

TITLE: PERSONAL PROTECTIVE EQUIPMENT

PURPOSE: To provide guidance on the proper use of personal protective equipment in Harris Health System Facilities; and To provide additional guidance for personal protective equipment in implementing standard precautions and transmission-based precautions (i.e., contact, droplet, airborne) to prevent infection).

POLICY STATEMENT:

Harris Health System (Harris Health) follows the Center for Disease Control (CDC), 25 Texas Administrative Code Chapter 133, and Association of Peri-Operative Registered Nurses (AORN) guidelines, for the use of personal protective equipment by healthcare workers to prevent exposure to blood, body fluids, and other hazards, excluding personal protective equipment for emergency management for hazardous materials.

POLICY ELABORATIONS:

I. DEFINITIONS:

- A. **APRON:** Disposable or reusable covering to protect the upper torso, lower torso and thighs from blood or other body fluids.
- B. **BUNNY SUIT:** Disposable jumpsuit to completely cover all outer clothing in order to enter an Operating Room restricted area in lieu of scrubs.
- C. **FACE SHIELDS:** Clear plastic barrier covering the face including eyes, nose, and mouth.
- D. **GOWN:** Water resistant or impervious apparel that covers the arms, body and upper legs to prevent exposure to blood and other body fluids.
- E. **GLOVES:**

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POLICY AND REGULATIONS MANUAL

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Board Motion No: N/A
Last Revised Date: 11/27/2019
Due for Review: 11/27/2022

1. **EXAM:** Non sterile clean disposable gloves used for protection during non-invasive procedures or treatments; and
 2. **STERILE:** Sterile disposable hand covering used in invasive procedures.
- F. **GOGGLES:** Eye protection to prevent splashing to the eyes.
- G. **HAIR COVERS:** Disposable bouffant or skull caps that cover the hair.
- H. **HEALTH CARE PERSONNEL (HCP):** All paid and unpaid persons providing direct patient care and/or services or having direct patient contact in health-care settings at Harris Health facilities who have the potential for exposure to patients and/or to infectious materials, including body fluids/substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air. This policy shall include affiliates, contractors, and vendors who have direct contact with patients.
- I. **LEGGINGS/BOOTS:** Water impervious covers to protect lower extremities and shoes from exposure to splashing of blood or body fluids.
- J. **LABORATORY COATS:** Disposable or cloth covering of the torso and arms used to prevent exposure to blood, body fluids, chemicals, or caustic drugs.
- K. **MASKS (SURGICAL):** A disposable low particulate covering for mouth and nose that can be worn by HCP or patients. Surgical masks, worn by HCP, prevent inhalation or splashing to mouth and nose; if worn by a patient, prevent the escape of droplet nuclei.
- L. **N95 RESPIRATORS:** A high particulate filter that covers healthcare workers' mouths and nose to prevent exposure to airborne illnesses. (i.e., Tuberculosis).
- M. **PERSONAL PROTECTIVE EQUIPMENT (PPE):** A physical protective barrier that prevents direct contact with body fluids or contaminated surfaces. This includes gloves, gown, masks, respirators, face shields, hair covers, shoe covers, and leggings.

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1. **DONNING:** Putting on PPE; and
2. **DOFFING:** Safely removing or taking off PPE

N. **SHOE COVERS:** Water impervious cover to protect shoes from exposure to splashing of blood or body fluids.

O. **SLEEVES:** Plastic disposable arm covering.

II. RESPONSIBILITIES:

All staff, physicians, students and other HCPs shall be responsible for the following:

- A. Donning protective equipment when there is a likelihood that they may come into physical contact with blood, body fluids, fomites or other hazards; and
- B. Know how to properly
 1. Select appropriate PPE; and
 2. Don, doff, adjust, and wear PPE. (See Appendix A)

III. PROCEDURES:

See Appendix A and Appendix B.

