









| | Infection prevention and control (IPC) programs |
|------------------------|---|
| Today's | Performing risk assessments |
| Agenda ^s | Identifying, investigating, controlling, reporting, and preventing infections and outbreaks |

Today's Agenda

• Infection prevention and control (IPC) programs

- Performing risk assessments
- Identifying, investigating, controlling, reporting, and preventing infections and outbreaks

Infection prevention and control (IPC) programs Performing risk assessments Identifying, investigating, controlling, reporting, and preventing infections and outbreaks

Infection Prevention and Control (IPC) Programs

An infection prevention program is designed to prevent the spread of infections.

• The true purpose behind the program is to protect staff, residents, volunteers, and visitors from infection.

An infection prevention program should be based on:

- Infection risks specific to the facility.
- Population served.
- Services provided.
- Health care personnel who deliver services.

The risk of infection is reduced when all elements of an infection prevention program are practiced.

| IPC Program Components | | | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|--|--|
| Infection control risk assessment | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

An infection prevention program should include an IPC risk assessment. An IPC risk assessment should:

- Be performed annually.
- Involve key stakeholders.
- Consider environmental, internal, and external factors.
- Include all areas of the facility (dental, dialysis, wound care, physical therapy).

Resource:

https://higherlogicdownload.s3.amazonaws.com/APIC/eb3f0499-9134-44a4-9b14-f1d9f3915c3f/UploadedImages/ICRiskAssessmentAnalysis.xls

Infection control risk assessment

Hand hygiene program

Immunizations

Employee health

Committees

IPC plans

https://www.cdc.gov/handhygiene/

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https://www.cdc.gov/legionella/wmp/toolkit/index.html?CDC_AA_refVal=https%3A% 2F%2Fwww.cdc.gov%2Flegionella%2Fmaintenance%2Fwmp-toolkit.html



Help drive change by:

- Putting your audit findings into data.
- Providing feedback to staff and leaders.
- Creating sustainability.



Start a notebook: Maintain a record of your learning experiences, note keeping, to-do lists, etc. Taking good notes is an essential part of this job, especially during investigations, meetings, and discussions, as youmay need to refer to these often.

Regulatory review: Develop an awareness of critical regulatory statutes or accreditations applicable to your job. In most organizations, the quality department has oversight of accreditation. Be sure to discuss this when meeting with the quality director. Regulatory statutes are listed in the resource section of each overview.

Short meet-and-greets: Introduce yourself to key IP partners in your facility. Connect with team membersin leadership positions, including but not limited to:

- Quality
- IP medical director or epidemiologist

- Nursing
- Housekeeping/environmental services
- Employee/occupational health
- Plant operations/maintenance/engineering
- Sterile process and delivery/reprocessing/high-level disinfection*
- Surgical services/operating room*
- Laboratory*
- Laundry/linen services*

Performing IPC Risk Assessments

Prior to completing the IPC risk assessment consider the following:

- When was it last completed?
- · How has the facility performed or met the goals
- What has changed? Do you have a new contracting staff? Laundry? Have you looked at the laundry area? Who does your laundry? Etc.

Don't forget to consider environmental, internal, and external factors that may have changed:

- Changes within the community population
- Vaccination rates
- Number and types of invasive devices used
- Emerging illnesses or infections

| INFECTION EVENT | PROE | | TY OI NCE | F | LEVEL O | FHARM | FROM | EVENT | IMPAG | | CARE | 1 | READINESS TO | | | RISK LEVEL |
|---|--------------------------------|-----|--------------|-------------------------------------|-----------------|--------------|---------------|--------------------------------------|------------------------------------|-----------------|------|---|--------------|------|--|------------|
| | (How likely is this to occur?) | | | (What would be the most likely?) | | | | (Will n treatn neede reside | new nent/o ed for ent/sto | care b 1ff?) | e | (Are processes/resourc es in place to identify/address this event?) | | | (Scores ≥ 8 are considered highest priority for improvemen t efforts.) | |
| Score | High | Med | Low | None | Serious Harm | Mod. Harm | Temp. Harm | None | High | Med | Low | None | Poor | Fair | Good | |
| | 3 | 2 | 1 | 0 | 3 | 2 | 1 | 0 | 3 | 2 | 1 | 0 | 3 | 2 | 1 | |
| Facility-onset Infections(s) Device- or care-related | | | | | | | | | | | | | | | | |
| Wound infection | | x | | | | | x | | | | x | | x | | | 7 |
| | | | | | | | | | | | | | | | | |

