

IPC Commissioning of Portable Isolation Containment System

Portable Isolation Containment System (PICS)

This checklist was developed by Alberta Health Services (AHS) Infection Prevention and Control for use by experienced Infection Control Professionals (ICPs) during the establishment and commissioning of a Portable Isolation Containment System (PICS) used for providing healthcare services.

Overview

Health services are an integral component of every community. In the event of a disaster (man-made or natural) availability of, and accessibility to health services become increasingly important to support first responders and/or those who have been impacted by the disaster. In some circumstances, PICS may be established to function as an emergency healthcare centre. In extreme situations, including geographical isolation, the emergency healthcare centre may include a field operating room intended for life-saving procedures only.

The AHS Incident Management System (IMS) organizational structure is based on the Incident Command System (ICS), which enables rapid integration and connectivity between sites, services, zones, external partners and stakeholders. It defines the roles and responsibilities of personnel and the operating procedures to be used in the management and direction of emergencies and disasters.

IPC is represented at each level of the IMS structure. IPC requirements are integral to establishing and commissioning temporary health service delivery areas and structures used during the post-disaster period, such as a temporary urgent care centre. Each establishment of the PICS will vary, and this checklist is a guide to consider the required IPC principles in each scenario.

Infection prevention and control principles are to be followed during the operation of PICS. [Routine Practices](#) help prevent the spread of infections. Use routine practices, including an [Infection Prevention and Control Risk Assessment \(IPC RA\)](#) for every patient, every time, regardless of their diagnosis, suspect or confirmed infection or location within a PICS. If the PICS is used for an infectious disease requiring airborne isolation (e.g. measles), air flow, appropriate negative pressure and a plan for patient placement, including possible [cohorting](#) needs to be clearly outlined. If the PICS tents is being used for a specific infectious disease, consult with IPC and Workplace Health and Safety (WHS) to determine if personal protective equipment (PPE) can be worn continuously between patients. IPC and WHS will determine parameters for continuous PPE use in specific scenarios.

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No	Area	Yes	No
1.0	General considerations		
1.1	Consultation with Infection Prevention and Control before opening	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Consider the need for AHS security	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Clear separation of clean and soiled supplies and linens	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Designate separate entrance and exit routes for one-way patient flow	<input type="checkbox"/>	<input type="checkbox"/>
1.5	General workflow: clean to dirty	<input type="checkbox"/>	<input type="checkbox"/>
1.6	General waste holding area is away from PICS	<input type="checkbox"/>	<input type="checkbox"/>
1.7	Defined area for assessment and triage	<input type="checkbox"/>	<input type="checkbox"/>
1.8	Defined area for environmental services and supplies	<input type="checkbox"/>	<input type="checkbox"/>
1.9	Defined area for charting	<input type="checkbox"/>	<input type="checkbox"/>
1.10	Defined area for pharmacy medications and supplies	<input type="checkbox"/>	<input type="checkbox"/>
1.11	Biohazardous waste holding area is away from PICS	<input type="checkbox"/>	<input type="checkbox"/>
1.12	Potable water is accessible	<input type="checkbox"/>	<input type="checkbox"/>
1.13	Grey water holding tank is separated from potable water	<input type="checkbox"/>	<input type="checkbox"/>
1.14	Plan for management of reusable soiled equipment and instruments	<input type="checkbox"/>	<input type="checkbox"/>
1.15	Promote single-use medical devices	<input type="checkbox"/>	<input type="checkbox"/>
1.16	Eyewash station is available	<input type="checkbox"/>	<input type="checkbox"/>
1.17	Confidential paper-shredding container is available	<input type="checkbox"/>	<input type="checkbox"/>
2.0	Water intrusion management resources		
2.1	Sandbags, squeegee, bailing bucket, wet vacuum available	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Vinyl flooring sections are sealed during setup	<input type="checkbox"/>	<input type="checkbox"/>
3.0	Pre-occupancy requirements		
3.1	Floors are cleaned with a HEPA filter-equipped vacuum and washed	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Interior and exterior vinyl walls are cleaned with a standard detergent and warm water as per manufacturer's instructions	<input type="checkbox"/>	<input type="checkbox"/>
3.3	In the OR and isolation pods the interior walls are disinfected with AHS provided disinfectant	<input type="checkbox"/>	<input type="checkbox"/>

