



NC Department of Health and Human Services
Division of Public Health

**StrongSchoolsNC Infection Control
and PPE Guidance (K-12)**

**Use of Personal Protective Equipment
(PPE) for School Staff**

NC DPH School Health Nurse Consultant Team
8/2020

NCDHHS, Division of Public Health |

Welcome to the StrongSchoolsNC Infection Control and PPE Guidance Training. This session is intended for use by school staff who do not have access to a school nurse for training. It will review the guidance directions for conditions in which PPE is recommended for use in schools, what PPE should be used, and how PPE should be properly maintained or disposed. Note: This discussion does not address the specific PPE requirements for individual healthcare procedures that are routinely performed in schools.

**Participants are advised to reference
the most recently posted information
available on the [NC DHHS](#) school
guidance webpage.**

NCDHHS, Division of Public Health |

The link on this slide goes to all DHHS StrongSchoolsNC guidance for schools. Staying current on requirements and guidance is important. It is advised that school staff print copies for reference and be fully informed about current guidance.

Video Review Required With This Training

- Understanding how to correctly put on (donning) and take off (doffing) is important in personal protective equipment (PPE) use.
- Please review one of the recommended videos for this purpose before proceeding.

[CDC Using Personal Protective Equipment](#)

[Personal Protective Equipment for COVID-19](#)

[PPE Donning and Doffing](#)

NCDHHS, Division of Public Health |

It is also expected that a PPE video covering donning and doffing of PPE has been completed prior to completing this session. Video options for review are available in the StrongSchoolsNC Infection Control and PPE Guidance (K-12) document and are listed here. Please select one to view.

Introduction

Topics

- What is PPE and who should use it?

- PPE and the Sick/Isolation Location

- Select/Use/Optimize/Dispose of PPE
 - Procedure Facemasks
 - Face Shields
 - Gowns

- Hand Hygiene
 - Gloves

NCDHHS, Division of Public Health |

The topics that we will cover are listed on this slide. Schools have an important role in providing a safe and healthy learning environment for students and school staff. School staff help to reduce communicable disease exposure and transmission through use of appropriate infection control practices, supplies, and Personal Protective Equipment (PPE). While school staff may routinely use PPE for other healthcare procedures, the presence of COVID-19 requires additions not normally addressed. This session covers modifications resulting from challenges during a pandemic. This training reflects guidance in the [StrongerSchoolsNC Public Health Toolkit \(K-12\)](#) and [StrongSchoolsNC Infection Control and PPE Guidance \(K-12\)](#).

What is Personal Protective Equipment?

- Personal Protective Equipment includes coverings that are designed to protect the wearer and/or those nearby from the spread of illness-causing germs.
- The acronym PPE is often used to reference these items.
- PPE acts as a barrier to the wearer's skin, mouth, nose and/or eyes.

NCDHHS, Division of Public Health |

There are probably situations in your school right now where you normally use some form of PPE. Some examples include helping a student with a cut that is bleeding, performing a healthcare procedure for a student, and cleaning up body fluid spills. This slide describes that PPE is an acronym for the term Personal Protective Equipment. PPE creates a barrier between the wearer and possible sources of exposure to germs.

When Should PPE Be Worn?

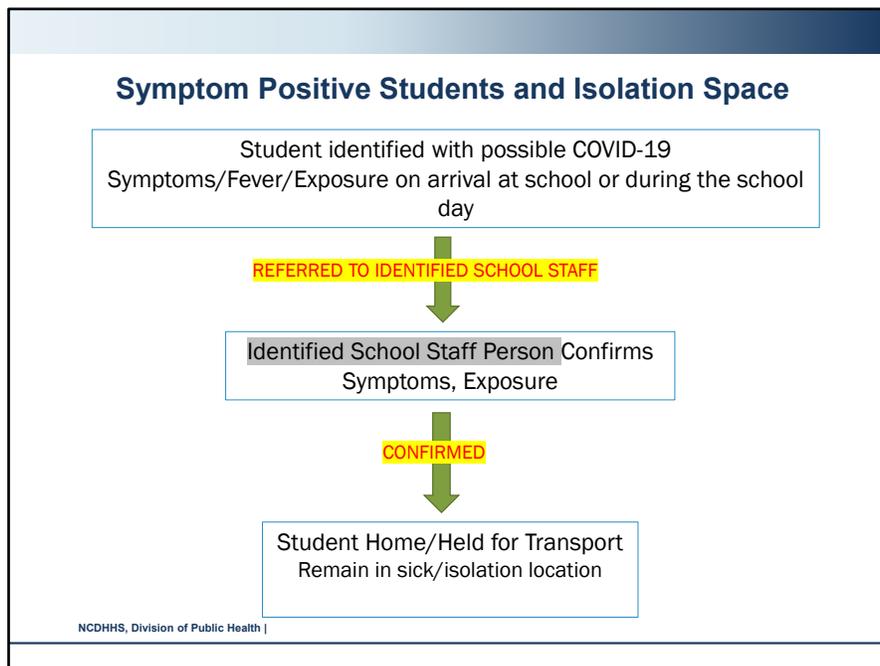
PPE should be used when:

- Monitoring or assisting a symptom positive student when it is not possible to maintain recommended distance
- Completing healthcare procedures for a symptom positive student while the student is awaiting transportation home
- Completing certain breathing-related health care procedures, such as a nebulizer treatment or suctioning

NCDHHS, Division of Public Health |

As described in the StrongSchools NC Infection Control and PPE Guidance, PPE should primarily be used by school staff for certain situations as listed on this slide (review bulleted situations). PPE provided by the state has been sent for use by people in the school setting that are identified to manage or provide care for COVID-19 symptom positive students. Those activities may present higher risk for exposure in some situations. Individuals in schools are primarily well, therefore PPE does not need to be used all the time and does not need to be used to care for children who appear healthy. PPE should be conserved and used with discretion.

While it is the goal that symptom positive individuals leave the building as soon as possible, it is recognized that sometimes circumstances prevent that from happening. Students who meet the criteria for returning home, and are awaiting transportation, should be held in a 'sick' or 'isolation' room/space reserved for that purpose. Students who are symptomatic will be monitored by staff who use PPE as recommended.



This chart shows the movement of a student identified with possible symptoms or who has shared possible exposure/diagnosis. As described in StrongSchoolsNC guidance, the person(s) receiving and managing the student should be a school staff person(s) identified for this purpose. Administrators should identify the staff members that will handle this role. That person is noted in gray on the slide.

Symptoms listed in guidance include fever, chills, shortness of breath/difficulty breathing, new cough, new loss of taste or smell.

Sick/Isolation Space

- This room/space is separate from that used for well care; dedicated to use by symptomatic individuals during processing and/or awaiting transport home
- [StrongSchoolsNC Infection Control and PPE Guidance \(K-12\)](#) covers PPE for use in caring for symptom positive students/staff
- Symptomatic students must be kept under visual supervision until released
- A record should be maintained of individuals identified as symptomatic and time spent in the isolation location
- Coordinate cleaning with environmental services after room use as directed in guidance

NCDHHS, Division of Public Health |

While staff persons will immediately go home, students are managed in the sick or isolation space that has been identified for that purpose. This is recommended to be a dedicated space for use only by symptomatic individuals, separate from where well care is given in the school.

DHHS Reference Guide for Suspected, Presumptive, or Confirmed Cases of COVID-19 guidance covers response and follow up needed for specific student situations (Exposure/No Symptoms, Diagnosis/No Symptoms, Symptoms). While the student must be visually supervised, school staff should remember to maintain a minimum six feet of distance and less than 15 minutes of close contact as much as possible while the student is awaiting transport home. If unable to do so, or other conditions warrant, PPE should be used as recommended for the situation.

A confidentially maintained isolation room tracking document may be used to note entrance and exit dates and times for those monitored in the isolation room. This may be important information if more than one student is in the room for a period of time, with later confirmation of COVID-19 infection. The tracking document may also be used to monitor when students and staff are allowed reentry to school after illness or quarantine. When multiple students are in the quarantine process it may

otherwise be difficult to verify completion.

School staff should coordinate with environmental services staff for cleaning of the isolation space between students and after final use for the day. Cleaning recommendations are covered in DHHS Infection Control guidance.

Reference Guide for Suspected, Presumptive, or Confirmed Cases of COVID-19 (K-12)

Positive Screening Protocol: At School or Transportation Entry

	EXPOSURE, NO SYMPTOMS	DIAGNOSIS, NO SYMPTOMS	SYMPTOMS
WHO	Staff or Student shares they were exposed to someone with COVID-19 within the last 2 weeks but is NOT symptomatic	Staff or Student shares they were diagnosed with COVID-19 less than 10 days ago, but is NOT symptomatic	Staff or Student presents with at least one of the following COVID-19 symptoms (<i>Fever • Chills • Shortness of breath or difficulty breathing • New cough • New loss of taste or smell</i>)
Staff Member	<input type="checkbox"/> Immediately no home	<input type="checkbox"/> Immediately no home	<input type="checkbox"/> Immediately no home

NCDHHS, Division of Public Health |

While this training covers PPE, you are reminded that the infection control guidance document includes protocols for the management of symptom positive individuals. These protocols should be reviewed and understood prior to use.

Next, we will review the guidance recommendations for the various types of PPE provided to public schools.

PPE – Procedure Masks

Selecting

- Procedure masks, worn with a face shield, protect individuals when working in close contact with symptomatic individuals when,
 - Providing health care procedures or physical assistance,
 - Providing respiratory-related health care procedures that carry the risk of aerosolization (nebulizer treatments, respiratory suctioning, etc.),
 - Monitoring or supervising the ill/isolation space for those who screen positive or develop symptoms during the day and are awaiting transportation home.

NCDHHS, Division of Public Health |

This slide addresses the use of procedure masks in the school setting consistent with StrongSchoolsNC Infection Control and PPE Guidance (K-12). Procedure masks should be selected for use, and worn with a face shield, when...(points from slide). Procedure masks should not be used in every situation and are specific to working with symptomatic individuals when recommended distance of six feet cannot be maintained. Cloth face coverings should routinely be worn at all other times. Cloth face coverings are not considered PPE but have been found to reduce COVID-19 transmission between people. Cloth face coverings can be worn when caring for symptom positive individuals when six feet of distance can be maintained.

PPE - Procedure Masks

Using

- If masks have ties or elastic head bands those should be secured at the middle of the back of the head and neck.
- Fit flexible upper bands to the nose bridge
- Masks should be held snug to face and below chin
- Do not touch the mask while wearing. If touched, immediately perform hand hygiene

Removal

- Remove with ties/ear bands and without touching the front
- Immediately perform hand hygiene after removal

NCDHHS, Division of Public Health |

Reminders for use of procedure masks are included on this slide. Care must be taken to avoid self-contamination when removing. Hand hygiene should always be performed prior to, and after removal of, PPE.

PPE - Procedure Masks

Optimizing/Disposal

- Use masks as recommended in order to preserve supplies
- Discard when soiled, exposed to respiratory secretions, damaged, or hard to breathe through
- When reused, due to having minimal contact with symptomatic individuals, follow CDC guidelines in [Strategies for Optimizing the Supply of Facemasks](#).
- CDC [Facemask Do's and Don'ts](#)

NCDHHS, Division of Public Health |

The CDC provides direction on the extended use of facemasks as “the practice of wearing the same facemask for repeated close contact encounters with several different patients, without removing the facemask between patient encounters”. The limited re-use of facemasks is “the practice of using the same facemask by one HCP for multiple encounters with different patients but removing it after each encounter”. Implementation of “extended use” or “limited re-use” procedures is dependent on resources available and is necessary in the school setting.

In reuse situations, upon leaving the symptom positive care area remove the mask and carefully fold so that the outer surface is held inward and against itself to reduce contact during storage. The folded mask can be stored between uses in a clean sealable paper bag or breathable container, labelled for the wearer.

Masks that fasten with ties may not be able to be undone without tearing and should be considered only for extended use, rather than re-use. Facemasks with elastic ear hooks may be more suitable for re-use.

CDC’s “Facemask Do’s and Don’ts” handout illustrates important points for facemask use: <https://www.cdc.gov/coronavirus/2019-ncov/downloads/hcp/fs-facemask-dos-donts.pdf>.

PPE – Reusable Face Shields

Selecting

- Face shields provide eye protection and increase protection provided by procedure masks when used in combination. They should be used with symptomatic people when:
 - Providing health care procedures or physical assistance,
 - Monitoring or supervising the ill/isolation space for those who screen positive or develop symptoms during the day and are awaiting transportation home, or
 - [Providing an ordered respiratory procedure \(such as nebulizer treatment\)](#) (under FAQs for school administrators)

NCDHHS, Division of Public Health |

Face shields provide eye protection and increase protection provided by procedure masks when needed and should be worn with a mask when being used as PPE. The face shield covers the forehead, extends below the chin, and wraps towards the sides of the face. One should use a face shield for (items listed on slide).

Respiratory procedures (nebulizer treatments, respiratory suctioning, etc.) may have the potential to aerosolize infectious particles in the event a student is COVID-19 positive. During such respiratory procedures staff should wear procedure masks and face shields in accordance with CDC recommendations linked on the slide. Since risk for exposure to asymptomatic COVID-19 during some aerosolizing respiratory procedures such as nebulizer treatments is not fully understood, it is recommended that schools identify a separate space when these procedures are needed. The space should not be the health room that is typically used for well care (e.g., providing medications, diabetic care). If not possible to identify a separate space, it is recommended that staff use a separated space within the isolation room.

PPE - Face Shields

Using

- Position the face shield over face and secure on brow with the headband
- Adjust to fit, comfortably

Removal

- Grasp ear or head pieces with ungloved hands and lift away from face
- Place in designated space for cleaning
- Label for wearer

NCDHHS, Division of Public Health |

Position the face shield over the face and eyes and secure it by using the attached earpieces or head band. Adjust to fit comfortably; however, it should fit snugly. Please be conscious of not touching the face shield with hands, even if wearing gloves, to avoid contamination.

After removing perform hand hygiene. The outside front of the face shield is considered contaminated after use until cleaned. The "clean" parts are the elastic head band and/or earpieces of the face shield. The "dirty" part is the shield itself. Face shields should be assigned to one wearer when reused.

PPE - Face Shields

Optimizing

Follow manufacturer instructions for cleaning and disinfection.
If unavailable follow [CDC guidance](#):

- Wearing gloves, wipe the *inside*, followed by the *outside* using a clean cloth saturated with neutral detergent solution or cleaner wipe.
- Rewipe the *outside* using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
- Rinse the outside of face shield with clean water or alcohol to remove residue.
- Fully dry (air dry or use clean absorbent towels).
- Remove gloves and perform hand hygiene.

NCDHHS, Division of Public Health |

After performing hand hygiene, use clean gloves to clean face shields either according to manufacturer recommendations, or CDC guidelines, which are referenced here. Dispose of the face shield if any component of the shield is damaged and/or visibility is compromised.

PPE - Gowns

Selecting

- When in close contact with an individual who is producing respiratory or other body fluid that is likely to get on the clothes of the caregiver

Using and Disposing

- Gowns are rarely needed and should be single-use items only
- Assure gown removal with soiled surface rolled inside
- Complete hand hygiene on removal

NCDHHS, Division of Public Health |

A small supply of gowns should be kept on hand. Gowns should be reserved for use when a student is producing respiratory or other body fluids to a degree that is likely to get on the clothing of the caregiver.

Gloves – Infection Control

Using

- When normally indicated for healthcare procedures (as PPE)
- Infection control
 - Screeners upon school entry
 - Cleaning potentially contaminated surfaces

Disposing

- Remove gloves using appropriate technique (pulling from wrist and inverting)
- Discard in trash and perform hand hygiene

NCDHHS, Division of Public Health |

Gloves are routinely purchased for use in schools each year for various purposes including PPE for health care procedures, custodial activities, and food service. As a result they are not addressed separately in the StrongSchoolsNC Infection Control and PPE Guidance for routine use related to COVID-19 activities when hand hygiene is practiced. Staff should continue to use gloves as PPE when normally indicated for health care procedures.

Recommendations in this training are for additional gloves needed beyond these normal activities. It is important to focus on proper glove removal to prevent contamination. Hand hygiene must be completed after gloves have been removed.

Always maintain at least one box of disposable gloves in or near the isolation room for use when caring for some symptomatic students who are awaiting transportation home AND at least one box in the reception/health office area for screening of individuals that enter during the school day.

