

# Vaccine Preventable Illnesses in the Office Setting

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2024 SCAAP CATCH MEETING

# Learning Objectives

At the conclusion of this presentation, learners will be able to:

- Identify infection prevention procedures needed for vaccine preventable illnesses
- Understand the importance of testing for vaccine preventable illnesses
- Explain how to report a vaccine preventable illness to the public health department

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# Decline in Routine Vaccinations

- SC Vaccination Rates School Children
  - 2014-2015 98.1%
  - 2021-2022 95.7%
- SC Varicella Outbreaks 2022
  - Upstate & Low Country
- Ohio Measles Outbreak 2023
  - 85 locally confirmed cases
  - 42% hospitalized



Source: [CDC/PHIL](#)

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[https://www.cdc.gov/mmwr/volumes/72/wr/mm7231a3.htm#F1\\_down](https://www.cdc.gov/mmwr/volumes/72/wr/mm7231a3.htm#F1_down)

<https://scdhec.gov/news-releases/dhec-encourages-keeping-chicken-pox-vaccinations-date-amid-outbreaks>

# VPIs in the Office

- Transmission of VPI
- Personal protective equipment
- Staff vaccination status
- Air exchanges in the office

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# Transmission/PPE

	Transmission	PPE
Mumps	Droplet	Mask/eye protection
Measles	Airborne	N95/eye protection
Varicella	Airborne/Contact	N95/gown/gloves/eye protection
Pertussis	Droplet	Mask/eye protection

