MODULE 3
Recognizing and Managing Infectious Diseases

• Daily Health Check
• Exclusion
• Symptoms versus disease
#1 Objectives
A. Knowledge
Each participant will be able to:
1. Identify the 3 primary reasons for exclusion, and know where to find and how to use the list of specific conditions that require exclusion.
2. Identify 2 reasons why exclusion does not reduce the spread of most common germs.
3. Explain at least 1 goal of exclusion.
4. Explain why consistent application of exclusion criteria creates clear expectations of families and child care staff, and a healthier environment.
5. Explain how to effectively manage an outbreak of an infectious disease and which people should be involved.

B. Attitude
Each participant will be able to:
1. Commit to implementing daily health checks in the child care facility.
2. Feel comfortable using a resource, such as Managing Infectious Diseases in Child Care and Schools, to determine proper management of infectious disease strategies.

C. Behavior
Each participant will:
1. Demonstrate proficiency using Managing Infectious Diseases in Child Care and Schools and Caring for Our Children (CFOC) to research a disease based on symptoms.
2. Demonstrate proficiency using Managing Infectious Diseases in Child Care and Schools and CFOC to research a disease based on a diagnosis.

(<1 minute)

#2 Guided Discussion
- The goal is to engage with the participants and raise interest in the subject. The intent is NOT to answer these questions at this point.
- Ask for participants’ opinions.
- Establish a safe learning environment. Assure participants there is no wrong response. Assure participants that we will answer these questions by the end of the session.
- Write issues that need to be answered or clarified on a flip chart using the “parking lot” concept.
- Topics that may come up, but do not need to be taught at this time:
  - Exclusion is not necessary for runny nose. Exclusion may be necessary for reduced activity or increased required care, but her activity level is near normal. She is participating in activities and is not requiring extra care. Exclusion may be necessary for fever if it is associated with behavior change. The fever cutoff is above 101°F orally. This case is intentionally vague to generate conversation.
  - The caregiver/teacher would have to pick and choose various aspects of several exclusion criteria. Discuss where exclusion criteria come from (CFOC, Managing Infectious Diseases in Child Care and Schools, state standards, each program’s written policies).
  - Some parents/guardians might have a strong opinion that children like this should be excluded, unless it is their own child! Parents worry that this child will spread infection to their own child. Caregivers/teachers worry about the child and whether she is comfortable and that her needs are met. They also may be concerned about what the parents might think if they did not exclude Suzie. And they may have concerns about the health of the child care staff. Health care professionals generally are not concerned with something like this because they understand that acquiring viral illnesses is part of maturing the immune system in a healthy way. Caregivers/teachers might get some pushback from health care professionals if exclusion results in required doctor visits or notes to return to care. These mandated visits/notes are generally not helpful unless the parent requests the visit. Research shows that viruses and other germs are spread by children who are not ill – either before they become sick or for days or weeks afterward. Therefore, targeting exclusion only on children with symptoms, such as runny nose, is unlikely to reduce the spread of disease.

References
Module 3: Instructor’s Manual

- CFOC is a joint publication of the American Academy of Pediatrics, the American Public Health Association, and the National Resource Center for Health and Safety in Child Care and Early Education.
- CFOC was developed by bringing together leaders in the field of child care to review the literature and develop standards that are based on research, knowledge, and experience. Each standard is supported with references and a rationale. Many groups of people in the fields of child care, health, and public health contribute to the review of the standards.
- The second edition is quoted in this curriculum, but the third edition is in progress and should be published in 2011. Substitute new wording when the third edition is available.
- An online version of CFOC can be viewed at the National Resource Center for Health and Safety in Child Care and Early Education Web site (http://nrckids.org/CFOC/index.html) or print copies can be obtained through the AAP, the American Public Health Association, the National Association for the Education of Young Children, or from Redleaf Press.
- State standards and regulations are developed by the state regulatory agency. The process by which state standards are developed varies from state to state, but there is no requirement for it to be evidence-based or supported by research. Most states allow for a period of public comment when changes are being made in standards and regulations.


(7 minutes)

### #3 Guided Discussion

*Ask* the following questions to the participants. Answers are listed for the instructor. Help guide the participants toward the answers without revealing them outright. This will encourage interactive discussion.

- **Question:** When is the daily health check performed?
  - **Answer:** Each day when children are dropped off at the center.

- **Question:** Why do we do it? What are we trying to accomplish?
  - **Answer:** To detect conditions which might need exclusion because
    1) the child is/will be unable to participate adequately in activities, 2) the child may need more care than staff can provide and still safely attend to the other children, or 3) the child has 1 of the specific excludable conditions – we will discuss these in detail later.
  - Early identification of ill children before parents leave
    - Makes management simple
    - Is better for the child
    - May reduce the chance of exposure to other children
  - Some children are dropped off so early they have been asleep during the car ride and the parent has not yet adequately assessed the status of the child.

- **Question:** Who does the daily health check?
  - **Answer:** The daily health check is done by a designated person qualified to assess the health status of young children. This may vary by the type of program from the teacher/caregiver, director, or designated/trained front desk staff.

- **Question:** How is the daily health check done?
  - **Answer:** Engage the parent and child (if age appropriate) in conversation. Look at the child and observe his/her behavior. If you suspect illness or unusual behavior, touch the child to assess for warmth that may indicate fever. You do not need to check every child for fever, only those exhibiting symptoms of illness.

(5 minutes)
### #4 Lecture

- Sometimes, children become ill after the parents or guardians have dropped them off.
- Look for children who are:
  - Less active
  - Clingy or cranky
  - Not participating in activities
- If participation decreases, look for other symptoms of illness.
- If symptoms of illness develop, the caregiver/teacher will need to:
  - Determine whether the child needs to be excluded
  - Notify the parent or guardian

(<1 minute)

### #5 Video

- Double-click on the black square to view video.
- This video addresses this situation and what to do with an ill child until the parent or guardian arrives.
- This video segment is 3:18 minutes long.
- The video segment is taken from Part 6: *Caring for Our Children Video Series*.¹
- If time is not available to show video, discuss the topics in the video.
  (Instructor should view video prior to training and then lead discussion with participants.)

### Reference


(4 minutes)

### #6 Lecture

- Consider an outbreak when you see an increase in children with the same symptoms.
- Some outbreaks are expected each year (seasonal influenza, hand-foot-and-mouth, bronchiolitis).
- However, if you note unexpected numbers of children with the same symptoms, or a small number of children with unusually severe symptoms, you should report the issue to the Child Care Health Consultant, if you have one, or the health department.
- Extensive discussion about outbreaks, epidemics and pandemics are beyond the scope of this course. However, you may consult *Managing Infectious Diseases in Child Care and Schools*¹ for more information. The AAP has a Web site with information on preparation for pandemic influenza.²

### Resource

2. www.aap.org/disasters/pandemic-flu-cc.cfm

(<1 minute)
Guided discussion

- How do you make decisions about exclusion?
- Steer participants to these answers after asking the questions below.
- Answers can be written on flip chart.
- Ask “What are 2 characteristics of good exclusion criteria?”
  1. Should be written.
  2. Should be discussed with parents or guardians at the time of enrollment of their child so they are not surprised by them.
  - The 2 steps above ensure:
    1. Parents understand decisions better.
    2. Parents know that their own child is being treated in a safe and healthy way that is equal to others.
  - Exclusion criteria are confusing because:
    1. They vary by state and each program may write its own as long as the program’s rules comply with state criteria.
    2. Parents, health care professionals, and caregivers/teachers often are not aware of, or do not understand, the exclusion criteria.
- The AAP has published exclusion criteria that can be found in 2 references: CFOC, and Managing Infectious Diseases in Child Care and Schools. The AAP exclusion criteria incorporate expert advice and medical evidence from research to determine the best course of action for the most common infections or symptoms. Some states have adopted these recommendations; however, if your state has not, usually the recommendations contained in the AAP references are more detailed, and are not in conflict with the state criteria. If there is a conflict between the AAP exclusion criteria and those of your state, you need to follow the state rules until they are updated.
- Ask “Is exclusion an effective way to reduce transmission of germs?”
  - Exclusion is NOT an effective way to reduce the spread of most common germs.
    1. Germs spread before kids get sick and can continue to spread after a child recovers, sometimes for weeks.
    2. Some kids spread germs without ever becoming sick themselves.
    3. Targeting the ones who appear ill has little or no effect on reducing the transmission of most of the common illnesses.
  - There are a small number of conditions that are reportable to the health department and that do require exclusion. We will discuss these later.
- Ask “What are reasons to exclude children from out-of-home child care?”
  - Allow participants to discuss this for 1 minute.
  - The list is obviously large … BUT … it is helpful to break this down into 3 main categories we will cover in the next slide.

Lecture

- The 3 primary reasons for exclusion:
  1. Prevents the child from participating comfortably in activities.
  2. Results in a need for care that is greater than the staff can provide without compromising the health and safety of the other children.
  3. The child has a specific disease, condition, or symptom requiring exclusion.
- These first 2 primary reasons for exclusion:
  1. Are at the discretion of the caregiver/teacher.
  2. Do not require a diagnosis from a health care professional.
- When children meet these first 2 criteria, caregivers/teachers have the ability to decide when children need to be excluded.
- In addition to the 2 primary reasons for exclusion above, there are specific diseases, symptoms and conditions that require exclusion, and treatment in some cases, prior to return to care. Here are some of those diseases:
  - Lice, scabies, tuberculosis, impetigo, strep throat, chickenpox, pertussis, mumps, hepatitis A, measles, rubella, shingles, and herpes simplex.
  - This is a list of diseases that require diagnosis. These are specific diseases that require a diagnosis from a health care professional. Discussion of these diseases is covered in Managing Infectious Diseases in Child Care and Schools.
  - All the diseases on this list, except lice, are usually diagnosed because the child has been ill and was seen by a doctor or other health care professional. (Lice may be identified by seeing the live insects or insect eggs (nits) within 1/4 inch of the scalp. See Managing Infectious Diseases in Child Care and Schools for details about lice.
- Teachers/caregivers see the kids at the BEGINNING of the illness when they have SYMPTOMS.
- We will discuss specific diseases later.
#9 Lecture
- Caregivers/teachers often worry about making a diagnosis.
- For example:
  - Many children are excluded due to a rash but no behavioral changes. Though some might consider a rash a symptom, if the child’s activity level has not been negatively affected, the rash does not represent anything harmful to the child or others.
  - The reason is because the caregiver/teacher is afraid the child is contagious or harmful to others and a diagnosis is necessary.
  - If the child does not have symptoms of illness, there is not a reason to exclude.

#10 Video
- Double click on the black square to view video.
- This video reviews symptoms and diseases that require exclusion. Although the focus is on reasons to exclude children, most of the guidelines for exclusion for infectious illness apply equally to exclusion of staff who are ill. We do not address management of staff illness in any detail, but want to remind participants that there should be similar policies and procedures in place for them.
- We will have a chance for more detailed discussion about which symptoms and diseases need exclusion. Again, I want to reassure you that caregivers/teachers are not required to make diagnoses, only recognize symptoms that require exclusion.
- This video segment is 1:38 minutes long.
- The video segment is taken from Part 6: Caring for Our Children Video Series.¹
- If time is not available to show video, discuss the topics in the video. (Instructor should view video prior to training and then lead discussion with participants.)

Reference

#11 Lecture
- If a child has these severe symptoms, it doesn’t matter what the diagnosis is. Call an ambulance.

Reference

¹ The video segment is taken from Part 6: Caring for Our Children Video Series. If time is not available to show video, discuss the topics in the video. (Instructor should view video prior to training and then lead discussion with participants.)
#12 Lecture

- These conditions don’t need an ambulance as long as a parent can pick the child up within an hour.
- Though we covered a lot of severe and urgent conditions, I think that all of us would recognize these conditions as needing urgent evaluation by a health care professional.
- In areas where it is known that a venomous bite can pose severe risk, a venomous bite should require a 911 call.

(<1 minute)

#13 Lecture

- These conditions are less severe
  - But do require exclusion despite the lack of a diagnosis.
  - Most of these conditions don’t require a health visit; look up the symptom in Managing Infectious Diseases in Child Care and Schools\(^1\) or contact a health care professional.
  - The symptom and conditions listed on this slide require exclusion in addition to the first 2 primary reasons for exclusion (prevents the child from participating comfortably in activities; results in a need for care that is greater than the staff can provide without compromising the health and safety of the other children) AND those diseases already covered in the Reasons for Exclusion slide.
    - Fever with symptoms like sore throat, rash, vomiting, diarrhea, or cough. Fever can be caused by harmless conditions like exercise. A caregiver/teacher should not take temperature unless the child shows signs of illness!
      - “Fever is an elevation of the normal body temperature. Fever can be a sign of illnesses not caused by infections, such as rheumatoid arthritis or cancer; fever can be a reaction to a variety of medicines.”\(^2\)
      - “Oral temperatures above 101°F (38.3°C), rectal temperatures above 102°F (38.9°C), or axillary (armpit) temperatures above 100°F (37.8°C) usually are considered to be above normal in children. Children’s temperatures may be elevated for a variety of reasons, most of which do not indicate serious illness.”\(^2\)
      - “Infants younger than 4 months with fever should be evaluated by a medical professional. Any infant younger than 2 months with fever should get medical attention immediately. The fever is not harmful; however, the illness causing it may be serious in this age group.”\(^2\)
    - Blood in the stool not related to passage of hard stools — passage of hard stools is called constipation.
    - Blood not due to hard stools.
    - While vomiting more than twice in 24 hours requires exclusion, children who spit up from diagnosed conditions such as gastrointestinal reflux do not need to be excluded. Management of children who have a diagnosed condition that explains their symptoms should have a special care plan that teachers/caregivers who are responsible for them follow.
    - Abdominal pain lasting less than 2 hours or intermittent but associated with fever or other behavior change.
    - Drooling with mouth sores.

Acknowledged that the list is long and participants can refer to symptom chart in Managing Infectious Diseases in Child Care and Schools. These symptoms cover the vast majority of conditions that could be concerning for child care settings. Managing Infectious Diseases in Child Care and Schools also addresses when children with these symptoms can return to care.

References


(1 minute)
#14 Participant Exercise

- Divide up into 3 groups for interactive case-based scenarios of new symptoms.
- Assign 1 symptom-based case to each group. The cases are in Module 3 of the Participant’s Manual.
- Instruct the participants to follow the questions on the case.
- Show the following slides for the cases.
  - Symptom-based Case 1 (Diarrhea): No slides
  - Symptom-based Case 2 (Pinkeye): Slide 14
  - Symptom-based Case 3 (Hand-Foot-and-Mouth): Slides 15–17
- Use *Managing Infectious Diseases* and *CFOC* as resources.
- Have 2 copies of *Managing Infectious Diseases in Child Care and Schools* and *CFOC* for each group.
- Groups should discover that *Managing Infectious Diseases in Child Care and Schools* is an easier-to-use resource for this purpose.
- Groups will also discover some subtle differences between the 2 references as the policies have evolved. The most recent reference is always the most current policy.
- Each group will have 10 minutes to discuss their own case and 5 minutes (total time 15 minutes) to share findings about their case to the whole group afterwards.

**Note:**
- The intent is to become familiar with the use of the available tools not to memorize the management of every symptom. Even health care professionals need to look up these references to determine the proper management strategies.
- In all 3 of these cases, neither of the first 2 primary reasons for exclusion are met (nor do any of the symptoms of these cases meet specific criteria for exclusion):
  - Prevents the child from participating comfortably in activities.
  - Results in a need for care that is greater than the staff can provide without compromising the health and safety of the other children.
- *Managing Infectious Diseases in Child Care and Schools* has specific instructions about which conditions require health department reporting under the quick reference sheet for each condition and the table, Infectious Diseases Designated as Notifiable at the National Level — United States 2008.¹

**Symptom-based Case 1 (Diarrhea) Discussion Points**
- Diapered children with diarrhea can stay in care as long as
  - Stool is contained in the diaper.
  - Less than 2 stools over normal daily amount.
  - No blood or mucus is in the stool.
  - No other exclusion criteria are met.
- This is a change from prior versions of *Managing Infectious Diseases in Child Care and Schools* and *CFOC*, where any child in diapers with diarrhea required exclusion.
- Hand hygiene, cleaning, and sanitizing are very important.
- Rotavirus vaccine may reduce the amount of diarrhea in child care settings.

**Manual Materials**
- Symptom-based Case 1
- Symptom-based Case 2
- Symptom-based Case 3

**Reference**

(25 minutes for Symptom-based Case Activity)
Symptom-based Case 2 (Pinkeye) Discussion Points

- For this exercise, refer participants to the Pinkeye (Conjunctivitis) Quick Reference Sheet in Module 2 of the Participant’s Manual.
- Pinkeye is the common name for conjunctivitis.
- Exclusion is not necessary for red eyes with either pus watery discharge, unless other exclusion criteria are met (child not participating, requiring too much care).
- Antibiotics are not necessary.
- A medical visit is not necessary.
- These are changes from prior versions of Managing Infectious Diseases in Child Care and Schools and CFOC, and represent a recognition that this is a harmless condition that self-resolves adequately without antibiotics.
- Symptoms of conjunctivitis are generally mild.
- Though this condition can be passed from 1 child to another, so can the common cold, which we do not treat and do not exclude for.
- Caregivers/teachers may use the Parent/Guardian Alert Letter in Module 3 of the Participant’s Manual to notify other parents, especially if 2 or more episodes occur at the same time.
- In situations where there are 2 or more children with conjunctivitis, notify the health consultant or health department if there is no health consultant, because this may represent 1 uncommon form of conjunctivitis (adenovirus) that may cause epidemics of watery, red eyes. There is no treatment for this form of conjunctivitis.
- **Note:** This policy will cause controversy and is very different from how we have practiced for years. However, the recommendation was evaluated very carefully by experts in general pediatrics, ophthalmology, and infectious diseases.

**Manual Materials**
- Parent/Guardian Alert Letter
- Pinkeye (Conjunctivitis) Quick Reference Sheet

Symptom-based Case 3 (Hand-Foot-and-Mouth Disease) Discussion Points

- For this exercise, refer participants to the Hand-Foot-and-Mouth Quick Reference Sheet in Module 2 of the Participant’s Manual.
- Hand-foot-and-mouth disease is the common name for coxsackievirus.
- No behavioral exclusion criteria are met in this case. However, children with hand-foot-and-mouth disease might need to be excluded if the child is unable to participate or requires too much care. This is a generally harmless condition.
- It is impossible to stop the spread of this virus (and many others), because the virus particles are shed 3 to 6 days before illness and for weeks after symptoms have resolved.
- Caregivers/teachers may want to refer to the Quick Reference Sheet on hand-foot-and-mouth disease from Managing Infectious Diseases in Child Care and Schools in Module 3 of the Participant’s Manual on this condition, because it does cause concern for parents.
- No health visit is necessary.
- No notification of the health department is necessary.

**Manual Materials**
- Hand-Foot-and-Mouth Quick Reference Sheet

#15 Symptom-based Case 2 (Pinkeye) Discussion Points

- For this exercise, refer participants to the Pinkeye (Conjunctivitis) Quick Reference Sheet in Module 2 of the Participant’s Manual.
- Pinkeye is the common name for conjunctivitis.
- Exclusion is not necessary for red eyes with either pus watery discharge, unless other exclusion criteria are met (child not participating, requiring too much care).
- Antibiotics are not necessary.
- A medical visit is not necessary.
- These are changes from prior versions of Managing Infectious Diseases in Child Care and Schools and CFOC, and represent a recognition that this is a harmless condition that self-resolves adequately without antibiotics.
- Symptoms of conjunctivitis are generally mild.
- Though this condition can be passed from 1 child to another, so can the common cold, which we do not treat and do not exclude for.
- Caregivers/teachers may use the Parent/Guardian Alert Letter in Module 3 of the Participant’s Manual to notify other parents, especially if 2 or more episodes occur at the same time.
- In situations where there are 2 or more children with conjunctivitis, notify the health consultant or health department if there is no health consultant, because this may represent 1 uncommon form of conjunctivitis (adenovirus) that may cause epidemics of watery, red eyes. There is no treatment for this form of conjunctivitis.
- **Note:** This policy will cause controversy and is very different from how we have practiced for years. However, the recommendation was evaluated very carefully by experts in general pediatrics, ophthalmology, and infectious diseases.

**Manual Materials**
- Parent/Guardian Alert Letter
- Pinkeye (Conjunctivitis) Quick Reference Sheet

#16 Symptom-based Case 3 (Hand-Foot-and-Mouth Disease) Discussion Points

- For this exercise, refer participants to the Hand-Foot-and-Mouth Quick Reference Sheet in Module 2 of the Participant’s Manual.
- Hand-foot-and-mouth disease is the common name for coxsackievirus.
- No behavioral exclusion criteria are met in this case. However, children with hand-foot-and-mouth disease might need to be excluded if the child is unable to participate or requires too much care. This is a generally harmless condition.
- It is impossible to stop the spread of this virus (and many others), because the virus particles are shed 3 to 6 days before illness and for weeks after symptoms have resolved.
- Caregivers/teachers may want to refer to the Quick Reference Sheet on hand-foot-and-mouth disease from Managing Infectious Diseases in Child Care and Schools in Module 3 of the Participant’s Manual on this condition, because it does cause concern for parents.
- No health visit is necessary.
- No notification of the health department is necessary.

**Manual Materials**
- Hand-Foot-and-Mouth Quick Reference Sheet

#17
#18

Objective:

- Divide up into 3 groups for interactive case-based scenarios of new diagnoses.
- Assign 1 diagnosis-based case to each group. The cases are in Module 3 of the Participant’s Manual.
- Instruct the participants to follow the questions on the case.
- This is the same type of exercise as the symptom-based cases except the emphasis is that there now is a diagnosis, which will enable caregivers/teachers to look up specific information about the disease and provide this information to parents, guardians, and potentially the health consultant or health department.
- Show the following slides for the cases.
  - Diagnosis-based Case 1 (Shigella): No slides
  - Diagnosis-based Case 2 (Lice): Slides 19–20
  - Diagnosis-based Case 3 (MRSA skin infection): Slide 21
- Use *Managing Infectious Diseases in Child Care and Schools* and *CFOC* as resources.
  - Have 2 copies of *Managing Infectious Diseases in Child Care and Schools* and *CFOC* for each group.
  - Groups should discover that *Managing Infectious Diseases in Child Care and Schools* is an easier-to-use resource for this purpose.
  - Groups will also discover some subtle differences between the 2 references as the policies have evolved. The most recent reference is always the most current policy.
  - Each group will have 10 minutes to discuss their own case and 5 minutes (total time 15 minutes) to share findings about their case to the whole group afterwards.
- Note:
  - The intent is to become familiar with the use of the available tools not to memorize the management of every symptom. Even health care professionals need to look up these references to determine the proper management strategies.
  - In all 3 of these cases, neither of the first 2 primary reasons for exclusion are met (nor do any of the symptoms of these cases meet specific criteria for exclusion):
    - Prevents the child from participating comfortably in activities.
    - Results in a need for care that is greater than the staff can provide without compromising the health and safety of the other children
  - *Managing Infectious Diseases in Child Care and Schools* has specific instructions about which conditions require health department reporting under the quick reference sheet for each condition and the table, Infectious Diseases Designated as Notifiable at the National Level — United States 2008.

#19

**Participant Exercise**

- Divide up into 3 groups for interactive case-based scenarios of new diagnoses.
- Assign 1 diagnosis-based case to each group. The cases are in Module 3 of the Participant’s Manual.
- Instruct the participants to follow the questions on the case.
- This is the same type of exercise as the symptom-based cases except the emphasis is that there now is a diagnosis, which will enable caregivers/teachers to look up specific information about the disease and provide this information to parents, guardians, and potentially the health consultant or health department.
- Show the following slides for the cases.
  - Diagnosis-based Case 1 (Shigella): No slides
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  - In all 3 of these cases, neither of the first 2 primary reasons for exclusion are met (nor do any of the symptoms of these cases meet specific criteria for exclusion):
    - Prevents the child from participating comfortably in activities.
    - Results in a need for care that is greater than the staff can provide without compromising the health and safety of the other children
  - *Managing Infectious Diseases in Child Care and Schools* has specific instructions about which conditions require health department reporting under the quick reference sheet for each condition and the table, Infectious Diseases Designated as Notifiable at the National Level — United States 2008.

**Diagnosis-based Case 1 (Shigella) Discussion Points**

- Shigella outbreaks can spread rapidly.
- Exclusion is very necessary for bloody diarrhea and requires a doctor visit.
- Exclusion is required until:
  - Child is treated.
  - Two negative stool cultures 24 hours apart.
  - Stool is contained in diaper and fewer than 2 stools above normal or no toileting accidents for older children
- Health department reporting is necessary.
- Remember to assess the caregivers/teachers and be sure no person with diarrhea is doing food handling.

**Manual Materials**

- Diagnosis-based Case 1
- Diagnosis-based Case 2
- Diagnosis-based Case 3
#20 • Child with nits in hair.

### Diagnosis-based Case 2 (Lice) Discussion Points
- For this exercise, refer participants to the Lice (Pediculosis Capitis) Quick Reference Sheet in Module 2 of the Participant’s Manual.
- Exclusion is required at the end of the day, not emergently.
- The affected individual should have treatment for lice. After treatment has started, allow return to the program should be allowed. For example, a child who is treated in the evening can return to the program the next morning.
- The presence of nits that are more than 1/4 inch from the scalp is not a reason to exclude for lice since these do not hatch live lice.
- To the extent possible, limit direct head-to-head contact to reduce the risk of person-to-person spread of lice.
- Lice infestations cause a lot of concern for parents and teachers/caregivers. We acknowledge that the AAP policies and suggested practice may be in conflict with the beliefs of parents and teacher/caregivers. The AAP policies on lice are an attempt to balance the relatively harmless health affects of lice with the sometimes extreme exclusion practices, such as immediate exclusion and no return until nits are gone (no nit policies) or required exclusions after treatment has been started. These exclusion practices have not been shown to reduce the spread of lice and can result in decreased education and quality care for children and lost parental income. Some of this concern can be addressed by copying and distributing the *Managing Infectious Diseases in Child Care and Schools* handout on lice.

### Manual Materials
- Lice (Pediculosis Capitis) Quick Reference Sheet

### Resources
1. AAP Healthy Children Web site for Families:  
   www.healthychildren.org/English/News/pages/AAP-Offers-Updated-Guidance-on-Treating-Head-Lice.aspx

#21 • Child with nits on hair behind ears and at nape of neck.

### Diagnosis-based Case 3 (MRSA) Discussion Points
- Exclusion not necessary as long as:
  - Lesion can be covered completely with no external drainage.
  - No other exclusion criteria met, such as prevents the child from participating comfortably in activities or results in a need for care that is greater than the staff can provide without compromising the health and safety of the other children.
  - Boils, abscesses, or cellulitis should be cultured to assist in treatment decisions (therefore, this child should see a health care professional).
  - Other children who are not having symptoms do not need to be cultured.

#22
Guided Discussion

- On a flipchart, list infections/conditions/symptoms which do NOT need exclusion (but frequently are excluded).
  - Common cold (runny nose, congestion)
  - Eye discharge (watery, yellow, green, white) with or without red eyes (unless 2 or more children have red eyes with discharge [pinkeye], until health department advises)
  - Fever without behavior change or signs of illness (unless child is under 5 months)
  - Rash without fever or behavioral changes
  - Ringworm (exclusion for treatment can be delayed until the end of the day)
  - Thrush
  - Lice (exclusion for treatment can be delayed until the end of the day)
  - Fifth disease (parvovirus) follows the rash exclusion criteria
    - Exposure of women who lack immunity to fifth disease and CMV during pregnancy poses some risk to their fetuses. Susceptible pregnant caregivers/teachers and pregnant mothers of children in child care and school settings should carefully wash their hands to reduce their risk of this infection and infection from other viruses that could harm a fetus. These women should consult with their health care professionals about their immune status and risk of infection.†
    - MRSA without an infection or illness that would otherwise require an exclusion
    - Cytomegalovirus (CMV) infection
    - Chronic Hepatitis B
    - HIV (case by case, and is based on protecting the HIV-infected child, not on potential harm to others)

Reference

Lecture

- The goal is NOT usually to reduce spread of mild infections since symptoms occur after germs have already spread.
- Instead, the goal should be to focus on the child’s activity level to ensure proper teacher/caregiver to child ratios and the most comfortable environment possible for the child.
- There are a number of conditions that are serious. The list is long, but these occur uncommonly. We vaccinate for many of these conditions. Refer to Managing Infectious Diseases in Child Care and Schools.†

Reference
Lecture

- Exclusion decisions are emotional, controversial, and confusing.
- Exclusion criteria need to be written down and reviewed ahead of time.
- Published guides, such as *Managing Infectious Diseases in Child Care and Schools*, come from a reliable source and help to defuse controversy and fear by imparting knowledge.
- Only 3 primary reasons for exclusion:
  - Prevents the child from participating comfortably in activities.
  - Results in a need for care that is greater than the staff can provide without compromising the health and safety of the other children.
  - Specific diseases, symptoms and conditions listed in *Managing Infectious Diseases in Child Care and Schools*.
- There are other specific diseases, symptoms and conditions that can be looked up in *Managing Infectious Diseases in Child Care and Schools*.
- If you are not certain who to notify, look it up in *Managing Infectious Diseases in Child Care and Schools*.

Resource


(1 minute)
Module 3: Recognizing and Managing Infectious Diseases

Objectives

A. Knowledge

Each participant will be able to:

1. Identify the 3 primary reasons for exclusion, and know where to find and how to use the list of specific conditions that require exclusion.
2. Identify 2 reasons why exclusion does not reduce the spread of most common germs.
3. Explain at least 1 goal of exclusion.
4. Explain why consistent application of exclusion criteria creates clear expectations of families and child care staff, and a healthier environment.
5. Explain how to effectively manage an outbreak of an infectious disease and which people should be involved.

B. Attitude

Each participant will be able to:

1. Commit to implementing daily health checks in the child care facility.
2. Feel comfortable using a resource, such as Managing Infectious Diseases in Child Care and Schools, to determine proper management of infectious disease strategies.

C. Behavior

Each participant will:

1. Demonstrate proficiency using Managing Infectious Diseases in Child Care and Schools and Caring for Our Children (CFOC) to research a disease based on symptoms.
2. Demonstrate proficiency using Managing Infectious Diseases in Child Care and Schools and CFOC to research a disease based on a diagnosis.
Module 3: Recognizing and Managing Infectious Diseases

References


- Aronson SS, Shope TR. *Managing Infectious Diseases in Child Care and Schools: A Quick Reference Guide*. 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2009 (Slides 1, 2, 6, 7, 12, 13, 14, 15, 18, 19, 22, 23, 24)

Module 3: Recognizing and Managing Infectious Diseases

Resources


2. www.aap.org/disasters/pandemic-flu-cc.cfm (Slide 6)


**Symptom-based Case 1**

A 10-month-old girl had some loose stools yesterday. She came to child care today. By lunch time, she has had 3 stools that are larger in volume than usual and watery green with no blood or mucus. The stools are contained in her diaper. She is acting normal and does not feel warm (no fever if you check). Normally, she has 2 stools from morning drop-off until her late afternoon pick-up from the child care program.

Take 5 minutes to discuss and write down your answers. You should try to look up the American Academy of Pediatrics’ policies in *Caring for Our Children* or *Managing Infectious Disease in Child Care and Schools*.

**Questions to consider:**

Should she be excluded?

What are your responsibilities to the affected child, the other children, and the child care staff?

When should you notify other parents or guardians?

When should you require a health visit?

When should you notify the health consultant or health department?

What do you think about the AAP policy on diarrhea?
Symptom-based Case 2

A 10-month old boy develops green/yellow eye discharge and the whites of his eyes appear red. He is otherwise acting normally other than a runny nose. He is playful, interactive, and eating and drinking well. See slide.

What are your responsibilities to the affected child, the other children, and the child care staff?

Questions to consider:

Should he be excluded?

What are your responsibilities to the affected child, the other children, and the child care staff?

When should you notify other parents or guardians?

When should you require a health visit?

When should you notify the health consultant or health department?

What do you think about the AAP policy on pink eye/conjunctivitis?
**Symptom-based Case 3**

A 24-month-old boy develops a rash consisting of small red bumps and white fluid-filled blisters on hands. He also complains of some mouth pain and you notice some red areas with white tops inside his lips. He is otherwise acting normally other than a runny nose. He is playful, interactive, and eating and drinking well. See slides.

Take 5 minutes to discuss and write down your answers. You should try to look up the American Academy of Pediatrics' policies in *Caring for Our Children* or *Managing Infectious Disease in Child Care and Schools*.

*Questions to consider:*

Should he be excluded?

What are your responsibilities to the affected child, the other children, and the child care staff?

When should you notify other parents or guardians?

When should you require a health visit?

When should you notify the health consultant or health department?

What do you think about the AAP policy on rash? Is this a specific type of rash? Does the exact diagnosis make a difference in how you manage this child?
Notice of Exposure to Communicable Disease

Name of Facility/School

Address of Facility/School

Telephone Number of Facility/School

Dear Parent or Legal Guardian:

A child in our facility/school has or is suspected of having ________________________________.

Without violating the confidentiality of this child, the facts you need to know about your child’s exposure in this situation are:

We want to inform you about this condition and the related exclusion and return-to-care practices at our facility/school. Please read the attached information sheet closely and call us with any questions.

Facility/School Staff Person’s Name

Telephone Number


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What is conjunctivitis?

Inflammation (ie, redness, swelling) of the thin tissue covering the white part of the eye and the inside of the eyelids.

What are the signs or symptoms?

There are several kinds of conjunctivitis, including:

- **Bacterial**
  - Red or pink, itchy, painful eye(s).
  - More than a tiny amount of green or yellow discharge.
  - Infected eyes may be crusted shut in the morning.
  - May affect one or both eyes.
- **Viral**
  - Pink, swollen, watering eye(s) sensitive to light.
  - May affect only one eye.
- **Allergic**
  - Itching, redness, and excessive tearing, usually of both eyes.
- **Chemical**
  - Red, watery eyes, especially after swimming in chlorinated water.
  - Immune mediated, such as that related to a systemic disease like Kawasaki disease.

What are the incubation and contagious periods?

Depending on the type of conjunctivitis, the incubation period varies.

- **Bacterial**
  - The incubation period is unknown because the bacteria that cause it are commonly present in most individuals and do not usually cause infection.
  - The contagious period ends when the course of medication is started.
- **Viral**
  - Sometimes occurs early in the course of a viral respiratory tract disease that has other signs or symptoms.
  - One type of viral conjunctivitis, adenovirus, may be contagious up to 14 days after the appearance of signs or symptoms. Children with adenovirus infection are often ill with fever, sore throat, and other respiratory tract symptoms. This virus may uncommonly cause outbreaks in child care and school settings. Antibiotics for this condition do not help the patient or reduce spread.
  - The contagious period continues while the signs or symptoms are present.

How is it spread?

Hands become contaminated by direct contact with discharge from an infected eye, or by touching other surfaces that have been contaminated by respiratory tract secretions and gets into the child’s eyes.

How do you control it?

- Consult a health professional for diagnosis and possible treatment. The role of antibiotics in treatment and preventing spread is unclear. Most children with pinkeye get better after 5 or 6 days without antibiotics.
- Careful hand hygiene before and after touching the eyes, nose, and mouth.
- Careful sanitation of objects that are commonly touched by hands or faces, such as tables, doorknobs, telephones, cots, cuddle blankets, and toys.

What are the roles of the caregiver/teacher and the family?

- Report the infection to staff designated by the child care program or school for decision making and action related to care of ill children. That person, in turn, alerts possibly exposed family members and staff to watch for symptoms.
- Notify child’s parent/guardian to consult with the child’s health professional about diagnosis and treatment by telephone or office visit. Documentation from the child’s health professional is not required.

➤continued
Pinkeye (Conjunctivitis), continued

• Seek advice from the health department or the program’s health consultant about how to prevent further spread if 2 or more children in one room have red eyes with watery discharge.
• Review hand-hygiene techniques and sanitation routines.
• Complete course of medication, if prescribed, for bacterial conjunctivitis.

Exclude from group setting?

No, unless
• The child is unable to participate and staff determine that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.
• The child meets other exclusion criteria, such as fever with behavior change (see “Conditions Requiring Temporary Exclusion” on page 41).
• There is a recommendation of the health department or the child’s health professional.

Readmit to group setting?

• When exclusion criteria are resolved, the child is able to participate, and staff determine that they can care for the child without compromising their ability to care for the health and safety of the other children in the group.
• Antibiotics are not required to return to care.

Comments

• It is helpful to think of pinkeye like the common cold. Both conditions may be passed on to other children but resolve without treatment. We do not exclude for the common cold. Pinkeye generally results in less symptoms of illness than the common cold. The best method for preventing spread is good hand hygiene.
• One form of viral conjunctivitis, caused by adenovirus, can cause epidemics. If 2 or more children in a group care setting develop conjunctivitis in the same period, seek the advice of the program’s health consultant.
Hand-Foot-and-Mouth Disease

What is hand-foot-and-mouth disease?
A common set of symptoms associated with viral infections that are most frequently seen in the summer and fall. Despite its scary name, this illness generally is mild. Most commonly caused by coxsackievirus A16 and enterovirus 71.

What are the signs or symptoms?
- Tiny blisters in the mouth and on the fingers, palms of hands, buttocks, and soles of feet that last a little longer than a week (one, few, or all of these may be present).
- May see common cold signs or symptoms with fever, sore throat, runny nose, and cough. The most troublesome finding is blisters in the mouth, which make it difficult for the child to eat or drink. Other signs or symptoms, such as vomiting and diarrhea, can occur, but are less frequently troublesome.
- Hand-foot-and-mouth disease caused by enterovirus 71 can cause neurologic symptoms.

What are the incubation and contagious periods?
- Incubation period: 3 to 6 days.
- Contagious period: Virus may be shed for several weeks after the infection starts; respiratory shedding of the virus is usually limited to a week or less.

How is it spread?
- Respiratory route (ie, coughing, sneezing)
- Direct contact
- Fecal-oral route

How do you control it?
- Teach children and caregivers/teachers to cover their mouths and noses when sneezing or coughing with a disposable facial tissue if possible, or with a shoulder if no facial tissue is available in time (“give your cough or sneeze a cold shoulder”). Teach everyone to wash hands right after using facial tissues or having contact with mucus.
- Dispose of facial tissues that contain nasal secretions after each use.
- Use good hand-washing technique at all the times listed in “When to Wash Hands” on page 25, especially after diaper changing.

What are the roles of the caregiver/teacher and the family?
- Report the infection to staff designated by the child care program or school for decision making and action related to care of ill children. That person, in turn, alerts possibly exposed family members and staff to watch for symptoms.
- Encourage the family to seek medical advice if the child is very uncomfortable with signs of illness from the infection, such as an inability to drink or eat, or if the child seems very ill.

Exclude from group setting?
No, unless
- The child is unable to participate and staff determine that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group. Excessive drooling from mouth sores might be a problem that staff will find difficult to manage for some children with this disease.
- The child meets other exclusion criteria, such as fever with behavior change (see “Conditions Requiring Temporary Exclusion” on page 41).

Available at www.aap.org/bookstore

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Hand-Foot-and-Mouth Disease, continued

- Note: Exclusion will not reduce disease transmission because some children may shed the virus without becoming recognizably ill, and other children who became ill may shed the virus for weeks in the stool.

Readmit to group setting?

When exclusion criteria are resolved, the child is able to participate, and staff determine that they can care for the child without compromising their ability to care for the health and safety of the other children in the group.
Diagnosis-based Case 1

You are the director of a center-based program. The third child in the past 2 weeks was just excluded from the toddler room for bloody diarrhea. The first 2 were diagnosed with shigella. They were treated and allowed back in the program after being cleared by their doctor. You just learned that 1 of your child care staff members who prepares the lunch each day has been coming to work despite having stomach cramps and diarrhea. You feel you have a major problem on your hands.

Take 5 minutes to discuss and write down your answers. You should try to look up the American Academy of Pediatrics' policies in Caring for Our Children or Managing Infectious Disease in Child Care and Schools.

Questions to consider:

What are your responsibilities to the affected child, the other children, and the child care staff?

When should you notify other parents or guardians?

When should you require a health visit?

When should you notify the health consultant or health department?

What do you think about the AAP policy on shigella?

Why is this policy stricter than other policies?
**Diagnosis-based Case 2**

You notice that 3-year-old Billy has been scratching his head quite a bit the last few days. You take a closer look and, in horror, note a small insect running from the lower neck into the deeper hair. Though your instinct is to run, you do look closer, and note lots of white casings at the bases of the hair follicles behind both ears and...1 more live critter. You take a deep breath and...

