Measles Information
Disclosure Statement

Information provided in this presentation is for educational purposes only and is not a substitute for medical advice or guidance from the Georgia Department of Public Health (GDPH). Presenters have no conflicts of interest to report.
Objectives

- Review current recommendations from federal and state agencies
- Update regarding signs and symptoms
- Understand current outbreak
- Discuss role of school nurses in outbreak response and answer questions
- Provide guidance and support to community nurses from an Infection Prevention perspective
- Offer additional resources as needed
Current State

11 Known Cases since early October – source: GDPH Alert received 11/18/2018
Measles by Year - CDC

Number of Measles Cases Reported by Year

2010-2019** (as of November 7, 2019)

<table>
<thead>
<tr>
<th>Year</th>
<th>Measles Cases</th>
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<tbody>
<tr>
<td>2010</td>
<td>63</td>
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<tr>
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<td>2017</td>
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<td>2018</td>
<td>372</td>
</tr>
<tr>
<td>2019</td>
<td>1261</td>
</tr>
</tbody>
</table>


**Cases as of November 7, 2019. Case count is preliminary and subject to change. Data are updated monthly.

(CDC, 2019)
Signs and Symptoms

High fever (up to 104°F)

3 C’s:
- Cough
- Runny Nose (Coryza)
- Red, Watery Eyes (Conjunctivitis)

2-3 Days Later:
Koplik Spots (tiny white spots inside the mouth)

3-5 Days Later:
Rash (usually begins at hairline/forehead and spreads down the body)

(CDC, 2019)
Contagious Period

4 days Before

Rash Appears

4 days After

(CDC, 2018)
Transmission

**AIRBORNE**

- Highly contagious
- 9 out of 10 susceptible (non-immune) people in the same room as someone with measles will get it
- Virus can hang in the air and infect others for 2 hours after a contagious person has been there

(CDC, 2018)
Incubation Period

• Symptoms most often appear between 7 and 14 days after exposure
• 5 to 21 days – anyone exposed to measles that is NOT immune has to remain quarantined for at least 21 days after the exposure
• On a case by case basis, this could be extended based on the prophylaxis post exposure

(CDC, 2018)
Return to School

• The contagious period for measles lasts through the 4th day after the appearance of the rash, but any child with a diagnosed case of measles must be cleared by GDPH prior to returning to school
• Any child that has confirmed measles should be followed by the public health department

(CDC, 2019)
When and How to Report

If you believe a child may have measles, contact the Georgia Department of Public Health at 866-PUB-HLTH (866-782-4584) immediately

• They will provide guidance regarding testing and next steps

• If the child is very ill and needs emergency medical attention, first call 911 and advise that you suspect measles, then call GDPH

Be sure to isolate the child away from others and have him/her wear a mask if they leave the area and measles is suspected.

(GDPH, 2019)
Preventing the Spread of Infection at School

- All unimmunized children in the same school that have been exposed to measles must stay quarantined at home for at least 21 days after exposure (exact date and timeline will be established by the GDPH)
- Immediately isolate and mask any child with symptoms of measles
- Contact GDPH as soon as possible
What School Nurses Can Do

Proactively

Check Your Lists: Be sure you know which students are unimmunized or not immune to measles (immunocompromised)

Communicate with school staff so they know what to watch for (signs and symptoms)

Encourage families to vaccinate all eligible household members (herd immunity)

Reactively

Contact GDPH immediately with any suspected case

Do NOT send child to healthcare provider/urgent care/clinic without first notifying the provider measles is suspected GDPH and the location that you suspect child has measles

Communicate with families of affected and at-risk children with the help and guidance of Public Health
Communication Tips

Talking with Families and School Staff
Tips for Talking to Families

- Stress importance and safety of vaccination
- Share only fact-based and reputable information
- CDC’s Resources for Vaccine Conversations with Parents
- Parents should talk to their healthcare provider about vaccines, but you can provide support and reinforcement
Impact on Children and the Community

About 1 in 5 unvaccinated people in the U.S. who get measles hospitalized.

As many as 1 out of every 20 children with measles gets pneumonia, the most common cause of death from measles in young children.

