Oneida County Health Department

PUBLIC HEALTH UPDATE

June 2017 May Surveillance

INSIDE THIS ISSUE:

June is National Safety Awareness Month

https://healthfinder.gov/NHO/JuneToolkit2.aspx

2017-18 School Year

Meningococcal Vaccine School Requirement

One dose of meningococcal vaccine is required for students who are entering 7th grade and for 8th graders who have no documentation of meningitis vaccine. If the child had the first dose before 7th grade, then another dose is not required until 12th grade.

Two doses will be required before 12th grade. Most students entering 12th grade got their first dose when they were younger and are now due for their second dose, or booster. This booster is needed because protection from the vaccine decreases over time.

A small number of teens who received two doses before their 16th birthday may need a third dose on or after their 16th birthday in order to enter 12th grade.

The **only** teens that will not need a second dose before 12th grade are those who got their first dose on or after their 16th birthday. Students who are not up-to-date will not be allowed to attend school until they are vaccinated.

For New York State school vaccine requirements, please go to:
https://www.health.ny.gov/publications/2370.pdf

Rabies Awareness

The risk of exposure to rabies during summer months rises as bat activity increases and people and pets spend more time outdoors.

There are things that individuals can do to reduce the risk of rabies for themselves, their family, pets and livestock:

- Keep the pets' rabies vaccinations up-to-date. Dogs, cats and ferrets 3-months and older must be vaccinated.
- Maintain control of the pets by keeping cats and ferrets indoors and keeping dogs under direct supervision.
- **Do not touch or feed wild or unknown animals**
- Do not touch dead or sick animals and warn children to avoid wild or strange animals
- Walk the pet on a leash, and keep pets indoors at night
- Spay or neuter the pets to help reduce the number of unwanted pets that may not be properly cared for or vaccinated regularly.
- Learn the signs of rabies in animals

Seek immediate medical attention if you have contact with an animal you think may be rabid.

Call animal control to remove all stray animals from your neighborhood since these animals may be unvaccinated or ill.

Report all animal bites to the Health Department at 315-798-5064 (for the complete press release visit: http://www.ocgov.net/oneida/sites/default/files/health/PressReleases/2016/)

Another Meningococcal Vaccine is also available for teens.

SEROGROUP B MENINGOCCAL VACCINE

Serogroup B Meningococcal Vaccine

Also knowns as MenB vaccine, with the brand names Bexsero and Trumenba).

This vaccine is not required for school entry and cannot be used to fulfill the school entrance requirement. It helps protect against a different type of meningococcal disease, and it can be given to teens and young adults between the ages of 16 and 23 years. It can also be given to people 10 and older who have certain medical conditions. It may be given at the same time as the meningococcal conjugate vaccine.

For more info on MenB go to: http://www.immunize.org/catg.d/p2035.pdf

ZIKA UPDATE

NYSDOH HEALTH ADVISORY: ZIKA VIRUS TESTING AT BIRTH

Infants born to mothers with laboratory evidence of Zika virus infection during pregnancy or infants with possible Zika-related brain/eye abnormalities and potential maternal Zika exposure should have nucleic acid amplification and serological testing as well as a head ultrasound.

Recommendations are also provided for placenta and umbilical cord testing for Zika virus (see attached).

All health care providers should review the guide to Wadsworth Zika Laboratory Results found in the following link: https://www.health.ny.gov/diseases/zika_virus/docs/guide_to_lab_results.pdf

Attention : ALL VFC Providers

A few quick reminders…

1. All providers should be using the 'accept transfer' when orders are received.
2. There are 2 required annual trainings:
   - You Call the Shots – Module 10 – Storage and Handling
   - You Call the Shots – Module 16 – Vaccines for Children

The Provider Profile and Agreement must be updated when there are any changes to delivery information or personnel.

Vaccines for Children Program - 1-800-543-7468

New Recommendations for Assessing Polio Immunity Using Serology and Vaccination Status

The recommendations for use of serology to assess polio immunity and for assessing the vaccination status of individuals who receive oral poliovirus vaccine (OPV) have changed because of strategies implemented by the World Health Organization's (WHO's) Global Polio Eradication Initiative. Type 2 wild poliovirus disease was officially declared eradicated in 2015. While the risk of imported type 2 vaccine derived- polio virus in the US is low, it is not zero. OPV contains an attenuated live vaccine virus. Rarely, the shedding of the virus can cause vaccine - derived polio in unvaccinated or under vaccinated individuals. For this reason, the US stopped the use of the OPV, and administers only IPV; however, OPV is still used in over 150 countries world-wide.

The Advisory Committee on Immunization Practices (ACIP) recommends that all infants and children in the U.S. be immune to all three poliovirus types. All children living in the U.S. who received OPV on or after April 2016, should be revaccinated with inactivated polio vaccine (IPV) per ACIP schedule. NYS school immunization regulations authorize schools to accept a positive serologic test against **all three serotypes of poliovirus only**, in lieu of complete polio vaccine series documentation. **However, serologic testing demonstrating immunity to only type 1 and/or type 3, but not to type 2 does not suffice as acceptable evidence of polio immunity**. The test will only be accepted if the test documents a separate result for each of the three serotypes.

New, as of early 2017, no U.S. laboratories offer serologic testing of type 2 poliovirus anymore so therefore, as of April 20, 2017, the CDC and Prevention released a new guideline that replaced the 2011 ACIP General Recommendations for vaccines. The new guidelines **do NOT** recommend the use of serology to assess polio immunity and recommend all persons less than 18 years of age who do not have documentation of an age appropriate series specifying receipt of either IPV or trivalent OPV should complete the IPV series per ACIP schedule.

For more information see NYSDOH Advisory from June 6, 2017 (see attachment)

Oneida County Communicable Disease Surveillance - May 2017

DISEASE	May 2017	YTD May 2017	YTD May 2016	DISEASE	May 2017	YTD May 2017	YTD May 2016
Tuberculosis	2	5	3	Influenza A	2	1379	150
Giardia	1	13	13	Influenza B	27	1270	176
Rabies Exposure	5	14	8	Pertussis	1	2	1
Salmonella	2	8	8	Cryptosporidiosis	2	4	3
Campylobacter	1	8	9	Syphilis	1	7	4
Hepatitis C (confirmed)	8	47	64	Gonorrhea	23	70	15
Hepatitis C (acute)	1	2	2	Chlamydia	101	248	266

ANTHONY J. PICENTE, JR.

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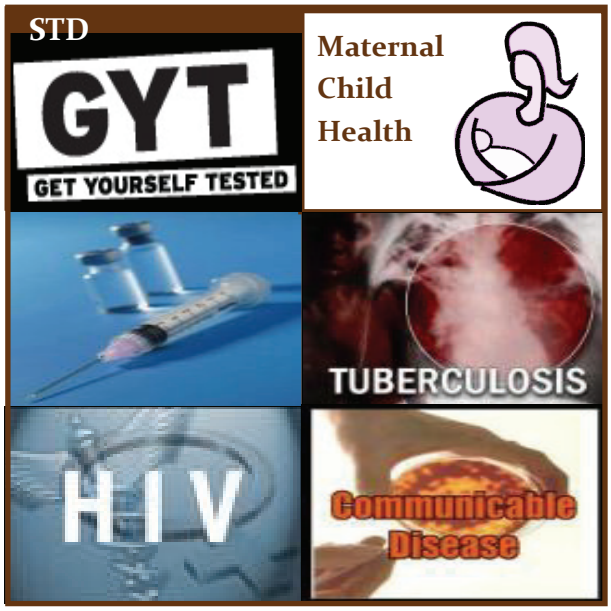
CLINICAL SERVICES

406 Elizabeth Street
Utica, New York 13501

Phone: 315-798-5747
Fax: 315-798-1057
E-mail: spejcic@ocgov.net
rburgess@ocgov.net

Clinic Hours: 8:30-4pm
Monday through Friday



All previous Public Health Updates are posted at http://www.ocgov.net

Etc., Etc.

CLOSED PODs - (Point of Distribution Services)

The Oneida County Health Department is recruiting other Oneida County community based organizations to become their own closed POD, for times of need. Typically, the OCHD would hold PODs in various locations within the community to dispense medication; however, even with extensive planning by the local health department, it is a challenge to staff enough PODs to provide medication to an entire community in a short timeframe. Engaging community partners to expand the dispensing network through partner-staffed PODs can ensure medication is dispensed quickly and strengthen the resilience of the community during an emergency.

The establishment of closed PODs provides substantial advantages to the community. Employees and families can receive medication at the facilities, reducing the likelihood that employees would have to leave work to travel to another POD. This will help to continue to operate during difficult times. Ultimately, the transition from closed to open PODs will have an even greater impact on public health, as a whole. If you are interested in becoming a closed POD partner with OCHD, please contact Lisa Worden, Program Analyst Emergency Preparedness Coordinator at lworden@ocgov.net.

MMR Vaccine for Children Traveling Abroad

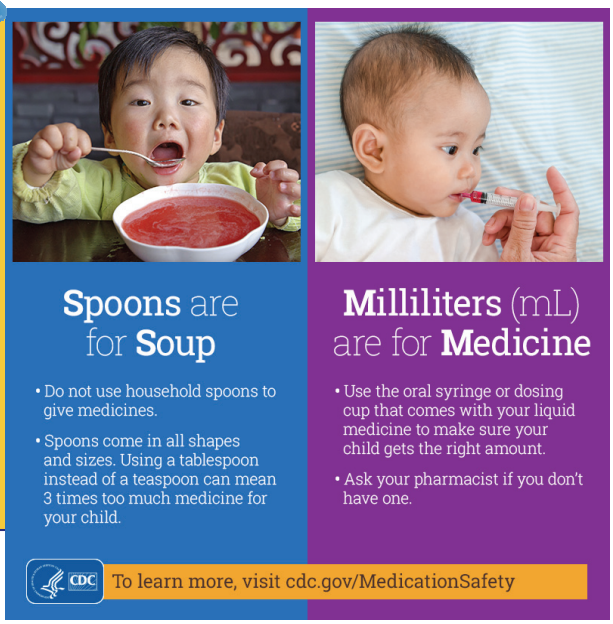
Children traveling abroad may need to be vaccinated at an earlier age than routinely recommended. Infants 6-11 months should receive one dose of MMR vaccine before departure, and then be vaccinated with MMR vaccine at 12-15 months and again at 4-6 yrs.

Children 12 months and older should have 2 doses of MMR vaccine before traveling overseas. Children who have received one dose should receive their second dose before departure, provided the two doses are separated by ≥ 28 days.

GOT BED BUGS? **Learn About Bed Bug Detection, Protection, and Control**

JULY 19, 2017 from 7:00 - 8:30 PM
WMO Presbyterian Church
714 Washington Street, Utica (see attachment)

Spoons are for Soup / Milliliters (mL) are for Medicine The average tablespoon holds three times as much medicine as a teaspoon. Don't use household spoons to give liquid medicines. Instead, use the dosing device that comes with your child's medicine (oral syringe or dosing cup) to make sure that he or she gets the right amount. Ask your pharmacist if you don't have one.



NEW YORK STATE OF OPPORTUNITY. Department of Health

ANDREW M. CUOMO
Governor

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Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

May 25, 2017

TO: Birth Facilities and Local Health Departments (LHDs)
FROM: New York State Department of Health (NYSDOH) Bureau of Communicable Disease Control

HEALTH ADVISORY: ZIKA VIRUS TESTING AT BIRTH

Please distribute to the Labor and Delivery, Laboratory and Pathology Service, Pediatrics, Neonatology, Infection Control Department, Emergency Department, Infectious Disease Department, Obstetrics/Gynecology (including Nurse Practitioners and Midwives), Family Medicine, Director of Nursing, and the Medical Director.

SUMMARY

- This advisory provides updated information on Zika virus testing at birth. **NYSDOH requests that it be posted conspicuously in the labor and delivery units of birth facilities and in other areas as described above**.
- Infants born to mothers with laboratory evidence of Zika virus infection during pregnancy or infants with possible Zika-related brain/eye abnormalities and potential maternal Zika exposure should have nucleic acid amplification and serological testing as well as a head ultrasound. Recommendations are also provided for placenta and umbilical cord testing for Zika virus.
- Additional information on the evaluation of infants of mothers with possible Zika infection can be found in the August 26, 2016, Morbidity and Mortality Weekly Report (MMWR) entitled "Update: Interim Guidance for the Evaluation and Management of Infants with Possible Congenital Zika Virus Infection—United States, August 2016" at https://www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm.
- Zika virus test results will be returned to the provider or facility listed as the submitter. Therefore, birth facilities should establish policies/procedures that ensure the infant's outpatient pediatric care provider is made aware of the mother's Zika risk and testing information as well as the results of the infant's laboratory testing results, head ultrasound, and other Zika-related evaluations.
- For testing at birth originating in facilities within **New York City (NYC)**, approval for testing and additional information can be obtained by calling 866-692-3641 Monday-Friday, 9 am to 5 pm. Additional information on Zika virus can also be found at http://www1.nyc.gov/site/doh/providers/reporting-and-services.page.
- For testing at birth originating in facilities in **New York State (NYS) outside of NYC**, approval for testing and additional information can be obtained by calling 888-364-4723 Monday-Friday, 9 am to 5 pm. Additional information on Zika virus can also be found at http://www.health.ny.gov/diseases/zika_virus/providers.htm.

Joint Recommendations for Day of Delivery Testing and Specimen Collection for Zika Virus

New York State Department of Health (NYS DOH) and New York City Department of Health and Mental Hygiene (NYC DOHMH)

I. Testing Guidance

Testing guidance is based on the location of the birth facility, regardless of the patient's residence. For example, a NY State resident delivering at a NY City facility should be tested in accordance with NYC recommendations.

Criteria for maternal testing on day of delivery	Women who have not had Zika virus testing after their most recent potential exposure[1]
Criteria for collecting formalin-fixed placenta and umbilical cord specimens	Collect for women with the following laboratory results: ▪ PCR/NAAT[2] negative, IgM positive, and PRNT positive for Zika and dengue (undifferentiated flavivirus) ▪ PCR/NAAT negative, IgM positive, and a Zika PRNT result that is pending ▪ PCR/NAAT negative, IgM negative, and Zika PRNT positive results ▪ An infant with pre- or postnatal findings of microcephaly, intracranial calcifications or other possible Zika-related brain/eye abnormalities AND mother with potential exposure (regardless of maternal test results) *Placenta testing is not recommended for women who have tested 1) NAAT positive or 2) IgM positive and PRNT positive for Zika and negative for dengue*
Criteria for infant testing	▪ Infants born to mothers with laboratory evidence of Zika virus infection during pregnancy ▪ An infant with pre- or postnatal findings of microcephaly, intracranial calcifications or other possible Zika-related brain/eye abnormalities AND mother with potential exposure (regardless of maternal test results)
Specimens for infants meeting criteria	▪ 2.5-3ml of blood in a serum tube (ideally within 2 days of birth) ▪ Minimum of 1ml urine in a sterile cup sealed with parafilm (ideally within 2 days of birth)
Neuroimaging for infants meeting criteria	▪ Head ultrasound prior to hospital discharge for all infants meeting criteria ▪ Consider advanced neuroimaging if clinical abnormalities consistent with congential Zika syndrome are present

[1] Exposure is defined here as travel to or residence in an area with active mosquito-borne transmission of Zika virus (https://www.cdc.gov/zika/geo/countries-territories.html) or unprotected vaginal, anal, or oral sexual exposure with a partner who traveled to or resided in an area with active mosquito-borne transmission of Zika virus during pregnancy or in the eight weeks prior to conception.

[2] rRT-PCR is a form of NAAT (nucleic acid amplification testing).

II. How should specimens be prepared and handled?

Pre-approval should be obtained prior to submitting specimens. Specimens arriving at the lab without pre-approval will have delays in testing or will not be tested.

Facilities within NYC

- During business hours, call the NYC DOHMH Provider Access Line at 1-866-692-3641 for consultation, pre-approval, forms, and to arrange transportation of specimens to the NYC Public Health Laboratory.

New York State Facilities outside of NYC

- Contact NYS DOH via the NYSDOH Zika Information Line at 1-888-364-4723, Monday to Friday 9am to 5pm, for consultation, pre-approval, and to arrange transportation of specimens to the NYS Wadsworth Laboratory.

Joint Recommendations for Day of Delivery Testing and Specimen Collection for Zika Virus

New York State Department of Health (NYS DOH) and New York City Department of Health and Mental Hygiene (NYC DOHMH)

Label all specimens. Failure to properly label a specimen will result in rejection and the specimen will not be tested. Specimens must be labeled with:

- Patient's first and last name
- Patient's date of birth
- Date and time of collection
- Specimen type (serum, urine, CSF, etc.)
- The container for each placental specimen should also be labeled on the outside with:
  - Mother's name and date of birth (do not include infant's information)
  - Area of placenta sampled (e.g., maternal vs. fetal side, placental disk, etc.)
  - "Formalin-fixed"

Seal Specimen Containers

- Close specimen containers tightly and seal with parafilm.
- Leaking specimens will not be tested.
- Hemolyzed specimens will not be tested.

Specimen handling for facilities with a centrifuge and -70°C freezer	

Maternal serum – only for women who have not had Zika virus testing after their most recent potential exposure	○ Collect blood in serum separator tube(s)*
	  ○ **Facilities within NYC**: 12ml of blood in two 6ml serum separator tubes
	  ○ **NYS facilities outside of NYC**: 6ml of blood in a serum separator tube
	○ Centrifuge blood within 6 hours; specimens that are not centrifuged immediately should be refrigerated immediately until centrifuged.
	○ Transfer serum, using sterile technique, to separate, labeled sterile tube(s) (at least 3 ml serum required) and discard the clot that remains in the blood tube.
	○ Store specimen in -70°C freezer and ship on **dry ice**.

Maternal urine - only if testing serum	○ Collect 3-20 ml of urine in a sterile leak-proof container. ○ Store specimen in -70°C freezer and ship on dry ice.

Placenta, fetal membranes, umbilical cord – Formalin-fixed specimens only.	○ At least 3 full-thickness pieces (0.5-1cm x 3-4cm thick) from middle third of placental disk and at least one piece from placental margin; sample maternal and fetal sides of placenta, along with any pathologic lesion, if present. In addition, please include the following:
	  ○ 5 x 12cm strip of fetal membranes.
	  ○ Four segments, each 2.5cm in length, of umbilical cord; please obtain segments that are proximal, middle, and distal to umbilical cord insertion site on the placenta.
	○ Indicate placenta weight.
	○ Tissues may be refrigerated at +4°C for <24 hours until fixed in formalin.
	○ Place the sections in a screw top sterile cup containing formalin. Tightly screw the lid to prevent leakage.
	○ Volume of formalin used should be about 10x the mass of tissue. Place in 10% neutral buffered formalin for a minimum of 3 days. Once fully fixed the tissue can be transferred to 70% ethanol for long term storage.
	○ Store formalin-fixed tissues at room temperature. Ship at room temperature.
	○ Paraffin blocks may be submitted as well.

Infant serum – collected directly from the infant, within 2 days of birth	○ Collect 2.5-3 ml of blood by venipuncture in a serum separator tube.* ○ Centrifuge within 6 hours of collection and transfer serum to a separate tube using sterile technique. ○ Store specimen in -70°C freezer and ship on dry ice.

Joint Recommendations for Day of Delivery Testing and Specimen Collection for Zika Virus

New York State Department of Health (NYS DOH) and New York City Department of Health and Mental Hygiene (NYC DOHMH)

Infant urine	○ Collect at least 1 ml of urine in a sterile leak-proof container. ○ Store specimen in -70°C freezer and ship on dry ice.
Infant CSF and Amniotic fluid	These specimen types are *not* routinely requested for Zika testing. If these specimens are obtained for other studies, aliquot a sample for Zika testing. If available, amniotic fluid may be tested upon consultation with the Department of Health.
Infant CSF	○ Collect in sterile container (tube or cryovial). ○ Store specimen in -70°C freezer and ship on dry ice.
Amniotic Fluid	○ Collect in sterile container (15 or 50 ml conical tube). ○ Store specimen in -70°C freezer and ship on dry ice.

Specimen handling for facilities with centrifuge and refrigerator, but no -70°C freezer or dry ice

- Process as indicated above.
- Refrigerate centrifuged serum and urine at 2-8°C immediately after collection.
- Ship overnight with **cold packs** to lab for arrival within 72 hours of collection.
- Preferably, specimens should arrive between Monday and Friday, between 9am and 4pm.
- Specimens can arrive after business hours and on weekends and holidays.
- Label the outer packaging: "Store at -70°C upon arrival." Failure to label the outer packaging correctly may result in specimens not being tested.

Specimen handling for facilities <u>in NY City</u> without a centrifuge (specimens sent to NY State *must* be centrifuged before shipping)

- Specimens may only be collected on non-holiday WEEKDAYS. Specimens received at NYC PHL after 2 pm or on weekends/holidays cannot be appropriately processed or tested and these specimens will be REJECTED. Specimens *must* be **collected by 11 am**. Hold specimens in a refrigerator (2-8°C) or on cold packs. Ship to the NYC PHL on cold packs.
- Specimens *must* **arrive at the NYC PHL by 2 pm** AND within 6 hours of collection.
- Label the outer packaging: "STAT specimen – process immediately." Failure to label the outer packaging correctly may result in specimens not being tested. Even with STAT specimen handling, these specimens are at a high risk of hemolysis and providers are encouraged to refer patients to centers that have centrifuge capability.

*Serum separator tube cap colors include red top, tiger top, speckle top, and gold top. These tubes contain clot activator, so that serum can be readily obtained. Do NOT use blood tubes that contain anti-coagulants including green, yellow, or purple top tubes.

III. Who should I notify and what forms do I need to send with specimens?

Facilities within NY City

- During business hours, call the NYC DOHMH Provider Access Line at 1-866-692-3641 for consultation, pre-approval, forms, and to arrange transportation of specimens to the NYC Public Health Laboratory.
  - If specimens are approved for testing, DOHMH staff will email or fax the completed NYC Public Health Laboratory test request form for each specimen.
- Each form should be paired with the correct specimen and placed in the outer pocket of the submission bag and the specimen inside the bag.

New York State Facilities outside of NY City

- Contact NYS DOH via the NYS DOH Zika Information Line at 1-888-364-4723, Monday to Friday 9am to 5pm, for consultation, pre-approval, and to arrange shipment.
- Specimens may be collected and stored as outlined above until shipping can be arranged.

Joint Recommendations for Day of Delivery Testing and Specimen Collection for Zika Virus

New York State Department of Health (NYS DOH) and New York City Department of Health and Mental Hygiene (NYC DOHMH)

- Wadsworth's Infectious Disease Requisition (IDR) form: http://www.wadsworth.org/sites/default/files/WebDoc/1065760803/infectious_diseases_requisition_DOH_4463.pdf
  - The IDR form should be completed in full and accompany each specimen being submitted.
  - If present, symptoms should be clearly noted on the IDR.

IV. How should specimens be stored and transported?

- Serum and urine specimens may be stored and shipped:
  1. If specimens are frozen ship on dry ice. (Follow shipping regulations for UN 3373 Biological Substance, Category B and UN 1875, Class 9 for dry ice).
  2. If specimens are refrigerated, shipping must occur within 48 hours of specimen collection. Prepare as above in order to arrive at the lab within 72 hours after collection.
     - Refrigerate immediately and ship on cold packs.
     - Cold packs should be *frozen* before placed in the box, not just refrigerated.
     - Sufficient cold packs should be used to keep the specimens refrigerated during shipping.
- For formalin fixed (wet) or formalin-fixed paraffin-embedded tissues, specimens should be sent at room temperature. Fixed tissues should not be shipped with refrigerated or frozen samples. The NYS/NYC public health laboratory will ship fixed placenta specimens to the CDC for testing.
- CSF and amniotic fluid specimens should be handled in the same manner as serum and urine specimens.
- Indicate the temperature shipment requirements on the outside of the package.

Facilities within NYC

- Label outer packaging as "Store at -70 C upon arrival" if specimens have been centrifuged.
- Label outer packaging as "STAT specimen – process immediately" if specimens have NOT been centrifuged.
- Courier arrangements to the NYC Public Health Laboratory can be made by calling the NYC DOHMH Provider Access Line at 1-866-692-3641 during business hours.

Facilities outside of NYC

- After receiving approval from NYS DOH, specimens must be shipped overnight with cold packs or dry ice to:
  The Wadsworth Center, David Axelrod Institute
  120 New Scotland Avenue
  Albany, NY 12208
- Delivery to Wadsworth Center should occur between Monday and Friday, preferably between 9am and 4pm. However, deliveries are accepted at all hours and any day of the week.

V. How will test results be reported?

Zika test results will be sent to the provider or facility listed as the submitter. Birth facilities should establish procedures for the transmission of laboratory test results, clinical assessment, and maternal Zika exposure/testing to the infant's outpatient pediatric provider to ensure appropriate ongoing care of the infant.

Facilities within NYC

- Facilities may receive some results via secure fax if a secured fax number is provided. Otherwise, results will be mailed.

New York State Facilities outside of NYC

- If the submitter has a NYS Health Commerce System account with CLIMS access, results will be transmitted electronically. Otherwise, results will be mailed.

VI. Other Resources

- NYSDOH: http://www.health.ny.gov/diseases/zika_virus/providers.htm
- NYC DOHMH: http://www1.nyc.gov/site/doh/providers/reporting-and-services-main.page
- Infectious Diseases Requisition (IDR) form required for shipment of specimens to Wadsworth Center. https://www.wadsworth.org/sites/default/files/WebDoc/1065760803/infectious_diseases_requisition_DOH_4463.pdf
- CDC Clinical Guidance: https://www.cdc.gov/zika/hc-providers/clinical-guidance.html
- Update: Interim Guidance for the Evaluation and Management of Infants with Possible Congenital Zika Virus Infection — United States, August 2016. https://www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm?s_cid=mm6533e2_w
- Preventing Transmission of Zika Virus in Labor and Delivery Settings Through Implementation of Standard Precautions—United States, 2016. https://www.cdc.gov/mmwr/volumes/65/wr/mm6511e3.htm

NEW YORK STATE OF OPPORTUNITY. Department of Health

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Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

Date: June 7, 2017

To: Healthcare Providers and Local Health Departments

From: New York State Department of Health (NYSDOH), Bureau of Immunization

HEALTH ADVISORY:
Updated Guidance for Assessment of Poliovirus Vaccination Status:
Serologic Testing No Longer Recommended to Assess Poliovirus Immunity
Please distribute to Medical Director, Director of Nursing, Family Medicine, Pediatrics, all Primary Care Providers

SUMMARY

The recommendations for use of serology to assess polio immunity and for assessing the vaccination status of individuals who receive oral poliovirus vaccine (OPV) have changed because of strategies implemented by the World Health Organization's (WHO's) Global Polio Eradication Initiative. Type 2 wild poliovirus disease was officially declared eradicated in 2015.

- Countries still using OPV are in the process of switching to inactivated poliovirus vaccine (IPV) containing all 3 poliovirus types in order to reduce the risk of vaccine-related polio outbreaks.
- The risk of importation of type 2 vaccine-derived poliovirus into the United States (U.S.) is low but not zero. Therefore, **the Advisory Committee on Immunization Practices (ACIP) continues to recommend that all U.S. infants and children be immune to all three poliovirus types.**
- All persons less than 18 years of age who do not have documentation of an age-appropriate series specifying receipt of either IPV or trivalent OPV (tOPV) should complete or repeat the series with IPV in accordance with the ACIP schedule.
    - Poliovirus vaccination outside of the U.S. is valid only if documentation indicates receipt of either IPV or tOPV or if the dose was administered before April 1, 2016. This is because doses of OPV given after April 1, 2016 are either bivalent (bOPV) or monovalent (mOPV) and do not contain type 2 poliovirus. Therefore**, children living in the U.S. who received OPV on or after April 1, 2016 should be revaccinated with IPV according to the ACIP schedule.**
- Handling of type 2 poliovirus has been limited to only a few essential facilities in the U.S. Since testing for antibodies to all three poliovirus serotypes is not available, **serologic testing is no longer recommended to assess polio immunity**.

GLOBAL POLIO ERADICATION INITIATIVE (GPEI)

The goal of the GPEI is complete eradication and containment of all polioviruses, such that no child ever again suffers paralytic poliomyelitis. Since 1988, when the GPEI was established, the number of polio cases globally has been reduced by more than 99%. Polio remains endemic in only three countries – Afghanistan, Pakistan, and Nigeria – where transmission of wild poliovirus

has not been completely stopped. In September 2015, wild poliovirus type 2 was officially declared eradicated worldwide.
OPV contains an attenuated live vaccine virus. On rare occasions, shedding of the vaccine virus can cause vaccine-derived polio in unvaccinated or undervaccinated individuals. For this reason, the U.S. discontinued use of OPV and switched to an all-IPV schedule in 2000. However, OPV is still in use in over 150 countries worldwide.

As the world gets closer to ending transmission of wild poliovirus, the risk of vaccine-derived polio increases in importance. No cases of type 2 wild poliovirus have been detected anywhere in the world since 1999. However, more than 650 cases of type 2 vaccine-derived polio have occurred since 2006, including several outbreaks in 2015. More than 94% of vaccine-derived polio cases have been caused by the type 2 component.

Eliminating the risk of vaccine-derived polio requires the eventual withdrawal of all OPV. The GPEI has implemented a multi-year global phase-out of OPV and replacement with IPV. The first step in this plan was to strengthen existing immunization systems. At least one dose of IPV was introduced into the routine immunization schedule of countries using OPV, as available supplies of IPV permitted, with a focus on the highest risk countries. IPV provides protection against poliovirus types 1, 2 and 3, reduces viral shedding and the risk of vaccine-derived polio outbreaks. As of August 31, 2016, 89% of WHO member states are using IPV.

The next step took place in April 2016, when all countries using OPV switched from use of tOPV to bOPV containing only types 1 and 3 polioviruses. The type 2 component was eliminated because the risks of vaccine-derived polio associated with the type 2 component outweighed the benefits. All doses of OPV administered in countries using OPV after April 1, 2016 are either bOPV or mOPV and do not contain type 2 poliovirus. The final step, at a future date that has not yet been determined, will be to stop the global use of OPV and replace it with an all-IPV schedule similar to the one used in the U.S.

The global switch from tOPV to bOPV will markedly reduce the risk for vaccine-derived poliovirus type 2 importation into the U.S. However, until this risk is estimated by WHO to approach zero, the **ACIP continues to recommend that all U.S. infants and children be immune to all three poliovirus types**. All persons less than 18 years of age who do not have documentation of an age-appropriate series specifying receipt of either IPV or tOPV should complete or repeat the IPV series in accordance with the ACIP schedule.

ASSESSMENT OF POLIOVIRUS VACCINATION STATUS FOR SCHOOL ENTRY

Previous poliovirus vaccination with either IPV or tOPV will provide protection against all three poliovirus types and may be accepted as valid for school entry in NYS. Trivalent OPV was used for routine poliovirus vaccination before April 1, 2016 in all countries using OPV. Therefore, if an individual has documentation of OPV received before April 1, 2016 it can be counted as a tOPV dose, unless it was specifically notated that it was administered during a vaccination campaign. Either mOPV or bOPV were often used during mass vaccination campaigns. However, doses of OPV administered after April 1, 2016 are either bOPV or mOPV and do not meet the U.S. recommendations, nor the NYS school requirements, for protection against all three poliovirus types. **Children living in the U.S. with documentation of doses of OPV that were administered after April 1, 2016 should be revaccinated with IPV in accordance with the ACIP schedule**.