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No	Area	Yes	No
4.0	Washroom/portable toilet		
4.1	Toilet and hand hygiene sinks are available for both staff and patients	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Dedicated isolation patient toilet and hand hygiene sink	<input type="checkbox"/>	<input type="checkbox"/>
5.0	Hand hygiene accessibility		
5.1	Consult the AHS ABHR Dispenser Placement Algorithm to optimize locations and determine the maximum allowable number of dispensers	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Priority for placement of Alcohol-Based Hand Rub (ABHR)	<input type="checkbox"/>	<input type="checkbox"/>
	a) Priority 1 - point-of-care	<input type="checkbox"/>	<input type="checkbox"/>
	b) Priority 2 - clean and sterile supplies	<input type="checkbox"/>	<input type="checkbox"/>
	c) Priority 3 - PPE donning and doffing	<input type="checkbox"/>	<input type="checkbox"/>
	d) Priority 4 - at entrance/exit to the healthcare area	<input type="checkbox"/>	<input type="checkbox"/>
5.3	Portable hand hygiene sink, soap dispenser, and disposable single-use towels are available	<input type="checkbox"/>	<input type="checkbox"/>
6.0	Standard Operating Procedures (SPOs)		
6.1	Outbreak Management Guideline with line lists	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Environmental Services Standard Operating Procedures	<input type="checkbox"/>	<input type="checkbox"/>
6.3	General and Biomedical Waste	<input type="checkbox"/>	<input type="checkbox"/>
7.0	Environmental cleaning		
7.1	Consider secondment of AHS ES staff or contracted agency familiar with cleaning healthcare facilities	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Schedule for routine environmental cleaning, including patient area and outbreak events is available	<input type="checkbox"/>	<input type="checkbox"/>
7.3	AHS-provided RTU (ready to use) disinfectant products and wipes are available	<input type="checkbox"/>	<input type="checkbox"/>
7.4	Cart with cleaning supplies and disinfectants are available	<input type="checkbox"/>	<input type="checkbox"/>
7.5	Blood and body fluid spill kit including cleaning cart, hand pail, clean cloths, wet mop, bucket and wringer, cleaning/disinfecting product(s), spill pack, dust pan, brush, wet floor signs, garbage bags, linen bags (for soiled linen),	<input type="checkbox"/>	<input type="checkbox"/>

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No	Area	Yes	No
	mask and gloves, absorbent material, and safety goggles/glasses. Additional PPE may be required, as appropriate.		
8.0	Heating/ventilation/air conditioning		
Depending on the use of PICS, air pressure and air exchanges may be validated by engineers, otherwise directional airflow will be verified.			
8.1	Minimally establish directionality, pressure, temperature and humidity	<input type="checkbox"/>	<input type="checkbox"/>
8.2	Relative humidity monitoring and documentation: 30-60%	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Temperature monitoring and documentation: 20-24° C	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Documented maintenance schedule for Air/HEPA Filters	<input type="checkbox"/>	<input type="checkbox"/>
8.5	Clean storage area - positive pressure: 12 (air changes/hour) ACH	<input type="checkbox"/>	<input type="checkbox"/>
8.6	Resuscitation, treatment area and/or airborne isolation room: negative pressure: 12 ACH	<input type="checkbox"/>	<input type="checkbox"/>
8.7	Soiled storage area - negative pressure: 10 ACH	<input type="checkbox"/>	<input type="checkbox"/>
8.8	Operating room - positive pressure: 20 ACH (airflow from top down ideal)	<input type="checkbox"/>	<input type="checkbox"/>
8.9	Monitoring and documentation of airflow, pressure and ACH	<input type="checkbox"/>	<input type="checkbox"/>
9.0	Triage area		
9.1	Consider space and privacy for conducting assessments	<input type="checkbox"/>	<input type="checkbox"/>
9.2	Masks and ABHR are available for patients	<input type="checkbox"/>	<input type="checkbox"/>
9.3	Triage area is able to separate patients requiring isolation, i.e., distance / physical barriers	<input type="checkbox"/>	<input type="checkbox"/>
9.4	Personal Protective Equipment is available in triage area with adequate sizes, models, and quantities		
9.5	Symptom-based assessment tools , including GI/ILI/rash/wound, are available to assess all patients for signs and symptoms of acute infection	<input type="checkbox"/>	<input type="checkbox"/>
9.6	Symptom-based references for PPE and additional precautions are available as part of the IPC Resource Manual	<input type="checkbox"/>	<input type="checkbox"/>
10.0	Treatment area		
10.1	Beds are separated by 2 meters with barriers (walls/screens/curtains)	<input type="checkbox"/>	<input type="checkbox"/>
10.2	ABHR dispensers are readily available (see 5.0 ↑)	<input type="checkbox"/>	<input type="checkbox"/>

