incurred, brought or prosecuted, in any way arising out of or in connection with the Ventilators or otherwise in connection with these criteria and terms, unless solely caused by the negligence or willful misconduct of the Province.

FORM TWO: Host Hospital Checklist for Sending and Receiving Provincial Ventilators

To be completed prior to ventilator shipping and upon return

Host Hospital Checklist for Sending and Receiving Provincial Ventilators

NOTE: Host Hospital to contact the vendor(s) directly, for repairs, malfunctions or damages that fall within warranty terms and conditions.

Date: _____	**Completed By: _____**	
Host Hospital Name: **Site Lead (Name and Title):** **Contact Number and Email:**		
Ventilator being: □ Shipped □ Received *or* □ For Rotation *(Check One)* ***Please complete one form per ventilator (to be filed at your hospital)***		
Requesting Hospital Name	**Requesting Hospital Contact Name and Number**	
Type of Ventilator (AVEA, Evita XL, PB 840)	**Date Shipped/Received**	
MOH Asset Tag Number	**Hospital Tag Number**	**Serial Number**

Action	Status	Date	Initials
Read hours meter	**Number of hours: _____**		
Wipe down ventilator	□ **No** □ **Yes**		
Biomedical electrical check (receiving only)	□ **No** □**Yes**		
Check overall condition of the housing	□**Very Good** □**Good** □**Poor**		
Keyboard/panel condition	□**Very Good** □**Good** □**Poor**		
Trolley/stand condition – casters	□**Very Good** □**Good** □**Poor**		
Scratches or damage on display field/screen	□ **No** □**Yes: _____**		
Power cord attached	□ **No** □**Yes**		
Patient circuit arm attached	□ **No** □**Yes**		
Inspiratory block and fittings checked	□ **No** □**Yes**		

Expiratory block and fittings checked	□ **No** □**Yes**		
Fan cover and filters in place	□ **No** □**Yes**		
Operator Manual (if requested)	□ **No** □**Yes**		
Vendor information on the ventilator	□ **No** □**Yes**		
Fisher & Paykel humidifier attached	□ **No** □**Yes**		
Heated wire & temperature probe cables	□ **No** □**Yes**		
O_2 and air high pressure lines attached with DISS connections	□ **No** □**Yes**		
Circuits/pots sent	□ **No** □**Yes:** **Number Sent** ___		
Circuits/pots returned	□ **No** □**Yes:** **Number Returned** ___		
External flow sensor included	□ **No** □**Yes:** **Number Sent** ___		
Heated Expiratory filter (Evita XL) sent	□ **No** □**Yes** □ **n/a**		
Expiratory filter 840 sent	□ **No** □**Yes** □ **n/a**		
Expiratory filter Avea sent	□ **No** □**Yes** □ **n/a**		
Circuits/ventilator sent	□ **No** □**Yes:** **Number Sent** ___		

Standard Biomedical Test	**Pass**	**Date**	**Signature**
Performed by:	□ **No** □**Yes**		
Biomedical Engineering Electrical Safety Test	**Pass**	**Date**	**Signature**
Performed by:	□ **No** □**Yes**		
Respiratory Therapy Department Functionality Test	**Pass**	**Date**	**Signature**
Performed by:	□ **No** □**Yes**		

Additional Notes:

This form was completed by:

Name:	
Position:	**Contact Number:**
Signature:	**Date:**

FORM THREE: Requesting Hospital Checklist for Sending and Receiving Provincial Ventilators

To be completed upon receiving ventilator and prior to returning to Host Hospital

Requesting Hospital Checklist for Sending and Receiving Provincial Ventilators

NOTE: Requesting Hospital to contact Host Hospital Site Lead immediately, for repairs, malfunctions or damages to ventilators.

Date: _____	**Completed By: _____**	
Requesting Hospital Name: **Contact Person and Title:** **Contact Number and Email:**		
Ventilator being: □ Shipped □ Received (Check One) ***Please complete one form per ventilator (to be filed at your hospital)***		
Host Hospital Name	**Host Hospital Contact Name and Number**	
Type of Ventilator (AVEA, Evita XL, PB 840)	**Date Shipped/Received**	
MOH Asset Tag Number	**Hospital Tag Number**	**Serial Number**