SEROLOGIC TESTING FOR POLIO IMMUNITY

On April 20, 2017, the Centers for Disease Control and Prevention released the General Best Practice Guidelines for Immunization, replacing the previous 2011 ACIP General Recommendations on Immunization. The new Guidelines **do not recommend the use of serology to assess polio immunity**. All persons less than 18 years of age who do not have documentation of an age-appropriate series specifying receipt of either IPV or tOPV should complete the IPV series in accordance with the ACIP schedule.

In addition, serology to assess immunity to type 2 poliovirus is no longer available in the U.S. To reduce the risk for reintroduction of wild poliovirus type 2, the GPEI has implemented a laboratory containment strategy which limits handling of poliovirus type 2 containing materials to certified poliovirus-essential facilities. All laboratories or other facilities that handle or store poliovirus type 2 materials are required to destroy all unneeded materials and transfer needed materials to a designated poliovirus-essential facility. As a result, serologic tests for antibodies against poliovirus type 2, which utilize live virus, are no longer available at U.S. laboratories.

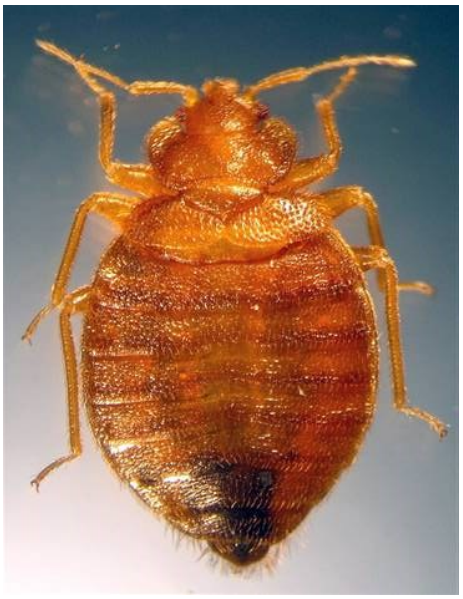
NYS school immunization regulations authorize schools to accept a positive serologic test against all three serotypes of poliovirus in place of a complete polio vaccine series. Serologic tests demonstrating immunity to poliovirus types 1 and/or 3 but which do not test for immunity to type 2 do not satisfy the regulatory requirement to demonstrate immunity to all three poliovirus types and are **not** acceptable evidence of polio immunity. However, previous serologic testing, which was obtained when testing for type 2 poliovirus was still available in the U.S., will still be accepted as evidence of polio immunity if the test documents a separate positive result for each of the three poliovirus serotypes (types 1, 2, and 3).

ADDITIONAL INFORMATION

- Centers for Disease Control and Prevention. General Best Practice Guidelines for Immunization: Best Practices Guidance of the Advisory Committee on Immunization Practices. Available at: https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Marin M, Patel M, Oberste S, Pallansch MA. Guidance for Assessment of Poliovirus Vaccination Status and Vaccination of Children Who Have Received Poliovirus Vaccine Outside the United States. MMWR Morb Mortal Wkly Rep 2017;66:23–25. Available at: https://www.cdc.gov/mmwr/volumes/66/wr/mm6601a6.htm
- *Errata:* Vol.66, No.1. MMWR Morb Mortal Wkly Rep 2017;66:180. Available at: https://www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm
- Hampton LM, Farrell M, Ramirez-Gonzalez A, *et al*. Cessation of Trivalent Oral Poliovirus Vaccine and Introduction of Inactivated Poliovirus Vaccine – Worldwide, 2016. MMWR Morb Mortal Wkly Rep 2016;65:934-938. Available at: https://www.cdc.gov/mmwr/volumes/65/wr/mm6535a3.htm?s_cid=mm6535a3_w
- For additional questions or comments, please contact the NYSDOH Bureau of Immunization at 518-473-4437 or email immunize@health.ny.gov.

GOT BED BUGS?

Learn About
Bed Bug Detection,
Protection, and Control



JULY 19, 2017

7:00 - 8:30 PM

WMO Presbyterian Church

714 Washington Street, Utica

Speaker—Lynne Gregory, EPA Reg. 2 Bed Bug Contact

WHO SHOULD ATTEND

- GENERAL PUBLIC
- MANAGERS OF:
  - Multi-unit housing
  - Shelters/Group Housing
  - Senior Housing
  - Client Service Providers

LEARN HOW TO:

- Detect a Bed Bug Infestation
- Protect your family from bed bugs
- Control bed bugs through Integrated Pest Management (IPM) techniques
- Find a proper pest control professional