An infection prevention program should include an IPC risk assessment.

An IPC risk assessment should:

- Be performed annually.
- Involve key stakeholders.
- Consider environmental, internal, and external factors.
- Include all areas of the facility (dental, dialysis, wound care, physical therapy).

Resource: <u>https://www.cdc.gov/longtermcare/excel/IPC-</u> <u>RiskAssessment.xlsx</u>



SMART goals-specific, measurable, attainable, relevant, and time-based.

| IPC PRACTICE FAILURES | PROB | ABILIT | Y OF | | IMPAC | T ON NT/STA | FF SAF | ETY | CAPAC | |) | READIN | NESS TO NT | C | RISK LEVEL |
|---|------|--------|------|----------|---|----------------|--------|------|--|------|------|--|---------------|------|---|
| (How likely is this to occur?) | | | | | (Will this failure directly impact safety?) | | | | (Are processes in place to identify this failure?) | | | (Are policies, procedures, and resources available to address this failure?) | | | (Scores ≥ 8 are considered highest priority for improvement efforts.) |
| Score | High | Med. | Low | Non e | High | Med. | Low | None | Poor | Fair | Good | Poor | Fair | Good | |
| | 3 | 2 | 1 | 0 | 3 | 2 | 1 | 0 | 3 | 2 | 1 | 3 | 2 | 1 | |
| Care activity | | | | | | | | | | | | | | | |
| Inadequate staff adherence to hand hygiene | x | | | | x | | | | x | | | x | | | 12 |
| | | | | | | | | | | | | | | | |

SMART Goal

Objective: Improve hand hygiene compliance in 2023

• Goals:

- Install hand hygiene dispensers outside each patient room by September 1, 2023
- Begin performing at least 10 secret observations monthly of all patient care staff on the medical unit by September 1, 2023
- Provide a small incentive at least once per month when 'catching' a staff member performing hand hygiene appropriately

After completing the IPC risk assessment:

- Prioritize the identified risks based on numerical value.
- Set goals for your program.
- Develop education opportunities and policies for your facility.



Illness Surveillance Be proactive with illness surveillance Implement empiric isolation precautions Ensure timely testing and treatment



Look for things including but not limited to:

- Fever >99°F (37.2°C) or a temperature <a>2°F (1.1°C) higher than the resident's baseline
- New or worsening symptoms like cough, shortness of breath, or dyspnea
- Pain or tenderness in a defined area of the body
- Delirium
- Changes in behavior like loss of appetite or lack of socialization



At minimum, exclude those with fever, vomiting, and diarrhea for at least 24 hours (48 hours for diarrhea) after the symptoms end.



Loeb:

- Designed for clinical use
- Infections will be over-counted if used retrospectively
- Set of signs and symptoms to indicate likely infection and antibiotic treatment

McGeer

- Designed for surveillance
- Retrospective
- Not meant for informing treatment (antibiotic) decisions





Outbreaks are a sudden rise in the number of cases of a disease that are over the expected occurrence.

There are different scenarios, including:

- Many cases caused by the same organism.
- A single case of a very unusual disease.



