

HID Dispatch

A quarterly newsletter to share tips, trends and best practices across the state.

To don or not to don? That's the key question.



Personal Protection Equipment (PPE) is there to do just that, protect you. In the healthcare setting, it specifically protects you from exposure to infectious agents. Even though it is the only barrier between healthcare workers and a patient with a highly infectious disease (HID), most are not as familiar with it as they can be. We may, or may not, receive annual training on it and we probably rarely use it. How PPE prepared is your facility today to handle a HID patient if they were to walk through the door?

Tips in this newsletter will help you select the right PPE, properly store and stock PPE and train for when your facility needs it.

Choosing the right PPE

In a world with many options, PPE is no different. Not only are there different types of PPE for different professions, but more specifically there are several types of PPE for *just* the healthcare setting.

When Carle Foundation Hospital first began its Ebola journey, they used many different types. The State's recommendations differed from than Center for Disease Control (CDC), who had different suggestions than the World Health Organization (WHO).

Following guidelines is challenging. "Just as soon as we would get staff trained and up to date, the guidelines would change again so several different types of PPE were dispersed throughout our agency as well as inconsistencies in trainings," said Casey McCartney, HID program specialist.

Now a standardized approach is in place so the organization uses only one type of PPE. Not only does this provide staff with better training and peace of mind, but it also makes managing and distributing stock and monitoring expiration dates easier.



EMS staff in full PPE



HID unit staff in full PPE

Choosing the right PPE (cont'd)

Carle currently uses the [SafePAQplus kits](#) because everything is offered in one package. There are many options available but to adequately proper for HID patient, it is highly recommended that you find a way to keep the following on hand:

Impermeable Garment-Gown extending to mid-calf or coveralls (if using coveralls I recommend ones with foot coverings for easier doffing).

Respiratory Protection-PAPR, CAPR, or N95 Respirator or higher

Gloves-Two pairs of gloves, preferably extended cuff

Boot Covers-Covers that extend to mid-calf

Apron-This is only necessary if the patient is wet

<https://www.cdc.gov/vhf/ebola/healthcare-us/ppe/guidance.html>

PPE Supply

While having the right PPE is essential, it's also important to make sure you have enough of it. You may think a couple of boxes are enough, but once staff starts using it, it can go fast. Frontline facilities should have enough PPE to care for a patient for at least 12-24 hours, assessment hospitals for up to 5 days, and treatment centers for at least a week. Below is an example chart of estimated PPE usage at our facility. As you can see, if nothing goes wrong, no PPE is damaged, and nothing is wasted, 21 sets of PPE are needed per day. That makes 105 sets for 5 days and almost 150 sets for *one* week. If the lack of funds is the reason for not having adequate PPE at your facility, contact me and I will try to get you some.

| | Persons/shift | Shifts/day | Persons/Day |
|----------------------|---------------|------------|-------------|
| Nurses in PPE* | 4 | 2 | 8 |
| Physician in PPE | 1 | 1 | 1 |
| Trained Observer | 1 | 3 | 3 |
| Doffing Assistant | 1 | 3 | 3 |
| Lab Staff | 1 | 2 | 2 |
| Environment Services | 2 | 2 | 4 |
| Total Persons | | | 21 |

*We only have 3 nurses/shift, but one will have to don twice due to our rotation

<https://www.cdc.gov/vhf/ebola/pdf/preparing-hospitals-ebola.pdf>

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PPE Training

Wearing PPE is more than just putting on a mask and gown. If not done correctly, it can potentially lead to staff exposure. When working with a HID patient, take into account easily forgotten special considerations and have staff refresh them often.

How to safely conduct routine clinical care while wearing PPE: Guidelines require staff to be double gloved, which could make it more difficult to draw blood or take vitals. How does staff use a stethoscope if they are wearing a PAPR?

Precautions to prevent staff exposure: Know what to do if there is equipment failure. Get into the habit of avoiding reflexive actions, like touching your face, while wearing PPE.

How to doff PPE safely: Taking off PPE poses a high risk of exposure. Staff should know *where* and how to safely remove their PPE. They should know processes such as who helps them doff and how to dispose of their soiled PPE correctly.

Physiologic strain associated with PPE: Being in PPE for extended amounts of time can cause many adverse side effects such as overheating, anxiety and/or fatigue. It is important that staff be aware of this and prepare themselves as much as possible before donning PPE.

Location, location, location

Knowing what PPE to wear and how to use it is only helpful if you know where it's located. According to Illinois' Preparedness guidelines, facilities should be able to access their PPE supply (i.e. know the location of and have a sufficient quantity of UNEXPIRED supply) within ten minutes of patient's arrival. When choosing an adequate location, here are some things to consider:

- **Is it easily accessible?**

If we don't use something often, it can tend to be buried or lost amidst other things that also aren't used often. Having a dedicated and *organized* place to keep your PPE ensures it's accessed easily and quickly.

- **How often is it checked?**

Sometimes items are used and not replaced. In an emergency, it's not enough to *hope* someone replaced them. Consider keeping a log and having a designated person check it monthly.



"Our son's school is so private even we don't know where it is!"

Location, location, location (cont'd)

Items will occasionally expire. It can be frustrating to buy something, have it sit on the shelf, wait three years to never use it, have it expire and have to throw it away. Think of it like car insurance; if you ever get into a situation where you need to use it, you are going to be glad you have it.

- **Is it stored safely?**

Keep your PPE in a dry, clean space minimizing exposure to potentially damaging conditions. Always double-check PPE for any rips or degradation prior to putting it on.

Infection Prevention Corner: Where and how to safely doff PPE

The removal of PPE is one of the most risky aspects of wearing PPE. While there are many right ways to do it, following recommendations limit self-contamination. When removing your enhanced PPE, consider these tips to keep yourself safe:

- Before removing PPE, identify which areas of your PPE are more likely to be contaminated, and avoid touching those areas (the outside-front of PPE equipment, including goggles, mask, face shield, etc., are more likely to contain infectious organisms). Instead, remove PPE by touching the uncontaminated pieces (ex. inside of the PPE and or anything that has not come in contact with infectious organisms).
- When removing PPE, first remove the outer layer of gloves, often the most contaminated. Remove the mask or respirator last.
- If you are wearing full PPE, remove it all at the doorway or anteroom, except your respirator. After the door is closed, remove the respirator outside the patient room.
- Hand hygiene should ALWAYS be performed after your PPE is removed (ensure there is either a sink or alcohol-based hand rub for staff to use).

<https://www.cdc.gov/HAI/pdfs/ppe/PPEslides6-29-04.pdf>

Editor's Note: How does your PPE knowledge rank? Take this one-minute quiz to find out.



I'm hoping after reading this newsletter, you have a better idea of how to be adequately PPE prepared. I've created a [quiz](#) to help both you, and me, have a better idea of the status of your hospital. Just click the link below to take it!

<https://www.surveymonkey.com/r/N5PYRHH>

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