

## Increasing Collaboration and Stakeholder Engagement to Improve the Use of Personal Protective Equipment

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North Zone Infection Prevention and Control  
Alberta Health Services

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Alberta Health Services – Infection Prevention and Control

No disclosures to report

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Background Issue

### Alberta Health Services

Five geographic zones

- North
- Edmonton
- Central
- Calgary
- South



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**Background Issue**

## North Zone

- Inconsistencies with proper PPE selection, donning and doffing
- Geographical separation
- Competing surveillance priorities and resources

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**Background Issue**

## The Hospital

In 2018, an increase in hospital acquired infections was observed in a small rural healthcare facility

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**PPE Auditing Tool**

Alberta Health Services  
Infection Prevention & Control

**Infection Prevention and Control - North Zone  
Personal Protective Equipment (PPE) Audit Tool**

Facility Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Unit / Rooms #: \_\_\_\_\_ Start / End Time: \_\_\_\_\_  
 Health Worker:  Nurse  Physician  Other: \_\_\_\_\_ Reviewer's Name: \_\_\_\_\_

Please indicate the type of Additional Precautions applied: \_\_\_\_\_

Indicate the sequence at which PPE is donned or doffed:				Check the "Yes" column if the following inappropriate activities were observed during the audit	
Donning PPE		Doffing PPE			Yes
Activity	Order (1 - 5)	Activity	Order (1 - 7)		
Hand Hygiene	<input type="checkbox"/>	Gloves	<input type="checkbox"/>	PPE worn outside of room or bed space	<input type="checkbox"/>
Gown	<input type="checkbox"/>	Hand Hygiene	<input type="checkbox"/>	Double-gloving	<input type="checkbox"/>
Mask	<input type="checkbox"/>	Gown	<input type="checkbox"/>	Microsizing gloves	<input type="checkbox"/>
Eye Protection	<input type="checkbox"/>	Hand Hygiene	<input type="checkbox"/>	Gloves not changed in between care activities and procedures	<input type="checkbox"/>
Gloves	<input type="checkbox"/>	Eye protection	<input type="checkbox"/>	Gowns worn incorrectly	<input type="checkbox"/>
		Mask	<input type="checkbox"/>	Same gown worn in different occasions	<input type="checkbox"/>
		Hand Hygiene	<input type="checkbox"/>	Incorrect type of mask worn (i.e. procedure mask vs. N95 respirator)	<input type="checkbox"/>
				Improper eye protection is worn • Eyeglasses are not substitutes for eye protection	<input type="checkbox"/>

Additional Comments: \_\_\_\_\_

© Albert Health Services. All rights reserved. (1) Alberta, (2) Infection and Control, (3) Center, (4) Center and Support Unit, (5) Division.  
 Contact the IIC at: 403-293-1000 or 1-877-424-2222 or visit: www.alberta.ca/infection-control

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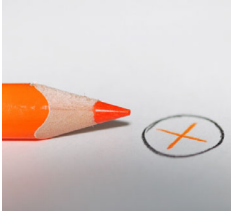
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**PPE Auditing Tool**

- Three months of auditing
- The audit revealed low compliance
- Overall compliance determined by selection, donning and doffing



HCA	Type of Isolation	Correct PPE Selected	PPE Selected	Correct Donning Sequence	Correct Doffing Sequence	Inappropriate Activities	Overall Compliant
Nurse	C. Diff Contact	No	None	No	No	N/A	No

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**Stakeholder Engagement Strategies**

### 1. Leadership Meetings

- IPC meeting with managers present from all departments
- Education had been exhausted
- Change in environment



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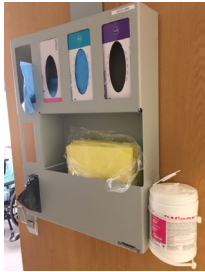
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**Stakeholder Engagement Strategies**

### 2. Think Tank with ICPs

- Share ideas, research and strategies
- Previous interventions
- Use of PPE holders



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Stakeholder Engagement Strategies

### 3. TRIZ Technique with Frontline Staff

**TRIZ METHOD FOR PROBLEM SOLVING**

```
graph TD; A[Your problem] --> B[TRIZ conceptual problems]; B --> C[TRIZ suggested solution]; C --> D[Your customized solution];
```

Reference: <https://www.designorate.com/triz-method-problem-solving/>

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Stakeholder Engagement Strategies

### TRIZ Example

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Stakeholder Engagement Strategies

### TRIZ Huddles

Gather a few people together and use the TRIZ technique to identify issues and discuss solutions

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Stakeholder Engagement Strategies

## Common Themes from TRIZ

- Lack of hand hygiene
- Shared equipment not being cleaned
- PPE not being used properly

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- Forgetting or failing to check the proper steps of PPE donning and doffing

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Collaborative Strategy

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Collaborative Strategy

### Contact Precautions

Donning		Doffing	
Hand hygiene	Gloves	Gloves	Hand hygiene
Gown			Gown
Gloves			Hand hygiene

**1. Hand Hygiene**

- Wash hands with soap and water for at least 20 seconds.
- Use hand sanitizer if soap and water are not available.

**2. Gown**

- Hold the gown by the neck loops and unfold.
- Put the gown over your head and shoulders.
- Secure the gown at the wrists.

**3. Goggles or Face Shield**

- Hold the frame by the temples.
- Place the goggles or face shield over your eyes and nose.

**4. Glove**

- Hold the cuff of the glove and pull it over the other hand.
- Repeat for the other hand.

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