Action	Status	Date	Initials
Read hours meter	**Number of hours: _____**		
Wipe down ventilator	**□ No □ Yes**		
Biomedical electrical check	**□ No □Yes**		
Check overall condition of the housing	**□Very Good □Good □Poor**		
Keyboard/panel condition	**□Very Good □Good □Poor**		
Trolley/stand condition – casters,	**□Very Good □Good □Poor**		
Scratches or damage on display field/screen	**□ No □Yes: _____**		
Power cord attached	**□ No □Yes**		
Patient circuit arm attached	**□ No □Yes**		
Inspiratory block and fittings checked	**□ No □Yes**		
Expiratory block and fittings checked	**□ No □Yes**		
Fan cover and filters in place	**□ No □Yes**		

Vendor information on the ventilator	□ **No** □**Yes**		
Fisher & Paykel humidifier attached	□ **No** □**Yes**		
Heated wire and temperature probe cables	□ **No** □**Yes**		
O_2 and air high pressure lines attached with DISS connections	□ **No** □**Yes**		
Circuits/pots sent	□ **No** □**Yes:** **Number Sent** ___		
Circuits/pots returned	□ **No** □**Yes:** **Number Returned** ___		
External flow sensor included	□ **No** □**Yes:** **Number Sent** ___		
Heated Expiratory filter (Evita XL) sent	□ **No** □**Yes** □ **n/a**		
Expiratory filter 840 sent	□ **No** □**Yes** □ **n/a**		
Expiratory filter Avea sent	□ **No** □**Yes** □ **n/a**		
Circuits/ventilator sent	□ **No** □**Yes:** **Number Sent** ___		
Vendor information on the ventilator	□ **No** □**Yes**		
Fisher & Paykel humidifier attached	□ **No** □**Yes**		
Heated wire and temperature probe cables	□ **No** □**Yes**		

Standard Biomedical Test	**Pass**	**Date**	**Signature**
Performed by:	□ **No** □**Yes**		
Biomedical Engineering Electrical Safety Test	**Pass**	**Date**	**Signature**
Performed by:	□ **No** □**Yes**		
Respiratory Therapy Department Functionality Test	**Pass**	**Date**	**Signature**
Performed by:	□ **No** □**Yes**		

Additional Notes:

This form was completed by:

Name:	
Position:	**Contact Number:**
Signature:	**Date:**

FORM FOUR: Revised Quarterly Ventilator Tracking Form (2019)

To be submitted to CCSO by fax or email one month after the end of quarter (i.e. July 31, October 31, January 31, April 30)

Revised Quarterly Ventilator Tracking Form (to be used from Oct. 1, 2019): Vent Use

To be submitted to CCSO by fax or email one month after the end of quarter (i.e. July 31, October 31, January 31, April 30)

CCSO Critical Care Services Ontario

Note: Please submit tracking details for all ventilators assigned to your Host Hospital								
Date Submitted:					**Quarter (e.g. Q1, 2019-20)**			
Host Hospital Name:					**Site Lead (Name):**			
					Contact Number:			
Date of Stockpile Vent Request *(dd/mm/yy)*	**Name of Requesting Hospital, Site**	**Ventilator Type** *(Model)*	**Asset Tag #**	**Release Date** *(dd/mm/yy)*	**Return Date** *(dd/mm/yy)*	**If not returned by end of reporting period, Anticipated Return Date** *(dd/mm/yy)*	**Damages Noted Upon Return?** *(Y/N)*	*If damages noted, what follow-up steps were taken?*

Revised Quarterly Ventilator Tracking Form (to be used from Oct. 1, 2019): Rotation and Maintenance

To be submitted to CCSO by fax or email one month after the end of quarter (i.e. July 31, October 31, January 31, April 30)

CCSO Critical Care Services Ontario

Note: Please submit tracking details for all ventilators assigned to your Host Hospital						
Date Submitted:				**Quarter (e.g. Q1, 2019-20)**		
Host Hospital Name:				**Site Lead (Name):**		
				Contact Number:		
Ventilator Type *(Model)*	**Asset Tag #**	**Current Status** *(storage / rotation / other)*	**Other Status** *Please describe*	**Most Recent Into Rotation Date** *(dd/mm/yy)*	**Most Recent Returned from Rotation Date** *(dd/mm/yy)*	**Preventative Maintenance Update** *(date last completed/planned upcoming)*

For More Information contact:

Critical Care Services Ontario (CCSO)
Email: Info@ccso.ca
Phone: (416) 340-4800 ext. 5856
Fax: (416) 340-4920