Module 1
Understanding Infectious Diseases

- Impact
- Vulnerability
- Symptoms
- Spread
Types of Germs

- Viruses
- Bacteria
- Fungi
- Parasites
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What does infection mean?
What does contamination mean?
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- Contagious
- Infectious
- Communicable
Child Care at 2:00 pm

A 20-month-old child wakes up from a nap and is flushed. She does not want to play with other children and is irritable. Her temperature was taken and is 101°F.

How does this affect:
Parents?
Caregivers/teachers?
Health care professionals?

How will the impact influence their decision making?
Impact of Infectious Diseases

• Economic
• Contagion
• Disruptions
• Health care provider issues
Impact of Infectious Diseases

Everyone is affected.
Bad News: Frequency of Illness

Children in early education and child care

- Sick more often
- Illnesses last longer
- More ear infections
- More antibiotic-resistant bacterial infections
Good News: Annual Illness Incidence by Age
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More Good News

• Germs in early education programs are the same as those in community outbreaks
• 90% of infections are mild, self-limited, and require no treatment
Good News for Child Care

• Illness incidence decreases after the first full year of attendance
• Kindergarten children with prior early education program attendance have fewer infections
• Children who attended early education programs were less likely to develop asthma at 6 years of age
Why are children more vulnerable to infectious diseases?
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Who is most vulnerable to infection?

- Young infants
- Children with special health care needs
- Children with impaired immune systems
- Pregnant women
Symptoms of Infectious Diseases

What symptoms might this child have or develop in the next few days?
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Symptoms of Infectious Diseases

- Cough
- Runny nose and/or congestion
- Difficult or noisy breathing
- Vomiting, nausea, or stomachache
- Diarrhea
- Rash
- Itching
- Drainage or irritation of eye or other infected body part
- Fever
- Aches or pains: Sore throat, earache, headache, body ache
- Mouth sores
- Swollen glands
- Behavior changes
What do you think are the most common symptoms that children in early education settings have?
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Common Symptoms Reported in Early Education settings

- Respiratory: 66%
- Fever: 14%
- Gastroenteritis: 9%
- Earache: 6%
- Rash: 5%
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What symptoms do you think cause the most absence?
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Symptoms that Cause the Most Absence

- Gastroenteritis: 23%
- Rash: 25%
- Earache: 10%
- Respiratory: 15%
- Fever: 15%
- Pinkeye: 16%
How Infectious Disease Spreads

- Respiratory droplets
- Fecal-oral
- Direct contact with people or objects
- Body fluids
- Insects
Bingo Matching Exercise

- Pull out your blank bingo card
- In random order on your card, fill in the squares with these methods of how infectious diseases are spread
- There are 9 squares and 8 items including free space

Direct Contact 1
Fecal Oral 1
Body Fluids 1
Insects

Direct Contact 2
Fecal-Oral 2
Body Fluids 2
Free Space
Bingo Matching Exercise

• The next slides will have photos of ways that disease can spread
• Match the photo with the way it spreads disease and put an x on that box
• Call out if you get BINGO!
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Summary

• Everyone is affected by the spread of infectious diseases in groups of children
• Children are more vulnerable
• Infectious diseases spread by different methods
• Each method of spread can be prevented by specific strategies, which will be discussed in the next module

Questions?
Acknowledgements

• This curriculum has been developed by the American Academy of Pediatrics (AAP). The authors and contributors are expert authorities in the fields of pediatrics and early childhood education and care.

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Module 2

Preventing Infectious Diseases

Controlling Spread

- Tools
- Vaccines
- Reducing Germs
- Sanitation
- Food Handling
- Policies and Procedures
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People

Places

Germs
Overview of Tools to Control Infection: People

- Nutrition
- Exercise
- Safe activities
- Healthful practices
- Immunization
- Manage risk of those with special needs
Overview of Tools to Control Infection: Places/Environment

- Facility Design
- Program Plan
Overview of Tools to Control Infection: Germs

- Wash hands
- Clean & sanitize surfaces
- Follow standard precautions
- Proper disposal of materials
- Exclude ill people from the group when it matters
Where can you find current recommended adult and child vaccine schedules?
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Seasonal Flu

Why should adults and children get vaccinated against the flu?
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Checking Vaccine Records

- How do you keep track of immunization records?
- Why should early childhood programs check vaccine records?
- Why are so many people overdue for vaccines?
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Handwashing

- Make sinks, soap, and towels available
- Wash hands at routine times
- Use good technique
- Have fun washing
- Soap and water are best
Other Issues

- Gloves
- Hand sanitizers
- Antibacterial soap
What does “clean” mean?
Sanitizing & Disinfecting

- What is the difference between sanitizing and disinfecting?
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How does your program clean these things?

