

New York State “Cheat Sheet” for Common Vaccine-Preventable Diseases

Instructions for Use:

The New York State Department of Health (NYSDOH) has developed the following vaccine preventable disease “cheat sheet” to help NYS local health department and regional epidemiology staff quickly locate key information about the four most common (non-COVID, non-influenza) vaccine preventable diseases in NYS: measles, mumps, pertussis (whooping cough) and varicella (chickenpox). This is intended as a job aid to supplement but not replace more detailed resources listed below.

Please note that the definitions of immunity for close contacts used in this document reflect current CDC guidance to identify persons at risk of infection should they be exposed to one of the listed vaccine-preventable diseases. However, definitions listed here may vary from student and healthcare worker vaccine requirements as well as private employer-based vaccine requirements. Please consult with the NYSDOH Bureau of Immunization about management of vaccine-preventable disease cases, exposures or outbreaks occurring in a school, child care, university or healthcare setting.

Digital copies of this document are also available online in both letter and legal-sized formats at https://www.health.ny.gov/prevention/immunization/providers/outbreak_control_guidelines.htm.

Please contact the NYSDOH Bureau of Immunization at immunize@health.ny.gov with any questions or feedback about this document.

Resources:

- NYS Outbreak Control Guidelines for VPD’s: https://www.health.ny.gov/prevention/immunization/providers/outbreak_control_guidelines.htm
- CDC Manual for the Surveillance of VPD’s: <https://www.cdc.gov/vaccines/pubs/surv-manual/index.html>
- The Pink Book: <https://www.cdc.gov/vaccines/pubs/pinkbook/index.html>
- CDC NNDSS Case Definitions: <https://ndc.services.cdc.gov/>

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VPD	Method of Transmission	Incubation Period	Period of Communicability	Definition of Close Contact	Close Contacts of Special Concern	Definition of Immunity for Exposed Contacts	Lab testing	Post Exposure Prophylaxis (PEP)	Contacts Indicated for PEP
Measles	Respiratory droplets and airborne route. Airborne transmission in a closed area has been reported for up to 2 hours after a person with measles occupied the area.	Average 14 days (range 7-21 days) Individuals prophylaxed with immunoglobulin (IG) may have extended incubation periods up to 28 days and mild disease presentation.	From 4 days before rash onset through 4 days after rash onset.	Persons who shared the same room or airspace for any duration while the case was contagious or within 2 hours after the case left the area.	Infants who are not vaccinated, immunocompromised individuals (regardless of vaccine status), and pregnant people.	Birth prior to 1957; Or written or electronic documentation of: <ul style="list-style-type: none"> • 2 doses of measles-containing vaccine for children age > 4 years, healthcare personnel, international travelers, and students at post-high school educational institutions, or • 1 or more doses of a measles-containing vaccine administered on or after the first birthday for children aged 1 - 4 years and adults not at high risk; or Positive serum measles IgG; or Laboratory confirmation of disease.	RT-PCR and culture: clinical specimen from nasopharynx or pharynx and urine IgM and IgG: serum	MMR vaccination within 72 hours of initial exposure for all nonimmune contacts without contraindications, or Immunoglobulin (IG) within 6 days of initial exposure for: <ul style="list-style-type: none"> • Nonimmune contacts at risk of severe disease and complications from measles (IGIM recommended), • Nonimmune pregnant contacts (IVIG recommended), and Immunocompromised contacts regardless of immunization status IVIG recommended	All close contacts without evidence of immunity

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Mumps	Spread by mucus or droplets from the nose or throat of an infected person. Fomite transmission is possible through contact with objects contaminated by infectious droplets.	Average 16 – 18 days (range 12 – 25 days) Individuals prophylaxed with immunoglobulin (IG) may have extended incubation periods up to 28 days and mild disease presentation.	From 2 days before parotitis onset through 5 days after parotitis onset.	Having direct contact with a mumps patient’s infectious respiratory secretions or Being less than 3 feet of a person infected with mumps during their communicable period for a prolonged length of time.	Household contacts, roommates, romantic and sexual partners, close friend groups, fraternities and sororities, sports teams	Birth prior to 1957; or Written or electronic documentation of: <ul style="list-style-type: none"> • 2 doses of mumps-containing vaccine for children age > 4 years, healthcare personnel, international travelers, and students at post-high school educational institutions, or • 1 or more doses of a mumps-containing vaccine administered on or after the first birthday for children aged 1 - 4 years and adults not at high risk; or Positive serum mumps IgG; or Laboratory confirmation of disease.	RT-PCR / culture: buccal swab IgM and IgG: serum	None indicated	N/A