Take 5 minutes to discuss and write down your answers. You should try to look up the American Academy of Pediatrics' policies in *Caring for Our Children* or *Managing Infectious Disease in Child Care and Schools*.

**Questions to consider:**

What are your responsibilities to the affected child, the other children, and the child care staff?

When should you notify other parents or guardians?

When should you require a health visit?

When should you notify the health consultant or health department?

What do you think about the AAP policy on lice?
Diagnosis-based Case 3

Sally, age 4 years, was bitten by a mosquito about a week ago. Despite your best efforts she continued to scratch at it. Today, the area of the bug bite looks worse. It is bigger, a little red, and is oozing some fluid. It doesn’t seem to hurt. Sally seems to be feeling well, participating in activities, and is not warm to touch or temperature. You remember that her mom told you that another family member had a MRSA skin infection last month.

Take 5 minutes to discuss and write down your answers. You should try to look up the American Academy of Pediatrics’ policies in Caring for Our Children or Managing Infectious Disease in Child Care and Schools.

Questions to consider:

What are your responsibilities to the affected child, the other children, and the child care staff?

When should you notify other parents or guardians?

When should you require a health visit?

When should you notify the health consultant or health department?

What do you think about the AAP policy on boils, abscesses, and MRSA infections?
Lice (Pediculosis Capitis)

What are head lice?
- Small, tan-colored insects (less than \( \frac{1}{8} \)" long)
  - Live on blood they draw from the scalp.
  - Live for days to weeks depending on temperature and humidity.
  - Crawl. (They do not hop or fly.)
  - Deposit tiny, gray/white eggs, known as nits, on a hair shaft 3 to 4 mm from the scalp because the eggs need the warmth from the scalp for hatching.
  - Cannot live for more than 48 hours away from the scalp as adult insects, and as eggs, cannot hatch at temperatures lower than those found close to the scalp.
- Having an infestation with lice may cause irritation and scratching, which can lead to secondary skin infection.
- Families and caregivers/teachers often get very upset about lice; however, head lice do not carry disease. Head lice infestations occur in all socio-economic groups and do not represent poor hygiene.
- Often, normal activities are disrupted because people become so upset about these insect pests.

What are the signs or symptoms?
- Itching of skin where lice feed on the scalp or neck or complaints about itchiness by older children.
- Nits may be glued to hair, most easily seen behind ears and at or near the nape of the neck.
- Scratching, especially behind and around ears and at the nape of the neck.
- Open sores and crusting from secondary bacterial infection that may be associated with swollen lymph nodes (commonly called swollen glands).

What are the incubation and contagious periods?
- Incubation period: 10 to 14 days from laying to hatching of eggs.
  - Lice can reproduce 2 to 3 weeks after hatching.
- Contagious period: Until lice are killed with a chemical treatment.

How are they spread?
- Direct contact with infested hair.
- Only lice, not nits, spread the infestation. (Nits must be near a warm scalp to hatch.)

How do you control them?
- By using medications (pediculocides) that kill lice and nits. Resistance of lice and nits to these chemicals has been reported, but the extent of resistance to the chemicals varies. Some chemicals may require 2 treatments. Since the chemicals are toxic, they should be used according to the approved instructions only. If a particular chemical fails to work, repeated use of that chemical is unlikely to be successful, and an alternative chemical that has been shown to be effective should be tried.
- None of the suggested remedies using common household products (eg, salad oils, mayonnaise, petroleum jelly) or chemicals intended for other purposes have been shown to be effective. Some that have been tried (eg, kerosene) are very dangerous.
- Mechanical removal of the lice and nits by combing them out with a special fine-tooth comb is tedious and very time-consuming.
- Have families examine the heads of household and close contacts.
- Infested articles that can be laundered should be cleaned at 130°F (54.4°C) and dried on the hot setting. Dry-cleaning clothing and bedding, or separating them from contact with people also is effective.

continued
Lice (Pediculosis Capitis), continued

- Toys, personal articles, bedding, other fabrics, and upholstered furniture that cannot be laundered with hot water and a dryer or dry-cleaned can be kept away from people (eg, in a plastic bag) for more than 2 days if there is concern about lice having crawled from an infested child onto these articles.
- Because head lice can only live for 1 to 2 days away from the scalp, chemical treatment of the environment is not necessary. Vacuum floors, carpets, mattresses, and furniture (a safe alternative to spraying).
- Help prevent lice infestation by encouraging children not to engage in activity that causes head-to-head contact.

What are the roles of the caregiver/teacher and the family?

- Report the infestation to staff designated by the child care program or school for decision making and action related to care of ill children. That person, in turn, alerts possibly exposed family members and staff to watch for symptoms.
- Have parents/guardians consult with a health professional for a treatment plan.
- Check children observed scratching their heads for lice; check all contacts.
- Educate caregivers/teachers and families on how to recognize lice and nits.

Exclude from group setting?

Yes, at the end of the program or school day.
- Children with lice should be referred for treatment at the end of the day.
- Until the end of the program or school day, avoid any activity that involves the child in head-to-head contact with other children or sharing of any headgear.

Readmit to group setting?

After the child has received the treatment recommended by the child’s health professional

Comments

- Removal of nits from the hair near the scalp that might contain live eggs is very difficult. Those farther than ¼" from the scalp are empty egg casings. Nit removal may help reduce diagnostic confusion about reinfection of children who have been successfully treated. However, no-nit policies that require children to be nit free are not recommended because they have not been shown to be effective in controlling outbreaks, may keep the child out of the program needlessly, and unduly burden the child’s parents/guardians who must implement this measure.
- Education of families and caregivers/teachers about the relatively benign consequences of head lice infestations should be attempted to reduce the level of disruption for the infested child and all the others involved in the program. It may be necessary to arrange for a health professional to provide this education to overcome the widespread beliefs about this problem.
- The itching results from an allergic reaction to the saliva of the lice; itching often persists for weeks after the infestation has resolved.