Communicable Disease Control for Shelter Providers

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Humans and Animals Live Together with Germs

- Human bodies contact and contain many germs all the time: viruses, bacteria, fungi
- Some germs are helpful to human bodies
- Some germs always cause illnesses in humans
- Some germs sometimes cause illnesses in humans
- A human body's relationship with a germ can either cause illness or support health

Megan Diddie, *Human Holobiont*
Health is about Balance, not Avoiding Germs Completely

• Humans need to be together to be healthy, sharing air and food and touch
• Sick people need to be cared for, not avoided
• Getting sick can be dangerous, but often it is not
• Some exposure to small amounts of germs causing mild illnesses can prevent getting serious illnesses later
• With awareness, some simple steps can allow people to be together and also get less sick, less often
Chain of Infection

- Reservoir: Human or agent (e.g., amoeba, rat)
- Mode of transmission: Direct contact, vector (mosquito), vehicle (food), droplet or airborne
- Susceptible host: Multiple portals of entry such as mouth, mucosa, syringe
Communicable Illnesses in Street and Shelter Locations

Alameda County Health Care for the Homeless (ACHCH) works closely with the County of Alameda Public Health Department's Division of Communicable Disease Control & Prevention (DCDCP) in an effort to prevent transmission of communicable diseases and respond to incidences of communicable diseases in shelters, homeless service centers, and in street/encampment settings in Alameda County.

ACHCH and DCDCP have jointly developed a toolkit to support homeless service providers in carrying out the fundamental strategies to prevent communicable diseases in shelters, streets and homeless services centers:

1. Create an internal process to identify outbreak or incidence of communicable disease.
2. Educate staff and residents to recognize specific disease patterns.
3. Document cases of similar etiology/symptoms with sufficient details to track source of disease outbreak.
4. Rapidly implement measures to control spread of illness based on mode of transmission of suspected infectious disease including isolation, PPE use, hand hygiene, cleaning and disinfection.
5. Notification to ACHCH and local health department of an outbreak to secure expertise and help in managing the outbreak.
Fundamental Strategies

1. Establish internal process (policies and procedures) to identify an outbreak or incidence of communicable disease
Outbreak Definition

• More persons with any symptom than would usually be expected in a specific setting for that time of year
• E.g., if two persons in the same shelter are sick with vomiting or diarrhea within one week, and that number of illnesses is more than typically seen, then an outbreak may be occurring.
  • Important to consider whether this a stable shelter population vs. transient population from day-to-day
• It is important to continually monitor for an increase in illnesses in the entire setting.
Poll Question #1

Do you have written policies and procedures to guide staff in identifying an outbreak? Yes, No, I don’t know but need to find out
Poll Question #2

One case of an infection can be considered an outbreak. True or False.
Fundamental Strategies

2. Educate staff to recognize specific disease patterns including the signs and symptoms of certain diseases

3. Document infections of similar etiology/symptoms with sufficient details to assist in tracking the source
Select Communicable Diseases and Infection Control Recommendations for Shelters

Fundamental Strategies to Prevent Communicable Diseases

1. Establish internal policies and procedures to identify an outbreak.
2. Educate staff to recognize specific disease patterns including the signs and symptoms of certain diseases.
3. Document infections of similar etiology/symptoms with sufficient details to assist in tracking the source.
Select Communicable Diseases and Infection Control Recommendations

- Methicillin-Resistant *Staphylococcus aureus* (MRSA) – Skin and Soft Tissue Infections
  - How to treat
  - Prevent outbreaks

- Diarrheal Infections
  - Types
  - Treatment
  - Prevention and Control

- Foodborne Diseases
  - Types
  - Treatment
  - Prevention and Control

- Aerosol Transmissible Diseases (ATD)
  - Types
  - Prevention and Control

- Infestations
  - Types
  - Treatment
  - Prevention and Control
Fundamental Strategies

4. Rapidly implement control measures to stop the spread based on the mode of transmission of the suspected infectious disease including:
   • Isolation
   • Personal Protective Equipment (PPE) use
   • Hand hygiene
   • Cleaning and disinfection
<table>
<thead>
<tr>
<th>Disease</th>
<th>Signs &amp; symptoms</th>
<th>Incubation Period</th>
<th>Transmission</th>
<th>Prevention</th>
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<tbody>
<tr>
<td>Chicken pox – varicella-zoster virus; viral disease</td>
<td>Especially seen in winter &amp; spring. Respiratory symptoms include malaise, low-grade fever followed by rash starting on face &amp; trunk spreading to rest of body. Fluid-filled vesicles rupture &amp; scab over within 1 week.</td>
<td>10-21 days</td>
<td>Thru inhalation of airborne droplets &amp; direct contact of weeping lesions &amp; Contaminated linens.</td>
<td>Mask client. Provider should avoid contact if they have never had chicken pox infection or vaccination. Vaccination available (since 1995) and required as part of childhood immunizations. Client isolated until all lesions crusted over and dry.</td>
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<td>Hepatitis – inflammation of the liver due to multiple causes (virus most common)</td>
<td>Signs &amp; symptoms generally same for all forms: Headache, fever, weakness, joint pain, anorexia, nausea, vomiting, right upper quadrant pain, jaundice, dark urine; clay-colored stools</td>
<td>Acute or Chronic incubation varies</td>
<td>Contact with blood and body fluids (Hep A transmits via oral-fecal contamination)</td>
<td>Most important is avoidance of contact with blood and body fluids of infected persons.</td>
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<tr>
<td>Hepatitis A – infectious or viral</td>
<td>May have no symptoms. Adults may have abdominal pain, loss of appetite, nausea, diarrhea, light colored stools, dark urine, fatigue, fever &amp; jaundice.</td>
<td>15-50 days; average 30 days. Disease often follows mild course</td>
<td>Fecal-oral route. Virus lasts on hands about 4 hours.</td>
<td>Vaccines in active areas (active immunity). Good handwashing.</td>
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</table>
### Appendix A

<table>
<thead>
<tr>
<th><strong>HIV</strong> – a virus that attacks the immune system &amp; causes AIDS (a collection of signs &amp; symptoms)</th>
<th>Mono-like syndrome, fatigue, fever, sore throat, lymphadenopathy, splenomegaly, rash, diarrhea. Skin lesions (Kaposi’s sarcoma); opportunistic infections (Pneumocystis carinii pneumonia, Tb)</th>
<th>Variable. May develop detectable antibodies 1-3 months. Variable time from HIV infection to diagnosis of AIDS.</th>
<th>Bloodborne through blood &amp; body fluids</th>
<th>Universal standard precautions</th>
<th>Death is usually from opportunistic diseases that take advantage of the patient’s weakened systems.</th>
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</thead>
<tbody>
<tr>
<td><strong>Influenza (flu)</strong></td>
<td>Epidemics usually in winter. Sudden onset fever for 3-5 days, chills, tiredness, malaise (not feeling well), musculoskeletal aches, nasal discharge, dry cough, mild sore throat. Children can also experience GI symptoms of nausea, vomiting &amp; diarrhea although this is uncommon in 1-4 days. Peak flu season is late December through March.</td>
<td>Direct contact especially in crowded areas via droplets. The virus can persist on surfaces for hours but indirect contact is less</td>
<td>Vaccination available annually; most effective if received from September to mid-November.</td>
<td>Handwashing critical. MMR vaccination part of childhood program.</td>
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<td><strong>Viral disease</strong></td>
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<td><strong>Measles</strong> (rubeola, hard measles)</td>
<td>Initially symptoms of severe cold with fever, conjunctivitis, swollen eyelids, photophobia, malaise, cough, nasopharyngeal congestion, red bumpy rash lasting about 6 days</td>
<td>7-14 days; average 10 days</td>
<td>Inhalation of infective droplets &amp; direct contact. Highly communicable virus mostly before prodrome starts (early or impending disease time), to about 4 days after rash appears.</td>
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<tr>
<td><strong>Meningitis</strong> – inflammation of meninges caused by bacteria &amp; viruses</td>
<td>Viral meningitis – most common type of meningitis; self-limited disease lasting 7-10 days. Bacterial – Neisseria meningitides bacteria causes very serious infection; fever, chills, headache, nuchal rigidity (stiff neck) with flexion, arthralgia (achy joints), lethargy, malaise (ill feeling), altered mental status, vomiting, seizures.</td>
<td>2-4 days up to 10 days</td>
<td>Resp droplets; contact with oral secretions, crowding, close contact; smoking, lower socioeconomic status. Viral meningitis can also be spread via contact with feces of infected person.</td>
<td>Practice good handwashing. Mask for pt and self. Universal precautions. Post exposure antibiotics started within 24 hours. Vaccination now part of childhood series (Haemophilus influenza type B). Avoid crowded places</td>
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<td><strong>Monkeypox</strong></td>
<td>Rare viral disease. 12 days after exposure get fever, headache, muscle aches, backache, swollen lymph nodes, tired. Rash 1-3 days after fever; often starts on face as fluid filled bumps &amp; the spreads.</td>
<td>12 days</td>
<td>From an animal with monkeypox if bitten or touch the animal’s Person-to-person from large respiratory droplets during long periods of face-to-face contact w/rash</td>
<td>No specific treatment. Vaccinations are best options of high risk population</td>
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<tr>
<td><strong>MRSA – methicillin resistant staphylococcus aureus</strong></td>
<td>Usually found in ill patients who are multidrug resistant. Often in open wounds, post-op wounds, around G-tube sites.</td>
<td></td>
<td>Usually spread from infected patients via hands of HCW &amp; inanimate objects (B/P cuff, stethoscope).</td>
<td>Handwashing after any patient contact. Wear gloves when doing pt contact. Protective gowns when in contact with infected linens. Avoid sharing of equipment. HCW can be colonized with MRSA (not common) but often are not ill &amp; are not at risk to other healthy persons (peers, family).</td>
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## Appendix A