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Pertussis	Respiratory droplets or by direct contact with respiratory secretions of an infected person.	Average 7 – 10 days (range 4 – 21 days). Rarely may be as long as 42 days.	From date of catarrhal symptom onset through 21 days after symptom onset. If treated with appropriate antibiotic therapy, this period is shortened to 5 days after initiation of antibiotics.	Direct face-to-face exposure within three feet of a symptomatic patient or Direct contact with respiratory, oral, nasal, or pharyngeal secretions from a symptomatic case patient.	Household contacts, infants age < 12 months, people in third trimester of pregnancy, immunocompromised individuals, people with moderate to severe asthma or chronic lung disease.	Neither infection nor immunization confers lifelong immunity, and serologic assays are not reliable indicators of immunity. Follow public health recommendations, such as post-exposure prophylaxis, regardless of vaccine history.	PCR / Culture: nasopharyngeal swab	Azithromycin (Zithromax), Clarithromycin (Biaxin), and Erythromycin are the primary antibiotics for pertussis PEP Trimethoprim-sulfamethoxazole (TMP-SMZ; Bactrim, Septra) is an alternative for patients who cannot tolerate macrolides and for macrolide resistant strains. TMP-SMZ is contraindicated for infants age < 2 months and is not recommended for pregnant women or nursing mothers Refer to Table 4 pertussis PEP dosage, duration, and contraindications by age groups.	All household contacts of a pertussis case. Contacts who are at high risk of severe illness or have close contact with a person at high risk of severe illness: Infants and women in their third trimester of pregnancy. All persons with pre-existing health conditions that may be exacerbated by a pertussis infection (for example immunocompromised persons and patients with moderate to severe asthma), Contacts who themselves have close contact with any group listed above, and All contacts in high-risk settings that include infants aged <12 months or women in the third trimester of pregnancy.

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Varicella	<p>Primary infection (Chickenpox)</p> <ul style="list-style-type: none"> Respiratory droplets, or Direct contact or inhalation of aerosols from vesicular fluid of skin lesions until lesions are dry and crusted. <p>Localized herpes zoster (Shingles)</p> <ul style="list-style-type: none"> Primarily transmitted through direct contact with the rash until the lesions are dry and crusted. Rare occurrence of airborne transmission Disseminated herpes zoster (>1 dermatome) Respiratory droplets or Direct contact with the rash until the lesions are dry and crusted. 	Average 14 – 16 days (range 10 – 21 days)	<p>Primary infection: From 1 – 2 days prior to rash onset until all the lesions are crusted over and at least 5 days after rash onset.</p> <p>Immunocompromised cases should be considered contagious until all lesions have crusted.</p> <p>Herpes Zoster: From rash onset until the rash dries and crusts over.</p>	<p>Having direct contact with the rash before it crusted over (all presentations) or</p> <p>Sharing the same room or airspace for any duration while the case was contagious (primary infection or disseminated herpes zoster only).</p>	<p>Infants who are not vaccinated, immunocompromised individuals without evidence of immunity, and pregnant people</p>	<p>Birth in the United States before 1980 (<u>except</u> for healthcare personnel, pregnant women, and immunocompromised persons, all of who would need to demonstrate other evidence of immunity if exposed); or</p> <p>Written or electronic documentation of:</p> <ul style="list-style-type: none"> 2 doses of varicella-containing vaccine for persons age > 4 years, or 1 or more doses of varicella-containing vaccine for children aged 1 – 4 years; or Positive serum varicella IgG; or Laboratory confirmation of disease or diagnosis or verification of a history of varicella disease or of herpes zoster by a healthcare provider. 	<p>PCR / culture: Clinical specimen from unroofed vesicle. Varicella paired IgG: serum.</p>	<p>Varicella vaccination within 3-5 days of initial exposure for all nonimmune contacts without contraindications, or VarIZIG within 10 days of initial exposure for:</p> <p>Immunocompromised contacts without evidence of immunity,</p> <p>Newborn infants whose mothers have signs and symptoms of varicella from 5 days before delivery to 2 days after:</p> <ul style="list-style-type: none"> Hospitalized premature infants born at ≥28 weeks of gestation whose mothers do not have evidence of immunity to varicella, Hospitalized premature infants born at < 28 weeks of gestation or who weigh ≤ 1,000 g at birth, regardless of their mothers’ evidence of immunity, and Pregnant contacts without evidence of immunity. 	All close contacts without evidence of immunity