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No	Area	Yes	No
10.3	Smooth, non-porous, solid-surface general waste containers are available	<input type="checkbox"/>	<input type="checkbox"/>
10.4	Biohazardous waste containers are available	<input type="checkbox"/>	<input type="checkbox"/>
10.5	Sharps containers available at point of care	<input type="checkbox"/>	<input type="checkbox"/>
10.6	Clean and sterile supplies are minimized, i.e., no overstocking	<input type="checkbox"/>	<input type="checkbox"/>
10.7	Supplies and linens stored away from potential contamination	<input type="checkbox"/>	<input type="checkbox"/>
10.8	Adequate types, sizes, models and quantities of PPE are available	<input type="checkbox"/>	<input type="checkbox"/>
11.0	Isolation treatment area		
11.1	Is connected to a vestibule or interconnected hallway that is used as an anteroom	<input type="checkbox"/>	<input type="checkbox"/>
11.2	Beds are separated by 2 meters with barriers (walls/screens/curtains)	<input type="checkbox"/>	<input type="checkbox"/>
11.3	Hand hygiene ABHR dispensers are readily available. In case of a GI outbreak, consider relocating a portable hand hygiene sink (see 5.0 ↑)	<input type="checkbox"/>	<input type="checkbox"/>
11.4	General waste containers are available large enough for (PPE) disposal	<input type="checkbox"/>	<input type="checkbox"/>
11.5	Biohazardous waste containers are available	<input type="checkbox"/>	<input type="checkbox"/>
11.6	Sharps containers are at point-of-care	<input type="checkbox"/>	<input type="checkbox"/>
11.7	Clean and sterile supplies are minimized, i.e., no overstocking	<input type="checkbox"/>	<input type="checkbox"/>
11.8	Personal Protective Equipment is outside of patient area in anteroom with adequate sizes, models, and quantities	<input type="checkbox"/>	<input type="checkbox"/>
12.0	Isolation PPE cart supplies		
12.1	Four sizes of gloves	<input type="checkbox"/>	<input type="checkbox"/>
12.2	Disposable isolation gowns/aprons	<input type="checkbox"/>	<input type="checkbox"/>
12.3	Protective eyewear, i.e., procedure masks with attached face shield or face shield/safety glasses	<input type="checkbox"/>	<input type="checkbox"/>
12.4	Respirators - N-95 respirators including adequate makes/models/sizes	<input type="checkbox"/>	<input type="checkbox"/>
12.5	Procedure masks for use with face shield/safety glasses and for transporting patients on droplet or airborne precautions	<input type="checkbox"/>	<input type="checkbox"/>
12.6	ABHR dispenser	<input type="checkbox"/>	<input type="checkbox"/>
12.7	Additional precautions signs	<input type="checkbox"/>	<input type="checkbox"/>

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No	Area	Yes	No
12.8	AHS-provided disinfectant wipes	<input type="checkbox"/>	<input type="checkbox"/>
13.0	Signage/posters		
13.1	Hand Hygiene <ul style="list-style-type: none"> How to use Alcohol-based Hand Rub How to Hand Wash 	<input type="checkbox"/>	<input type="checkbox"/>
13.2	Donning/Doffing <ul style="list-style-type: none"> Putting on (Donning) Personal Protective Equipment (PPE) Taking off (Doffing) Personal Protective Equipment (PPE) 	<input type="checkbox"/>	<input type="checkbox"/>
13.3	Additional Precautions <ul style="list-style-type: none"> https://www.albertahealthservices.ca/ipc/Page6854.aspx 	<input type="checkbox"/>	<input type="checkbox"/>
13.4	Infection Prevention and Control Risk Assessment Tools <ul style="list-style-type: none"> Infection Prevention and Control Risk Assessment (IPC RA) 	<input type="checkbox"/>	<input type="checkbox"/>
13.5	Rapid Assessment & Triage for Patients Presenting with Fever <ul style="list-style-type: none"> IPC Rapid Assessment and Triage for ED / Urgent Care Patients with Potential VHF 	<input type="checkbox"/>	<input type="checkbox"/>
13.6	Assessment Tools (Rash, GI, ILI and Wound Symptom Assessment) <ul style="list-style-type: none"> GI Algorithm Rash Algorithm Wound Algorithm Respiratory (ILI) Algorithm Patient Symptoms Alert Poster (multiple languages) 	<input type="checkbox"/>	<input type="checkbox"/>
It is recommended that signs for the following areas be prepared and printed for use during setup of the PICS.			
13.7	Clean supplies	<input type="checkbox"/>	<input type="checkbox"/>
13.8	Soiled supply holding area	<input type="checkbox"/>	<input type="checkbox"/>
13.9	Soiled linen holding area	<input type="checkbox"/>	<input type="checkbox"/>
13.10	Clean linen holding area	<input type="checkbox"/>	<input type="checkbox"/>
13.11	General waste holding area	<input type="checkbox"/>	<input type="checkbox"/>

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No	Area	Yes	No
13.12	Biohazard/sharps waste holding area	<input type="checkbox"/>	<input type="checkbox"/>
13.13	“STOP! DO NOT ENTER” for back door of isolation pod	<input type="checkbox"/>	<input type="checkbox"/>
13.14	Patient flow entry and exit routes	<input type="checkbox"/>	<input type="checkbox"/>

For more information, contact:
IPCSurvStdAdmin@ahs.ca
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Examples of PICS