Common source:

- All cases are exposed to an infectious agent from the same source.
- Exposure can be **continuous** or **intermittent**.
 - Example: Patrons who visited the same restaurant and ate alfalfa sprouts develop gastrointestinal (GI) illness attributed to salmonella

Propagated source:

- Transmission occurs from one person to another.
 - Example: Residents of a nursing home develop GI illness caused by norovirus after exposure to other residents or staff with the same GI infection



Confirm the presence of the outbreak

- Review records
- Involve medical director

Establish a case definition

 Review and adjust as necessary throughout the investigation Notify public health

Establish and implement control measures

Source: https://www.cdc.gov/outbreaks/index.html

Other outbreak investigation activities may include:

Line lists

Line lists:

Line list is really about making sure you're keeping track of anyone with symptoms related to the outbreak, their location within the facility, when is their infectious period, and anyone else that they could have exposed to the illness. This is another way to try to define and get a handle on the outbreak, as well as prevent further spread of illness within the facility.

Contact

tracing

Testing

Epidemic curve:

The epidemic curve is a graph where the cases that occurred during an outbreak are plotted according to the time of illness onset. The shape of the curve is then determined by the epidemic pattern. The curve can then be used to:

- Determine whether the source of infection was common, **propagated** (continuing), or both.
- · Establish whether the pathogen has a short or long incubation period
- Determine whether the outbreak is increasing or decreasing.

Contact tracing:

Contact tracing may be used when an infectious agent is identified in a facility.

• If the facility can identify close contacts with high-risk exposures, testing and

quarantine may be limited.

• If the facility cannot confidently identify, or the exposures are widespread, use **broad-based testing. ay be recommended.**

If the facility can identify close contacts or HCP with high-risk exposures, testing and quarantine may be limited. However, if the facility CANNOT identify who had close contact with the infected individual, a broad based strategy can be used. Broad based testing can be done as a (unit, wing, block, or facility-wide). This will depend on the extent of the outbreak. Next slide please.

Testing:

Determine whether environmental or other testing should be performed • Examples include:

- Point prevalence testing after multidr
 - Point prevalence testing after multidrug-resistant organism (MDRO) identification
 - Water fountain or cooling tower sampling to determine the source of Legionella

Sources:

- http://publichealth.lacounty.gov/acd/Diseases/EpiForms/OBHFGIList.pdf
- http://publichealth.lacounty.gov/acd/Diseases/EpiForms/OBInfluRespListHealth.pd f
- https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdhs.wisconsi n.gov%2Fforms%2Ff02731.xlsx&wdOrigin=BROWSELINK
- https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.cdc.gov %2Flongtermcare%2Fexcel%2FLTC-Resp-Outbreak-LineList-508.xlsm&wdOrigin=BROWSELINK
- https://www.cdc.gov/urdo/downloads/linelisttemplate.pdf



Source: https://www.cdc.gov/hai/outbreaks/steps for eval ic breach.html





- Identify the breach
- Gather relevant data
- Engage stakeholders
- Assess transmission risk level
- Notification
- Follow up









- Admissions can continue.
- Activities and communal dining may be put on hold.



Surveillance is something we use to help control the spread of infections and outbreaks. It is the collection and use of data to help implement interventions and help drive your infection control plan. Surveillance is a key component in maintaining IPC practices.

Mitigation Strategies

- Post-exposure prophylaxis
- Longer precaution duration
- Room placements and cohorting



For patient/residents

Mitigation Strategies

- Environmental cleaning and disinfection
- Basic IPC practices
- Facility movement
- Employee health policies



For HCP

Environmental:

- Pay attention to high touch surfaces
- Increase frequency of clean
- Make sure disinfectant is effective to whatever is causing the outbreak
- Consider whether additional measures need to be taken by facilities/engineering management, such as construction containment, air handling verification, and pressure management.

Basic Infection Prevention Practices

- Hand hygiene
- PPE use

Facility Movement

• Avoid transferring patients/residents from an affected area to another unit, wing, floor, or facility if not needed. Unnecessary movement may

further spread the outbreak. If movement within your facility, or to another facility, is needed to provide appropriate care or control the outbreak (single occupant room, respiratory isolation, etc.) notify the receiving unit or facility of the outbreak situation.

• Determine if patient/resident (ill and well) movement restrictions within your facility are appropriate (i.e., cohorting, diagnostic testing, activities, and eating in common dining room).

Involve Employee Health

• Work with employee or occupational health to ensure ill employees are assessed and appropriate restrictions are in place, requirements for returning to work are prepared, and if appropriate, prophylactic medications are obtained.



| Reportable Conditions | | | | | | | |
|-----------------------|--|---|--|--|--|--|--|
| Category 1 | Immediate phone callCase report within 24 hours | | | | | | |
| Category 2 | Case report within 72 hours | | | | | | |
| Category 3 | HIV infection and AIDS case report within 72 hours | | | | | | |
| | 44 | L | | | | | |

Review communicable disease public health <u>reporting requirements</u> and reporting timeframes:

- Category I: Within 24 hours (measles, TB)
- Category II: Within 72 hours (CP-CRE, influenza)
- Category III: Within 72 hours (HIV/AIDS)

Visit the <u>DHS Disease Reporting webpage</u> for a complete list of reportable diseases

Consider using this recently published handout <u>Reportable</u> <u>Communicable Disease Conditions in Wisconsin</u>

Quality Assurance and Performance Improvement



- Relevant data
- Observations
- Compliance
- Reportable events

QAPI

- Standardize data to make tracking over time easier
- Use the data to pinpoint key areas that need improvement or areas that are doing well or additional processes that you may have to monitor
- Share any reportable infection prevention events

Resources:

- <u>Hand Hygiene Template</u>: <u>https://www.health.state.mn.us/facilities/patientsafety/infectioncon</u> <u>trol/icar/res/hhaudit.xlsx</u>
- <u>EVS Quality Template</u>: <u>https://www.cdc.gov/hai/pdfs/toolkits/Environmental-Cleaning-Eval-Worksheet-10-6-2010.xls</u>

Communication and Documentation

- Communicate with unit and care team
- Maintain a line list with pertinent details
- Document infection surveillance



In the moment:

- Communicate with unit and care team
- Maintain a line list of pertinent details

After:

- Document infection surveillance
- Incorporate counts and rates
- Determine internal stakeholders for the documentation





Providing education

Training and education should be:

- Provided upon hire, annually, and as needed
- Role specific
- Should include competency checks and return demonstrations
- Developed in multiple different modes for adult learning

Ensure staff are trained on:

- Products, wet contact time, and expectations for cleaning.
- Correct techniques based on the products they are using.
- Tasks that they don't normally do if they are asked to do them.

Ideas could include:

- o Videos
- o Games
- $\circ\,$ Departmental or unit competition

- Escape Room (available at request of WI HAI Prevention Program)
- CDC Project Firstline MicroLearns and other training toolkits (https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/training.html)

Sustaining education:

- Observations/audits with appropriate follow-up
- Quality Assurance and Performance Improvement (QAPI) Committee involvement
- Colonization screening

Resources:

- Hand hygiene: <u>https://www.dhs.wisconsin.gov/forms/f02475.pdf</u>
- PPE: <u>https://www.dhs.wisconsin.gov/forms/f02726.pdf</u>
- Precautions: https://www.cdc.gov/infectioncontrol/pdf/QUOTS/Transmission-Based-Precautions-Suite-P.pdf
- Cleaning and disinfecting: <u>https://www.cdc.gov/hai/pdfs/toolkits/Environmental-Cleaning-Checklist-10-6-2010.pdf</u>



- Audits are tools for monitoring adherence and used to help determine effectiveness of specific behaviors in preventing infection transmission.
- Audits allow real-time feedback to staff members.
- Findings should be shared to promote compliance and encourage a culture of safety for all.
- Examples of processes that could be audited include hand hygiene, PPE donning and doffing, environmental disinfection practices, and (if available in-house) laundry processes from the point of use to washing, drying, and storing.



Resource: https://www.dhs.wisconsin.gov/forms/f02475.pdf

| DEPARTMEN Division of Put F-02726 (10/2 | T OF HEALTH lic Health 020) | SERVICES | | | | STATE OF WISCONSIN | | | | |
|---|--|---|--|--|---|--------------------|--|--|--|--|
| | HAND HYGIENE (HH) AND PERSONAL PROTECTIVE EQUIPMENT (PPE) OBSERVATIONS | | | | | | | | | |
| Staff type* | | Type of opportunity | HH performed? | What PPE is indicated? (check all that apply) | PPE used by staff during observation | Comments | | | | |
| MED NUR CNA Therapy | EVS | Room entry Room exit Before resident contact After resident contact Before glove use After glove use Other: | Alcohol-rub Hand wash No HH done | Gown Gloves Eye protection Mask None | Gown Gloves Eye protection Mask None | | | | | |
| MED NUR CNA Therapy DIET | EVS | Room entry Room exit Before resident contact After resident contact Before glove use After glove use Other: | Accohol-rub Hand wash No HH done | Gown Gloves Eye protection Mask None | Gown Gloves Eye protection Mask None | | | | | |
| MED NUR CNA Therapy DIET | EVS | Room entry Room exit Before resident contact After resident contact Before glove use After glove use Other: | Alcohol-rub Hand wash No HH done | Gown Gloves Eye protection Mask None | Gown Gloves Eye protection Mask None | | | | | |
| MED NUR CNA CNA DIET | EVS OTH FAM UNK | Room entry Room exit Before resident contact After resident contact Before glove use After glove use Other: | Alcohol-rub Hand wash No HH done | Gown Gioves Eye protection Mask None | Gown Gloves Eye protection Mask None | | | | | |
| *Staff key: I occupational UNK=Unkno | teff key: MED=Physician, physician assist, advanced practice nurse; NUR=Registered nurse, licensed practice nurse; CNA=Certified nurse aids or assist, Therapy=Physical, oupational, speech; DIET=Dietary staff, EVS=Environmental services or housekeeping staff, OTH=Social worker, clerical, dergy, hospice, other; FAM=Resident's family member; KiV-uhknown/unable to determine | | | | | | | | | |
| <u>[</u> | HS: | Hand Hy | giene an | d PPE Ob | servatior | ns, F-02726 | | | | |

Https://www.dhs.wisconsin.gov/forms/f02726.pdf



Resource:

https://www.cdc.gov/infectioncontrol/pdf/QUOTS/Transmission-Based-Precautions-Suite-P.pdf

| Date: | | | |
|---|--------------------|-------------|---------------------|
| Unit: | | | |
| Room Number: | | | |
| Initials of ES staff (optional): ² | | | |
| Evaluate the following priority site | es for each patier | it room: | N (D |
| High-touch Room Surfaces | Cleaned | Not Cleaned | Not Present in Room |
| Bed rails / controls | | | |
| I ray table | | | |
| IV pole (grab area) | | | |
| Call box / button | | | |
| Pedeide teble hendle | | | |
| Choir | | | |
| Chair Room sink | | | |
| Room light guitab | | | |
| Room inner door knob | | | |
| Pathroom inner door knob / plata | | | |
| Bathroom light switch | | | |
| Bathroom handrails by toilet | | | |
| Bathroom sink | | | |
| Toilet seat | | | |
| Toilet flush handle | | | |
| Toilet hednan cleaner | | | |

Checklist for EVS quality audits

- Direct Observations directly observing the cleaning process in real time
- Indirect Observations using an additional tool to monitor the cleaning process not in real time
- Focus on high touch surfaces

Resource: <u>https://www.cdc.gov/hai/pdfs/toolkits/Environmental-</u> <u>Cleaning-Checklist-10-6-2010.pdf</u>



Environmental rounding includes observing the environment for infection risks

Perform environmental rounding to look for:

- Proper sharps handling,
- Medication passing processes,
- Temperature logs
- Evidence of water damage
- Expired products, etc.

| Date: | Location: | | | Survey | or(s): |
|-------|--|-----|----|--------|--|
| | Торіс | Yes | No | N/A | Comments |
| 1. | Hallway Clearance – No equipment not in active use is permitted in the hallway. Permitted items must be staged only on one side. | | | | (Patient transport equipment is permitted so long as they are on one side and not blocking emergency exits and fire equipment.) |
| 2. | Hallway Clearance – All authorized equipment will be staged to one side. | | | | (This is important so that in the event of an emergency the path to safety is unobstructed.) |
| 3. | Hallway Clearance – soiled linen hampers are not in the hallways unless in active use. | | | | Hampers should not be staged in hallways at any time. If empty, they can be in patient rooms, if full; they should be transported to the Soiled Utility room and full bags emptied into a bin.) |
| 4. | Wet-Floor signs used and removed in a timely manner? | | | | (Staff should know the location of wet floor signs for when they are needed. It is also important to remove the sign when the floor is dry so as not to have another obstacle in the hallway or room.) |

APIC – https://apic.org/resources/topic-specific-infection-

prevention/environment-of-care/

Example checklists listed on the APIC site

http://www.premiermedicalhv.com/wp-content/uploads/2013/01/EOC-Checklist.pdf

https://www.mghpcs.org/eed/rr/Assets/documents/RR/checklists/EOC-Joint-Commission-Readiness-Checklist-2-19.pdf



Sources:

- <u>https://www.dhs.wisconsin.gov/disease/respiratory-outbreak.htm</u>
- <u>https://www.dhs.wisconsin.gov/publications/p0/p00653.pdf</u>





Email: dhswihaipreventionprogram@dhs.wisconsin.gov Phone: 608-267-7711 Website: www.dhs.wisconsin.gov/hai/contacts.htm

Regional Infection Preventionists

- Western Region: <u>Nikki Mueller, MLS(ASCP)CM</u>, <u>MBA, CIC</u>, Phone: 608-628-4464
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- Southern Region: Paula Pintar, MSN, RN, ACNS-BC, CIC, FAPIC, Phone: 608-471-0499



HAI Infection Prevention Education

The resources below are intended to connect health care facility infection preventionists (IP) with education materials to support their role in preventing, detecting, and responding to healthcare-associated infections.

IPs play an essential role in facility infection prevention policy development, surveillance, and risk assessment.

IPs serve as a resource to other staff and programs within their facilities.

In addition to the state in-person trainings and online references below, there are a number of links to trusted education resources, including the CDC (Centers for Disease Prevention and Control), the Centers for Medicare and Medicaid Services (CMS), and the Association for Professionals in Infection Control and Epidemiology (APIC).

Resources for infection preventionists Long-Term Care Education series

The long-term care (LTC) education series provides education presentations on topics that include infection prevention, HAIs, antibiotic stewardship, disease surveillance, and outbreak response for staff at skilled nursing facilities, assisted living facilities, local health departments, and other LTC stakeholders. Each session features a new, timely topic presented by the Department of Health Services (DHS) program staff, HAI Infection Preventionists, partner organizations, or other external subject matter experts.

View the <u>full library</u> of education sessions. Note: All 2021 and 2022 education sessions can be found by visiting the full library

Have a topic request?

Send topic ideas or requests that you have for the long-term care education series or the IP lunch and learn series

DHSWIHAIPreventionProgram@dhs. wi.gov.=

60

https://www.dhs.wisconsin.gov/hai/ip-education.htm



The IP Starter Kit provides Infection Preventionists a brief

background and resources for some of the many infection prevention-related responsibilities within health care

HAI Infection Prevention Education webpage

Have

facilities.

Infection Prev Starter

Upcoming LTC Education Session

Date: October 26, 2023

Topic: Ventilation



61