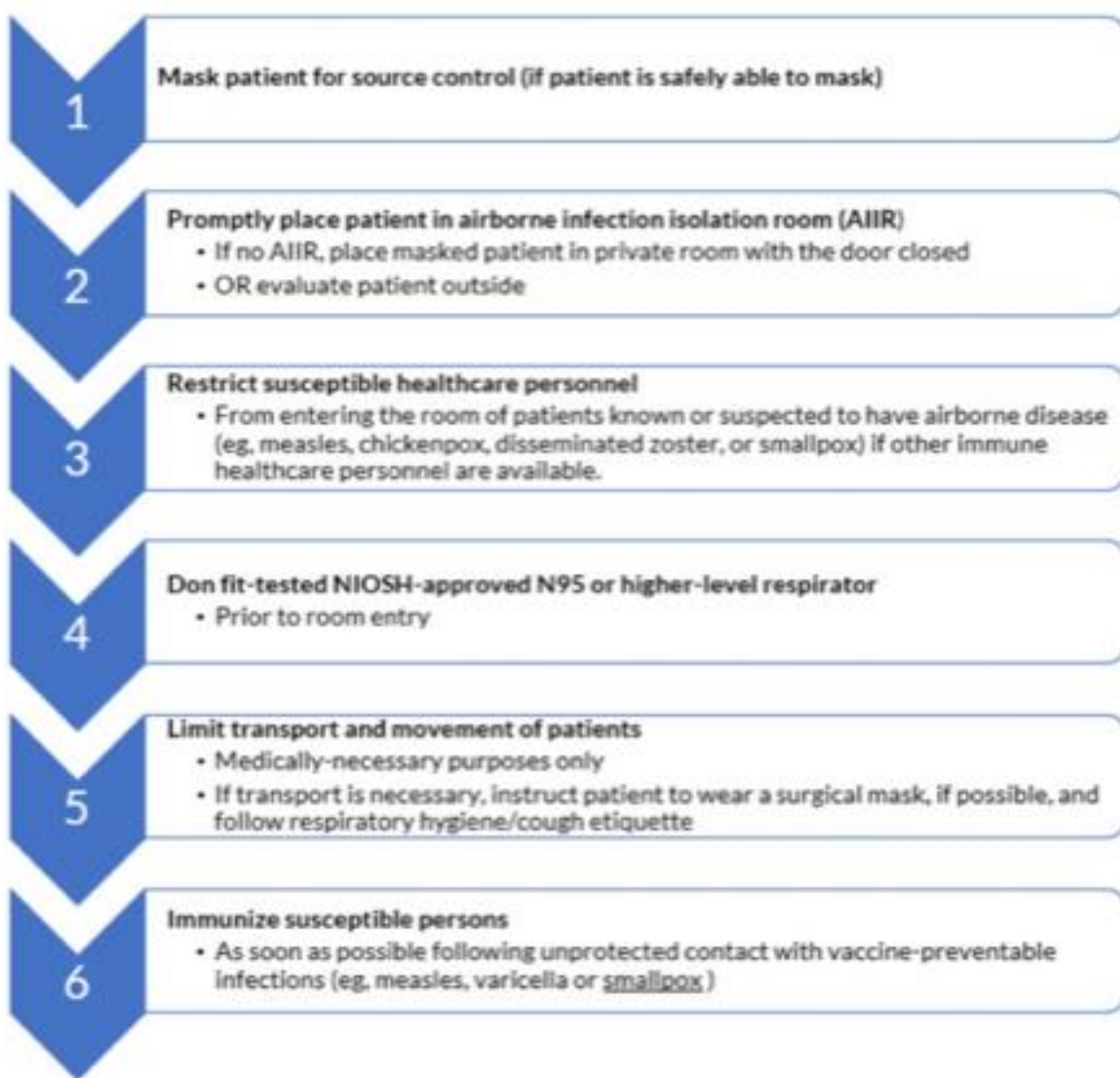
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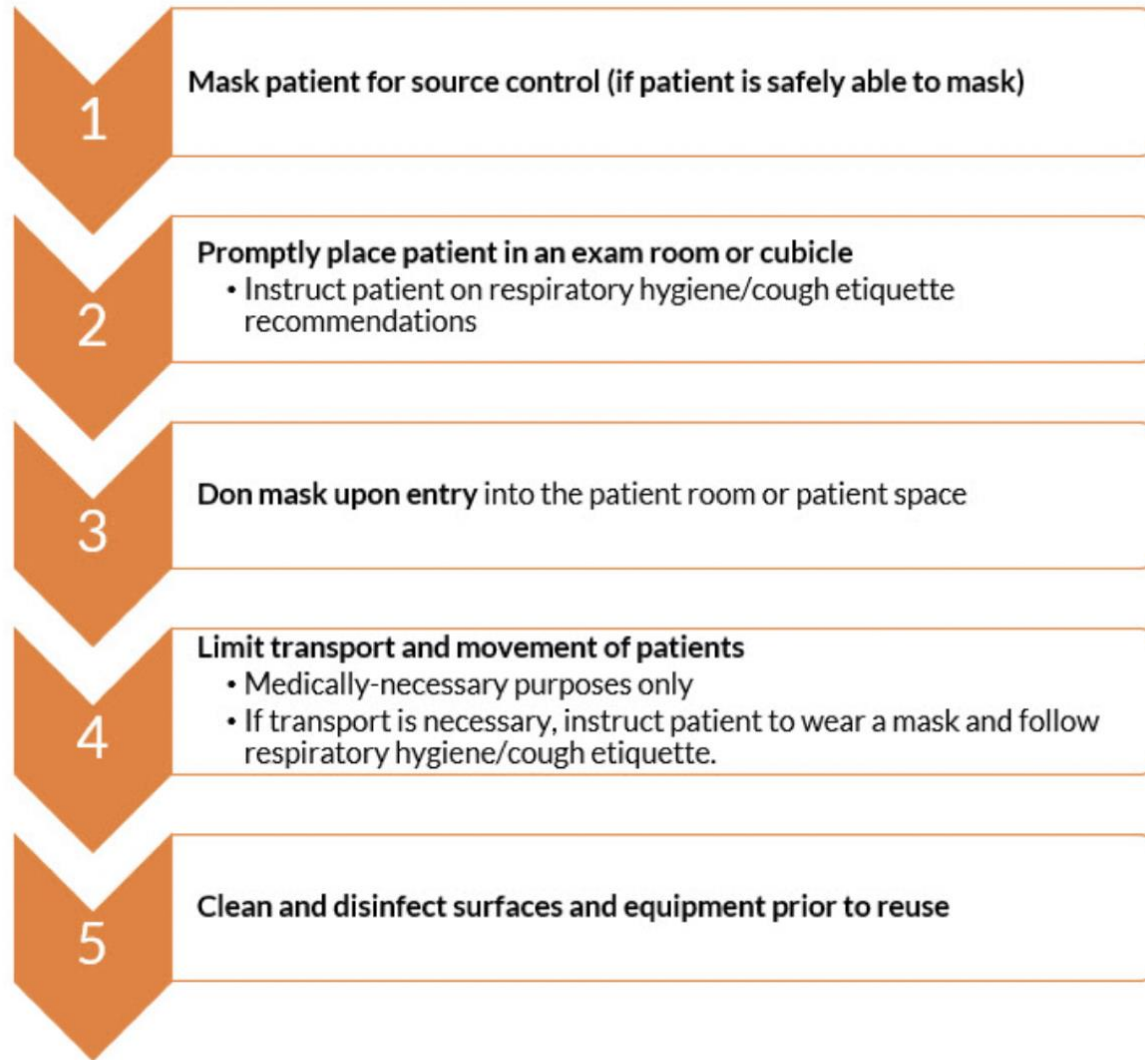
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*Adapted*

from <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>



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from <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>

# Staff Vaccination Status

If possible...

- Restrict unvaccinated staff from interacting with VPI patients
- Immunize anyone who is unprotected and exposed to a VPI
- If staff are unable to receive vaccine, ensure they have follow-up with a healthcare provider for other forms of post-exposure prophylaxis



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# Air Exchange in the Office

- Used to determine how long a room should remain unoccupied after an infectious patient has been in a room
- Close at least 2 hours after measles/airborne illnesses
- Try to schedule patients at the end of the day if possible

<https://www.cdc.gov/infectioncontrol/guidelines/measles/index.html>

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# Diagnosing VPIs

	Confirmatory Lab
Mumps	Buccal PCR
Measles	Nasopharyngeal/throat PCR
Varicella	Lesion PCR
Pertussis	Nasopharyngeal PCR



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<https://www.cdc.gov/vaccines/pubs/surv-manual/chpt22-lab-support.html#lab-test>

# Where can I get a Viral Transport Media Swab?

- Free from the lab you already use
- Establish a relationship with a "PCR Lab"
- Call your local public health department



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# Isolation/Exclusion



## School and Childcare Exclusion List

Official School and Child Care Exclusion List of Contagious or Communicable Diseases

<https://scdhec.gov/health/child-teen-health/school-exclusion>

- Exclusion of the patient
- Exclusion of the contacts who are not vaccinated

	Isolation	Unvaccinated Contact Exclusion
Mumps	5 days after onset parotitis	25 days after onset of parotitis in last person dx
Measles	4 days after the rash onset	21 days after the last case of measles
Varicella	Until the rash has crusted over	21 days after the last case of varicella
Pertussis	5 days after antibiotics	*Symptomatic: 5 days after antibiotics or 21 days after the last case

*Discussions with the Public Health Department will determine these dates*

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# Reporting VPIs

- SC List of Reportable Conditions
  - Disease Reporting by Laboratories, Health Care Providers, Hospitals, Clinics, Other Health Care Facilities
  - *Diseases do not have to be confirmed to be reported - actions to prevent further spread of disease may be necessary while confirmatory tests are pending.*

## South Carolina 2024 List of Reportable Conditions

REPORT UPON RECOGNITION OF A SUSPECTED CASE, OUTBREAK, DIAGNOSIS, OR POSITIVE LABORATORY EVIDENCE (SEE "HOW TO REPORT" BELOW)  
Suspected means clinical suspicion and/or initial laboratory detection, isolation, identification, or presence of supportive laboratory results.

- ⚠ **Potential agent of bioterrorism**
  - ! **Immediately reportable by phone call to a live person at the regional public health office, 24/7**
  - \* **Urgently reportable within 24 hours by phone or electronic notification (email: SCIONHelp@dhec.sc.gov for details. The SCIONHelp email address may not be used for case reporting.)**
  - All other conditions except lead are reportable within 3 business days**
- ⚠ ! **Any case that may be caused by chemical, biological, or radiological threat, novel infectious agent, or any cluster of cases, or outbreak of a disease or condition that might pose a substantial risk of human morbidity or mortality (1) (2)**
  - \* Anaplasmosis (*Anaplasma phagocytophilum*)
  - \* Animal (mammal) bites
  - ⚠ ! **Anthrax (*Bacillus anthracis*) (2)**
  - \* Babesiosis (*Babesia* spp.)
  - ⚠ ! **Botulism (*Clostridium botulinum* or *Botulinum* toxin)**
  - ⚠ \* Brucellosis (*Brucella* spp.) (2)
  - ⚠ \* Campylobacteriosis (2)
  - \* *Candida auris* or suspected (2) (3)
  - \* Carbapenem-resistant *Enterobacteriales* (CRE) and *Acinetobacter* species (2) (4) (5)
  - \* Carbapenem-resistant *Pseudomonas* spp. (CRPA) (2) (4) (6)
  - \* Chancroid (*Haemophilus ducreyi*)
  - \* Chikungunya (2)
  - \* *Chlamydia trachomatis*
  - \* Ciguatera
  - \* Coronavirus Disease 2019 (COVID-19), (SARS CoV-2) (7)
  - \* Cryptosporidiosis (*Cryptosporidium* spp.)
  - \* Cyclosporiasis (*Cyclospora cayentanensis*) (2)
  - \* Dengue (2)
  - \* Diphtheria (*Corynebacterium diphtheriae*) (2)
  - \* Eastern Equine Encephalitis (EEE) (2)
  - \* Ehrlichiosis (*Ehrlichia*)
  - \* *Escherichia coli*, Shiga toxin – producing (STEC) (2)
  - \* Giardiasis (*Giardia* spp.)
  - \* Gonorrhea (*Neisseria gonorrhoeae*) (4)
  - \* *Haemophilus influenzae*, all types, invasive disease (H flu) (2) (4) (8)
  - \* Hantavirus (2)
  - \* Hemolytic uremic syndrome (HUS), post-diarrheal
  - \* Hepatitis (acute) A, B, C, D, & E (9)
  - \* Hepatitis (chronic) B, C, & D (9)
  - \* Hepatitis B surface antigen + with each pregnancy
  - \* HIV and AIDS clinical diagnosis
  - \* HIV CD4 test (all CD4 T- lymphocyte results) (L)
  - \* HIV exposed infants (all results, positive and negative)
  - \* HIV subtype, genotype, and phenotype (L)
  - \* HIV 1/2 Antibody and Antigen (rapid)
  - \* HIV 1/2 AB/AG (confirmatory, all positive and negative) (L)
  - \* HIV 1/2 AB/AG+ and/or detectable viral load with each pregnancy
  - \* HIV viral load (all results, detectable and undetectable) (L)
  - ! **Influenza, avian or other novel strain**
  - \* Influenza associated deaths (all ages)
  - \* Influenza
    - Lab-confirmed cases (eg. culture, RT-PCR, DFA, Molecular assay) (10)
    - Influenza associated hospitalizations (10)
  - \* La Crosse Encephalitis (LACV) (2)
- Lead tests, all results - indicate venous or capillary specimen (11)
- Legionellosis
- Leprosy (*Mycobacterium leprae*) (Hansen's Disease)
- Leptospirosis
- Listeriosis (2)
- Lyme disease (*Borrelia burgdorferi*)
- Lymphogranuloma venereum
- \* Malaria (*Plasmodium* spp.) (2)
- ! **Measles (*Rubeola*)**
- ! **Meningococcal disease (*Neisseria meningitidis*) (2) (4) (8) (12)**
- \* Mpx (positive, negative, and all other results)
- \* Mumps
- \* Pertussis (*Bordetella pertussis*)
- ⚠ ! **Plague (*Yersinia pestis*) (2)**
- ! **Poliomyelitis**
- ⚠ Psittacosis (*Chlamydia psittaci*)
- ⚠ \* Q fever (*Coxiella burnetii*)
- ! **Rabies (*human*)**
- \* Rubella (includes congenital)
- \* Salmonellosis (2) (4)
- \* Shiga toxin positive (2)
- \* Shigellosis (2) (4)
- ⚠ ! **Smallpox (*Variola*)**
- Spotted Fever Rickettsiosis (*Rickettsia* spp.)
- \* *Staphylococcus aureus*, vancomycin-resistant or intermediate with a VA >8 MIC (VRSA/VISA) (2) (4) (13)
- \* *Streptococcus* group A, invasive disease (GAS) (4) (8) (14)
- \* *Streptococcus pneumoniae*, invasive (pneumococcal) (4) (8) (15)
- \* St. Louis Encephalitis (SLEV) (2)
- \* Syphilis: congenital, primary, or secondary (lesion or rash) or Darkfield positive (16)
- \* Syphilis: early latent, latent, tertiary, or positive serological test (17)
- \* Tetanus (*Clostridium tetani*)
- \* Toxic Shock (specify staphylococcal or streptococcal)
- \* Tuberculosis (*Mycobacterium tuberculosis*) (2) (18)
- \* Tuberculosis test - Positive Interferon Gamma Release Assays (IGRAs): QuantiFERON-TB Gold Plus (QFT-Plus) and T-SPOT.TB (18) (L)
- ⚠ \* Tularemia (*Francisella tularensis*) (2)
- \* Typhoid fever (*Salmonella typhi*) (2) (4)
- ⚠ \* Typhus, epidemic (*Rickettsia prowazekii*)
- \* Varicella
- \* Vibrio, all types, including *Vibrio cholerae* O1 and O139 (2)
- ⚠ ! **Viral Hemorrhagic Fevers (e.g. Ebola, Lassa, Marburg viruses)**
- \* West Nile Virus (2)
- \* Yellow Fever
- \* Yersiniosis (*Yersinia*, not *pestis*)
- \* Zika (2)