- Toys
- Bedding
- Soft toys
- Soft surfaces and furniture
- Carpets and hard surface floors
- Tables, door, and cabinet handles
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Evaluate This Diapering Set-Up

Courtesy of Cheryl Frank and Andrea Miller
Sanitary Food Handling

- Prevent food-borne illness with sanitary food handling practices
- Keep perishable foods at safe temperatures
- Prevent contamination of food during handling
- Examine foods brought from home
Informing Parents and Child Care Staff

- Daily health check
- Talking with parents about health policies
- Notification when children are ill
- Children with special needs
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Policies and Procedures

- **Caring for Our Children, National Health and Safety Performance Standards, fourth edition**, kept updated online at [http://nrckids.org](http://nrckids.org)

- **Model Child Care Health Policies** at [www.ecels-healthychildcarepa.org](http://www.ecels-healthychildcarepa.org)
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Policies and Procedures

- Does your program have clearly written policies to minimize infectious illnesses?
- Do you share these policies with families and child care staff?
- Do the policies need updating?
- What can you do to review and revise your program policies to minimize infectious illness?
Using Caring for Our Children at http://nrckids.org/

Look-up Exercise:
- Staff exclusion for illness
- Staff modeling of healthy behavior
- Space for an ill child
What are the infectious disease issues for each of these?

- Pets
- Storage of gear and bedding
- Separation of groups
Review: Focus of Tools to Control Infection

- People
- Places/environment
- Germs
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Module 3

Recognizing and Managing Infectious Diseases

- Daily health check
- Exclusion
- Symptoms versus disease
Case 1

The teacher in the toddler room notices that 20-month-old Suzie is a little less active than normal and has a runny nose, though she has been playing on and off. She is still participating in various activities. The teacher checks her temperature and it is 101°F.

• Does Suzy need to be excluded? Why or why not?
• Is there an exclusion policy that covers this?
• What is difficult about this case?
Daily Health Check

- Routine of greeting parents/children every day
- Form of communication between parents and caregiver/teacher
- May enable caregivers/teachers to identify illness while parents are still present
What To Do When Kids Get Sick After the Daily Health Check

- **Observe children**
  - Look for less activity
  - Increased care needs
  - Check for other symptoms

- **If other symptoms are present**
  - Make a decision about exclusion
  - Notify parents
  - Care for child until the parent/caregiver arrives
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What To Do When Kids Get Sick After the Daily Health Check

- Refer to exclusion criteria
- If a child needs to go home, procedures should be in place to take care of the child until they can be picked up
Outbreaks

• Sudden rise in the occurrence of a disease
• Notify your child care health consultant or health department
• Consult evidence-based resources
Exclusion

• How do you make decisions about exclusion?
• What are characteristics of good exclusion criteria?
• Is exclusion an effective way to reduce transmission of germs?
• What are the reasons to exclude children from out-of-home child care?
Does exclusion reduce the spread of disease?
Reasons for Exclusion

- The caregiver/teacher should exclude if the illness:
  - 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
  - Is a specific disease, symptom or condition requiring exclusion

CFOC4 Standard 3.6.1.1. Inclusion/Exclusion/Dismissal of Children
http://nrckids.org/CFOC/Database/3.6.1.1
Symptoms versus Diseases

- Children develop symptoms first but don’t yet have a diagnosis
- Caregivers/teachers **SHOULD NOT** make the diagnosis of a specific disease
- Caregivers/teachers **DO** need to recognize symptoms for which exclusion is necessary
Symptoms Requiring Exclusion

- Fever WITH behavior change
- Diarrhea (in some cases)
- Blood in stool
- Vomiting more than 2 times in 24 hours
- Abdominal pain (in some cases)
- Drooling with mouth sores
# Curriculum for Managing Infectious Diseases in Early Education and Child Care Settings

## Signs and Symptoms Chart

**Routine Exclusion Criteria Applicable to All Signs and Symptoms**
- Unable to participate.
- Care would compromise staff’s ability to care for other children.
- Child meets other exclusion criteria.

<table>
<thead>
<tr>
<th>Sign or Symptom</th>
<th>Common Causes</th>
<th>Complaints or What Might Be Seen</th>
<th>Notify Health Consultant</th>
<th>Notify Parent</th>
<th>Temporarily Exclude?</th>
<th>If Excluded, Readmit When</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cold Symptoms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cough</td>
<td>Common cold</td>
<td>Coughing</td>
<td>Yes</td>
<td>No, unless:</td>
<td>Severe cough</td>
<td>Severe cough</td>
</tr>
<tr>
<td></td>
<td>Lower respiratory infection (e.g., pneumonia, bronchiolitis)</td>
<td></td>
<td>Yes</td>
<td>No, unless:</td>
<td>Severe cough</td>
<td>Severe cough</td>
</tr>
<tr>
<td></td>
<td>Sinus infection</td>
<td></td>
<td>Yes</td>
<td>No, unless:</td>
<td>Severe cough</td>
<td>Severe cough</td>
</tr>
<tr>
<td></td>
<td>Pertussis</td>
<td></td>
<td>Yes</td>
<td>No, unless:</td>
<td>Severe cough</td>
<td>Severe cough</td>
</tr>
<tr>
<td></td>
<td>Other respiratory infections</td>
<td></td>
<td>Yes</td>
<td>No, unless:</td>
<td>Severe cough</td>
<td>Severe cough</td>
</tr>
<tr>
<td></td>
<td>Other infections</td>
<td></td>
<td>Yes</td>
<td>No, unless:</td>
<td>Severe cough</td>
<td>Severe cough</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No, unless:</td>
<td>Severe cough</td>
<td>Severe cough</td>
</tr>
<tr>
<td>Diaper Rash</td>
<td></td>
<td>Distress, danger signs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
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</tbody>
</table>

[http://nrckids.org/files/appendix/AppendixA.pdf](http://nrckids.org/files/appendix/AppendixA.pdf)
Severe Illness

There are certain symptoms of severe illness that it does not matter what the diagnosis is --- Call 911 (and the parents/caregivers)
Symptoms of Urgent Conditions

• Fever in a child who looks more than mildly ill
• Unexplained irritability
• Fever in a child under 60 days old
• Severe vomiting and/or diarrhea
• Venomous bites or stings
• Injury like a break to the skin that does not hold together
Child Develops Symptoms

- What are your responsibilities to the affected child and parents, to the other children, and the child care staff?
- When should you notify other parents?
- When should you require a health visit?
- When should you notify the health consultant or health department?

Model Child Care Health Policies: http://www.ecels-healthychildcarepa.org/
Child Already Has A Diagnosis

- What is your responsibility to child care staff, children and the affected child?
- When should you notify parents? How?
- When should you notify the health consultant or health department?
Conditions that DO NOT Need Exclusion

Many symptoms or conditions do not need exclusion (but children with them are frequently excluded)
Goals of Exclusion
Summary

• Exclusion decisions should be based on written criteria
• Three main reasons for exclusion
• Decisions about whom to notify can be determined by checking and consulting with local public health authorities as needed
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Wrap Up
Think-Pair-Share

- Find a partner
- Discuss what policies related to infectious diseases are present, absent or needed where you work
- Think about the items that those policies should include
- List them to share with the whole group
- You have 5 minutes
Policies

- Exclusion (and when a child can return)
- Staff health
- Immunization
- Food preparation
- Hand washing
- Hygiene practices (cleaning toys, storing personal materials)
- Diaper changing
Policies

- Standard precautions
- Daily health checks
- Care of an acutely ill child
- Parental notification
- Medication administration
- Outbreaks including pandemics
- Confidentiality
Next Steps?
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Additional Resources
Thank you for your participation!
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