About 1 child out of every 1,000 who get measles will develop encephalitis (swelling of the brain) that can lead to convulsions and can leave the child deaf or with intellectual disability.

Nearly 1 to 3 of every 1,000 children who become infected with measles will die from respiratory and neurologic complications.

Measles may cause pregnant women who have not had the MMR vaccine to give birth prematurely, or have a low-birth-weight baby.

(CDC, 2019)
You can help stop the spread of **measles**

**Early symptoms**
- High fever
- Watery eyes
- Runny nose
- Cough

**Later symptoms**
- High fever
- Koplik's spots: Small red spots with blue-white centers inside the mouth
- Rash: Typically appears three to five days after the onset of early symptoms, spreading from forehead downward

**Take action**
- Call your child's pediatrician immediately if you suspect your child:
  - May have measles.
  - Is not immunized against measles.
  - Has been exposed to someone with measles.

Remember that measles, a serious childhood disease, can be prevented with a vaccine. Vaccines prevent many harmful diseases and are safe.

To prevent spreading the disease, it is important to contact your child's pediatrician before going to a clinic or office so staff can prepare for your visit to avoid exposing others.

Discuss any vaccine-related decisions with your child's pediatrician.
FAQ’s

• Why is the incubation extended for kids who receive prophylaxis?
  – Immunoglobulin can cause the incubation period to be extended and the presentation of the illness to be unusual, so the surveillance period is extended to 28 days to ensure appropriate monitoring

• What type of testing is done for active measles?
  – Blood, urine, and throat swab are collected to test for active measles

• What type is testing or booster vaccines are needed for school nurses?
  – If you do not know your immunity status, have your titers checked and get a booster if needed
FAQ Continued

• Do school nurse need to wear N95 masks?
  – No, N95 masks are primarily worn in the healthcare setting. If you are immune to measles, a mask is not necessary but a surgical mask can be worn if desired

• What is the state of disease/measles outside of Cobb?
  – At this time, there are no confirmed cases of measles outside of Cobb county or elsewhere in Georgia. Updated information about outbreaks can be found on the CDC website.

• When would an adult who had already had MMR vaccinations need to have a booster?
  – Some adults may have only received one MMR or may not be aware of immune status. Talk to your PCP to determine need.
• How reliable is the MMR vaccination?
  – No vaccine is 100% effective, but MMR is one of the most effective we have. One vaccine provides 95% immunity and booster provides up to 99% immunity.

• What is being done to help combat against vaccination exemptions?
  – This is a legislative issue. Certain public health agencies work with state and national legislators to educate them about the process but it is also influenced by the beliefs of those writing and approving policies. Contact your state representatives!
FAQ Continued

• How can we tell if a person needs to be separated, because the signs and symptoms of early contagious period look similar to a common cold?
  – This will vary based on the current state of disease where you are. If there are no outbreaks in your area and the child has no known exposure or travel to an area with endemic measles, the early signs of measles may look similar to those of any respiratory illness. It is not necessary to treat every child with a respiratory illness as if they have measles unless the risk factors for the disease are high.
FAQ Continued

• Does the school collect the specimen?
  – No, specimens will be collected by healthcare facility or health department

• Are you still considered contagious after your receive the IGG shot?
  – Yes, children that receive immunoglobulin (IM or IG) must remain quarantined until released by public health – up to 28 days

• How do we clean the room is someone is suspected of having measles?
  – Close room and do not use for 2 hours. Then clean all surfaces with appropriate disinfectant.
Summary

• Measles is highly contagious
• 1 case of Measles is a public health emergency
• At least 11 people have been diagnosed in east Cobb county
• Vaccination is the most effective way to prevent measles
• If you suspect someone has measles, mask, isolate and contact Georgia Department of Public Health immediately
• All unvaccinated or susceptible people that are exposed to measles must remain quarantined for at least 21 days after exposure to prevent further spread of the disease
• People with measles are contagious 4 days before until 4 days after the appearance of the rash
More Resources

• Georgia Department of Public Health
• CDC – Measles
• Measles Outbreak Toolkit for Healthcare Providers
• How to Protect Your Children During a Measles Outbreak - American Academy of Pediatrics
Sources


Thank you!