<https://scdhec.gov/sites/default/files/Library/CR-005869.pdf>

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# How to Report

## How to Report Other Conditions

Report **Immediate** conditions by phone and **Urgent** conditions within 24 hours by phone or by electronic notification. Report all other conditions electronically\* or by mail within 3 days to the appropriate public health office in the region in which the patient resides. \*Email [SCIONHelp@dhec.sc.gov](mailto:SCIONHelp@dhec.sc.gov) for details on electronic notification. The **SCIONHelp** email may not be used for case reporting.

### Immediate and Urgent Reporting (TELEPHONE)

#### Lowcountry

Allendale, Bamberg, Beaufort, Berkeley, Calhoun, Charleston, Colleton, Dorchester, Hampton, Jasper, Orangeburg

3685 Rivers Avenue, Suite 201  
North Charleston, SC 29405

Office: (843) 441-1091  
Fax: (843) 953-0051  
Nights/Weekends: (843) 441-1091

#### Midlands

Aiken, Barnwell, Chester, Edgefield, Fairfield, Lancaster, Lexington, Kershaw, Newberry, Richland, Saluda, York

2000 Hampton Street  
Columbia, SC 29204

Office: (888) 801-1046  
Fax: (803) 251-3170  
Nights/Weekends: (888) 801-1046

#### Pee Dee

Clarendon, Chesterfield, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter, Williamsburg

1931 Industrial Park Road  
Conway, SC 29526

Office: (843) 915-8886  
Fax: (843) 915-6506  
Nights/Weekends: (843) 409-0695

#### Upstate

Abbeville, Anderson, Cherokee, Greenville, Greenwood, Laurens, McCormick, Oconee, Pickens, Spartanburg, Union

352 Halton Road  
Greenville, SC 29607

Office: (864) 372-3133  
Fax: (864) 282-4373  
Nights/Weekends: (864) 423-6648

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# Summary

- Wear the appropriate PPE based on transmission
- Send the appropriate test to diagnose a VPI
  - Call DHEC if needed
- Report per the LORC to DHEC

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# Resources for Reporting & Exclusion

- SC LORC: <https://scdhec.gov/health-professionals/south-carolina-list-reportable-conditions>
- SC Exclusion List: <https://scdhec.gov/health/child-teen-health/school-exclusion>
- SC HAN: <https://scdhec.gov/health-professionals/south-carolina-health-alert-network-han>

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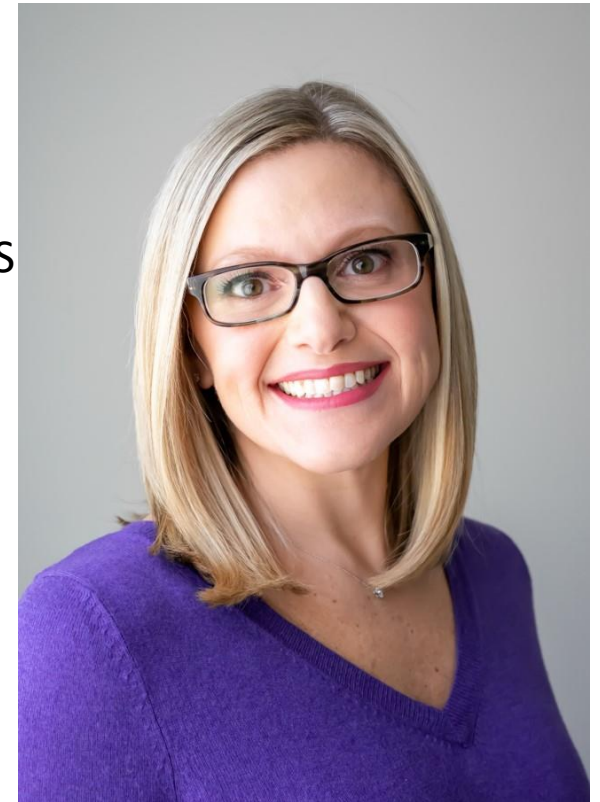
# Q & A

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# THANK YOU!

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