Gloves

Optimizing

- Many activities can be done hygienically with good handwashing and do not require gloves
- Adherence to hand hygiene protocols will limit the number of gloves being used
- Glove supply should be monitored to inform use rate for future orders

NCDHHS, Division of Public Health |

[Strategies to Optimize the Supply of PPE and Equipment](#) is linked in the StrongSchools NC Infection Control and PPE Guidance:

Disposable medical gloves should always be discarded after:

- Visible soiling or contamination with blood, respiratory or nasal secretions, or other body fluids occurs
- Any signs of damage (e.g., holes, rips, tearing) or degradation are observed.

Previously removed gloves should not be re-donned as the risk of tearing and contamination increases. Therefore, disposable glove “re-use” should not be performed.

After removing gloves for any reason, hand hygiene should be performed with alcohol-based hand sanitizer or soap and water. Additional guidance is available at the linked CDC site in the event of a severe supply shortage.

Hand Hygiene after use of PPE

The final step after doffing PPE is hand hygiene.

- Hands should be washed with soap and water after PPE removal for at least 20 seconds
- Hand sanitizer with 60% alcohol may be used if soap and water are not available
- WHO video on Handwashing:

<https://www.youtube.com/watch?v=3PmVJQUCm4E>

NCDHHS, Division of Public Health |

Hand Hygiene means cleaning hands by using either adequate handwashing (washing hands with soap and water for at least 20 seconds), antiseptic hand wash, antiseptic hand rub (i.e. alcohol-based hand sanitizer including foam or gel). Staff should wash their hands with soap and water whenever possible rather than using hand sanitizer. Hand sanitizer use should be limited to times when soap and water are not available.

Staff should perform hand hygiene after the removal of any PPE item. A video is available on this slide for use in training delegated staff.

WHO video on Handwashing:

<https://www.youtube.com/watch?v=3PmVJQUCm4E>

Final Points

- Monitor PPE use at the start of school in order to inform needs for future orders. A Tracking Tool that records PPE when used may be helpful.
- Wearing PPE does not protect staff if not removed correctly, followed by good hand hygiene.
- Use of PPE in manners other than described in the guidance will result in early depletion of supplies.

NCDHHS, Division of Public Health |

Here are some final points about your PPE. If a sample Inventory Tracking Tool is needed please contact your DPH School Health Nurse Consultant, map to follow.

Resources for Training

- [StrongerSchoolsNC Public Health Toolkit \(K-12\)](#)
- [StrongSchoolsNC Infection Control and PPE Guidance \(K-12\)](#)
- [Reference Guide for Suspected, Presumptive, or Confirmed Cases of COVID-19 \(K-12\)](#)
- [Strategies to Optimize the Supply of PPE and Equipment](#)

NCDHHS, Division of Public Health |

Additional resources referenced during this presentation.

School Health Nurse Consultants North Carolina Division of Public Health



NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Division of Public Health

State School Health Nurse Consultant
Ann Nichols
Mail Address: 1928 Mail Service Center
Raleigh, NC 27699-1928
919-707-5667; FAX: 919-870-4880
Ann.Nichols@dhhs.nc.gov

NW: Northwest Region
Amy Johnson
336-813-1526
Amy.T.Johnson@dhhs.nc.gov

C: Central Region
Jenifer Simone
919-218-1025
Jenifer.Simone@dhhs.nc.gov

NE: Northeast Region
Trish Hooton
919-745-9851
Trish.Hooton@dhhs.nc.gov



Charter Consultant
Annette Richardson
252-339-3909
Annette.Richardson@dhhs.nc.gov

Chronic Disease Consultant
Donna Daughtry
919-675-6620
Donna.Daughtry@dhhs.nc.gov

W: West Region
Beth Shook
828-767-0470
Beth.Shook@dhhs.nc.gov

SW: Southwest Region
Lucy Heffelfinger
828-695-2548
Lucy.Heffelfinger@dhhs.nc.gov

SE: Southeast Region
Amy Levy
919-922-5462
Amy.Levy@dhhs.nc.gov

N.C. Division of Public Health – Children & Youth Branch – School Health Unit—Revised December, 2018

Thank you for your attention during this presentation. [NC DPH School Health Nurse Consultants](#) are available for individual assistance as needed.