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REFERENCES/BIBLIOGRAPHY:

2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. CDC Available On-Line:

http://www.cdc.gov/hicpac/2007ip_part4.html

<http://www.aornstandards.org/content/1/SEC23.body?sid=a7bba70a-72d3-4bab-8e4b-372daf8b5d93>

<http://dass-b/Emergency%20Management/Shared%20Documents/Support%20Documents/DECON%20PROCESS.pdf>

[https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=T&app=9&p_dir=F&p_floc=173026&p_floc=44484&p_ploc=29578&pg=4&p_tac=&ti=25&pt=1&ch=133&rl=41](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=T&app=9&p_dir=F&p_floc=173026&p_floc=44484&p_ploc=29578&pg=4&p_tac=&ti=25&pt=1&ch=133&rl=41)

OFFICE OF PRIMARY RESPONSIBILITY:

Harris Health System Infection Prevention

REVIEW/REVISION HISTORY:

Effective Date	Version # (If Applicable)	Review/ (Indicate Revised)	Revision Reviewed	Date or	Approved by:
		Approved	6/1/2016	(By evote)	Infection Prevention Committee
	1.0	Approved	6/14/2016		Structure and Organizational Standards Committee
		Approved	7/25/2016		Physical Environment Committee
		Approved	10/27/2016		Interdisciplinary Clinical Committee
		Approved	5/18/2018		Infection Prevention System System-wide IP Committee Meeting
		Approved	6/12/2018		Structure and Organizational Standards Committee
		11/27/2019 Expedited Executive Approval via Rapid Cycle			EVP/CME

APPENDIX A PROCEDURES SELECTION OF PPE

A. Gloves:

1. Exam Gloves: Should be used for all direct contact during a non-sterile procedure or treatment including specimen collection;
2. Sterile Gloves: Should be used for invasive procedures including Central or PICC line placement, surgical procedures, and invasive procedures;
3. Gloves are to be worn when contact with blood or body fluids is anticipated;
4. Gloves are to be worn when touching environmental surfaces and/or patient care articles likely to be contaminated or soiled with blood or body fluids;
5. Gloves are to be put on just prior to performing a patient care task that involves contact with blood or body fluids;
6. Gloves should be removed immediately, without touching non-contaminated surfaces, as soon as the patient care task is complete; and
7. When performing multiple procedures on the same patient, gloves should be changed after contact with blood and body fluids that contain high concentrations of microorganisms (e.g., feces, wound drainage or oropharyngeal secretions) and before contact with a clean body site such as non-intact skin and vascular access sites.

B. Gowns:

1. Gowns should be used when there is a likelihood of splashing or if the healthcare worker could be exposed to pathogens, blood and/or body fluids in the environment;
2. Gown should be water impervious; and
3. Gowns should also be worn in Contact or Droplet Isolation rooms.

C. Masks:

1. Surgical Masks: Should be worn by healthcare worker to prevent any splashing to mouth or nose or prevent inhalation of droplet secretions;

2. Surgical masks may be used to cover the mouth and nose of patients or visitors who have a respiratory illness to prevent transmission to others. Note: Patients or visitors should never be given an N95 mask. If a patient arrives with a mask from outside of the hospital/clinic, it is recommended to replace this mask with surgical mask from the department supply;
3. Surgical mask should cover the mouth and nose and be secured in a manner that prevents venting at the sides of the mask. A fresh surgical mask should be donned before the health care worker performs or assists with each new procedure;
4. Surgical mask should be replaced and discarded whenever it becomes wet or soiled or has been taken down;
5. Surgical mask should not be worn hanging around the neck;
6. Surgical Masks should be removed and discarded by handling only the mask ties. All HCPs granted an exemption for the influenza vaccination must wear a surgical mask at all times while unvaccinated and while in any Harris Health patient care or clinical care area at a minimum from November 16th through March 31st of the following calendar year. See Policy 3.55.00; and
7. N95 Respirators: Should be worn only by healthcare workers who have been medically screened and fit tested at hire and annually. N95 masks are never to be placed on patients under any circumstance. They may not be worn in public areas. They should be worn in Airborne Isolation rooms.

D. Face Shields/Eye Shields:

Face Shields to be worn when splashing could occur and during procedures when blood or bone could reach the healthcare workers mouth, nose, or eyes.