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<tr>
<th>Pertussis – whooping cough</th>
<th>1(^{st}) phase – common cold symptoms lasts 1-2 weeks. 2(^{nd}) phase lasts month or longer. No fever. Mild cough that can become severe &amp; violent, productive. 3(^{rd}) phase – frequency and severity of coughing decreases.</th>
<th>6-20 days</th>
<th>Transmitted via respiratory secretions or in an aerosolized form. Highly contagious except in 3(^{rd}) phase. Communicability greatest before 2(^{nd}) phase.</th>
<th>Mask pt. DPT vaccination in childhood series (not sure how long immunity lasts).</th>
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<tr>
<td>Diarrheal Diseases</td>
<td>Acute onset of diarrhea, abdominal cramps, bloody diarrhea, dehydration, loose watery stool, fevers</td>
<td>Few hours to few days</td>
<td>Through contact with stool, aerosolized projectile vomiting(Norovirus)</td>
<td>Frequent Hand Washing Disinfection of contaminated surfaces Safe food products</td>
</tr>
<tr>
<td>Food-borne Diseases</td>
<td>Watery diarrhea, Fevers, Abdominal cramping,</td>
<td>Few hours to few days</td>
<td>Contaminated food, food toxins from improperly preserved or uncooked food</td>
<td>Safe food storage Maintaining proper temperature for cooking/storing food, frequent Hand Hygiene</td>
</tr>
</tbody>
</table>
**Fundamental Strategies**

5. Contact Health Care for the Homeless representatives for awareness.

- **ACHCH Regional Coordinators**: Homeless service providers can reach out to the following ACHCH Regional Coordinators as needed for consultation, questions, and issues related to concerns about communicable or respiratory illnesses, including COVID-19, among people experiencing homelessness:
  
  - **North County (Albany, Berkeley, Emeryville)**: Andrea Zeppa; Phone: (510) 912-8610; Email: Andrea.Zeppa@acgov.org
  
  - **Oakland**: Lynette Ward; Phone: (510) 504-1298; Email: Lynette.Ward@acgov.org
  
  - **Mid County (Alameda, Hayward, San Leandro, Castro Valley, Unincorporated)**: Phil Clark; Phone: (510) 504-1294; Email: Phil.Clark@acgov.org
  
  - **South & East County** (Fremont, Newark, Livermore, Dublin, Pleasanton, Union City): Hanna Toda; Phone: (510) 891-8943; Email: Hanna.Toda@acgov.org
Poll Question #3

Do you know what diseases are “reportable” or required to report to the Health Department in California?

Yes, No, or I don’t know but need to find out
Fundamental Strategies

- There is a list of **reportable diseases and conditions** that health care providers are required to report to Alameda County Public Health Department.

**Reportable Diseases & Conditions**

Our Communicable Disease Team will investigate disease reports. In certain circumstances, testing at the Alameda County Public Health Lab will be arranged. The Communicable Disease Team provides guidelines for treatment, prophylaxis, and infection control. Reporting of certain diseases may activate state and federal emergency response systems.

**Laboratory Reportable Diseases**

California Code of Regulations, Title 17, Section 2505 requires laboratories to report laboratory testing results suggestive of diseases of public health importance to the local health department.

- [California Department of Public Health List of Laboratory Reportable Diseases](acphd.org)

**Healthcare Provider Reportable Diseases**

Title 17, California Code of Regulations (CCR) §2500, §2593, §2641.5-2643.20, and §2800-2812 requires that healthcare providers report known or suspected cases of disease or condition, listed below, to the jurisdiction in which the patient resides.

- [California Department of Public Health List of Healthcare Provider Reportable Diseases](acphd.org)
Fundamental Strategies

• Report all reportable diseases and conditions to Alameda County Public Health Department via HCH Coordinator

• HCH will notify Acute Communicable Diseases of any outbreaks (varies by disease, but usually defined as >2-3 cases of infection) to secure expertise and assistance via acutecd@acgov.org
Poll Question #3

What types of communicable diseases or illnesses are of most current concern to you and your programs?
When to Call Alameda County Public Health Department?

• Contact HCH Coordinator for consultation first

• Refer ill shelter residents to healthcare providers for evaluation

• Report a cluster of residents/staff with vomiting/diarrhea or a cluster of residents/staff with a rash
  • Preferably via HCH coordinator
Summary: Fundamental Strategies for Communicable Disease Control in Shelter Settings

1. Establish internal policies and procedures to identify an outbreak.
2. Educate staff to recognize specific disease patterns including the signs and symptoms of certain diseases.
3. Document infections of similar etiology/symptoms with sufficient details to assist in tracking the source.
4. Rapidly implement control measures to stop the spread based on the mode of transmission of the suspected infectious disease including isolation, personal protective equipment (PPE) use, hand hygiene, cleaning and disinfection.
5. Contact Healthcare for the Homeless representatives for awareness.
6. Report all reportable diseases and conditions to Alameda County Public Health Department.
7. Notify Acute Communicable Diseases of any outbreaks (varies by disease, but usually defined as >2-3 cases of infection) to secure expertise and assistance via acutecd@acgov.org
Reporting COVID-19

Shelters & Congregate Living Facilities

**UPDATE:** As of November 7, 2023, ACPHD has updated the Preventing & Controlling COVID-19 Outbreaks in Unlicensed Congregate Living Facilities document. Please download and review the document.

The Isolation & Quarantine Hotel closed permanently at the end of February 2023. Facilities should have a plan to safely isolate and/or quarantine all residents on-site as needed. Please refer to our Guide for On-site Isolation & Quarantine for Unlicensed Group Living Settings. If you require assistance, please email COVIDOB@acgov.org

Congregate living facilities such as homeless shelters, residential treatment facilities, transitional housing facilities, room and board, group homes, and residential congregate living for youth must report the following to Alameda County Public Health Department per local reporting thresholds:

- 5 or more COVID-19 cases within a 7-day period in residents and/or staff.
Thank you for your attention!

For questions please email acutecd@acgov.org or call (510)267-3250