E. Hair Covers:

Should be worn by healthcare workers during sterile procedures including all surgeries, central line placement, and other invasive procedures. Fabric hair covers must be covered with a bouffant disposable hair cover.

F. Shoe Covers:

Should be worn in places where splashing to the floor is possible. Shoe covers must be removed immediately after use. Shoe covers should NOT be worn in hallways or public areas.

G. Leggings/Boots:

1. Should be worn in environments where there is a possibility of exposure to large volumes of body fluids, such as Labor and Delivery, surgery, and trauma rooms. They should never be worn outside of those rooms and must be immediately removed after use; *Refer to Harris Health System Mass Decontamination Procedures and for how to properly select PPE for patients that have been compromised by residual biological agents, chemical or radiologic contamination <http://dass-b /Emergency%20Management /Shared%20Documents/Support%20Documents/DECON%20PROCESS.pdf>;
2. Proper Locations to wear PPE; and
3. Isolation Rooms: All PPE as directed by the ordered isolation category (See Harris Health System Policy 3000).

H. Laboratory Coats:

1. Disposable Laboratory Coats should be used when there is a likelihood of splashing or if the healthcare worker could be exposed to pathogens, blood and/or body fluid in the environment, such as the laboratory.
2. Disposable Laboratory Coats should be water impervious.
3. Non-disposable Laboratory Coats should never be worn in Isolation rooms.
4. Disposable Laboratory Coats must be discarded in the patient room if worn if worn inside an isolation room.
5. Disposable Laboratory Coats, worn while performing dialysis or administering infusion treatments, should not be worn outside the treatment area, such as: clean storage rooms, non-patient care areas, offices, employee breakrooms and the cafeteria/dining room.

- I. PPE may be worn in all locations that exposure to blood, body fluids, formites, splashes, and other hazards are anticipated (i.e., surgical suites, decontamination rooms, dishwashing room in kitchen, etc.)

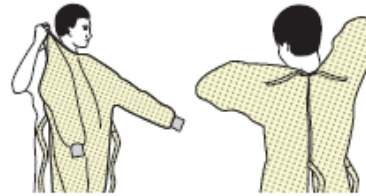
APPENDIX B PROCEDURES

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene



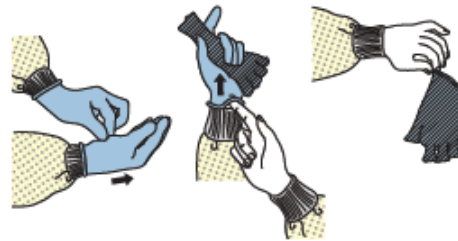
APPENDIX B (Continued) PROCEDURES

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

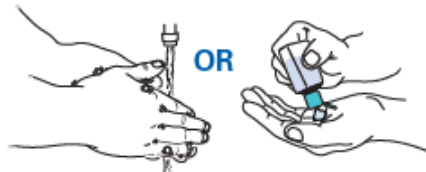


4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



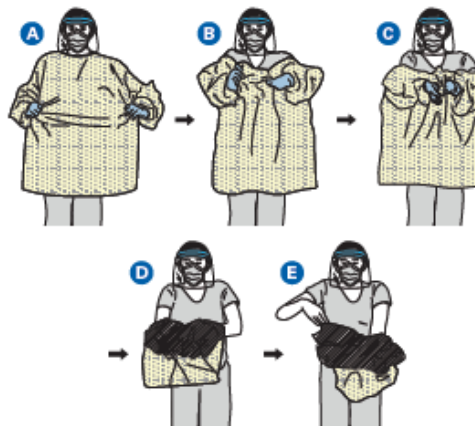
APPENDIX B (Continued) PROCEDURES

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

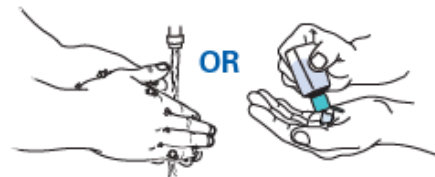


3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE

