

Performing a Facility Risk Assessment and Writing an IP&C Plan and Adult Learning Principles

ACH IP Course, 2022

Infection Prevention Training for ACH
Center for Health Care Quality California
Department of Public Health



Performing a Facility Risk Assessment and Writing an Infection Prevention and Control Plan

Objectives

- Describe the purpose of an infection prevention and control (IPC) plan
- Discuss the importance of incorporating the results of an infection control risk assessment into your IPC Plan
- List modifications your IPC Plan should include to accommodate risks present in your patient population

IPC Program

- An IPC program, implemented within a healthcare facility, is critical not only to prevent HAIs but also to prepare for and respond to communicable diseases crises.
- The World Health Organization defined a set of essential core components to help plan, organize and implement an IPC program.

[Core components of infection prevention and control programmes in health care. World Health Organization \(WHO\), 2011 \(PDF\)](http://www.who.int/csr/resources/publications/AM_CoreCom_IPC.pdf)
(www.who.int/csr/resources/publications/AM_CoreCom_IPC.pdf)

Elements of an IPC Program

An IPC program should include (but is not limited to):

- Visible, tangible leadership support for IPC
- A written annual risk assessment
- **A written IPC plan based on the annual risk assessment**
- IP policies and procedures
- Education
 - Health care provider (HCP)
 - Patient, family, caregiver education
- Adherence monitoring and feedback
- Antibiotic Stewardship Program

What is an IPC Plan?

- An IPC Plan is a written, time-based strategy to operationalize how the IPC Program's goals will be met in a facility
 - Addresses gaps and risk factors at the facility
 - Provides goals and actionable items
- Describes how a facility will meet the IPC program objectives

IPC Plan Includes

- The role of the Infection Preventionist
- Infection prevention goals for the year
- HAI surveillance to be conducted
 - Includes the incidence of infections
 - Such as *C. difficile* infections (CDI), urinary tract infections (UTI), pneumonia, or scabies
- How infections will be recorded and reported
- Policies and procedures to prevent transmission of infection
- How and where adherence monitoring will be performed
- How feedback will be given to HCP

**A written IPC plan is based on the
annual risk assessment**

The Annual Risk Assessment

An IPC plan includes elements identified by the annual risk assessment:

- Infection events
 - Numbers of HAI in the facility over the past year
 - Community rates of infectious disease
 - Facility or local outbreaks
- IPC practice failures
 - Gaps in infection prevention care practices
- Potential risk based on patient population type

Sample Annual Risk Assessment (Infection Events)

INFECTION EVENT	PROBABILITY OF OCCURRENCE (How likely is this to occur?)				LEVEL OF HARM FROM EVENT (What would be the most likely?)				IMPACT ON CARE (Will new treatment/care be needed for)				READINESS TO PREVENT (Are processes/resources in)			RISK LEVEL (Scores ≥ 8 are considered high)	
	Score	High 3	Med. 2	Low 1	None 0	Serious Harm 3	Moderate Harm 2	Temp. Harm 1	None 0	High 3	Med. 2	Low 1	None 0	Poor 3	Fair 2	Good 1	
Activity-onset Infections(s)																	
Device- or care-																	
Catheter-associated urinary tract infection (CAUTI)																	
Central line-associated bloodstream infection (CLABSI)																	
Tracheostomy-associated respiratory infection																	
Percutaneous-gastrostomy insertion site infection																	
Wound infection																	
Other (specify):																	
Resident-related																	
Symptomatic urinary tract infection (SUTI)																	
Pneumonia																	
Cellulitis/soft tissue <i>Clostridioides difficile</i> infection																	
Tuberculosis*																	
Other (specify):																	
Outbreak-related																	
Influenza*																	
Other viral respiratory pathogens*																	
Norovirus gastroenteritis*																	
Bacterial gastroenteritis (e.g., <i>Salmonella</i> , <i>Shigella</i>)																	
Scabies																	
Conjunctivitis																	
Group A <i>Streptococcus</i> *																	
MRSA																	
Other (specify):																	
* Risk assessment should take into account the frequency of occurrence																	

CDPH HAI Program Webpage, [Sample Annual Risk Assessment](http://www.cdc.gov/longtermcare/excel/IPC-RiskAssessment.xlsx) (Excel) (www.cdc.gov/longtermcare/excel/IPC-RiskAssessment.xlsx)

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<i>Device- or care-</i>																	
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Group A <i>Streptococcus</i> *																	
MDRO																	
Other (specify):																	
* Risk assessment should take into account the frequency of this																	

Evaluate the risk related to each infection event type:

- Probability of occurrence
 - How likely is the event to occur?
- Level of harm
 - How much harm would occur due to the event?
- Impact on care and prevention strategies
 - Will new treatment be needed for the patient/resident or staff?
- Readiness to prevent
 - Are processes in place to identify or address this event?

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Score	(How likely is this to occur?)				(What would be the most likely?)				(Will new treatment/care be needed for)				(Are processes/resources in)			12
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MDRO																
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The risk score for each infection event will vary, based on your facility's characteristics

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infection events

IPC practice failures (+)

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MRSA																
Other (specify):																
* Risk assessment should take into account the frequency of																

- This facility utilizes many urinary catheters
- They have very few tracheostomy patients. They stabilize, then transfer them to a sister facility
- Consider how these risks would be addressed in the facility's infection control plan

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IPC PRACTICE FAILURES	PROBABILITY OF OCCURRENCE (How likely is this to occur?)				IMPACT ON RESIDENT/STAFF SAFETY (Will this failure directly impact safety?)				CAPACITY TO DETECT (Are processes in place to identify)			READINESS TO PREVENT (Are policies, procedures, and res)			RISK LEVEL (Scores ≥ 8 are cons
	High	Med.	Low	None	High	Med.	Low	None	Poor	Fair	Good	Poor	Fair	Good	
Score	3	2	1	0	3	2	1	0	3	2	1	3	2	1	
Care activity															

Evaluate the risk related to each IPC practice failure:

- Probability of occurrence
 - How likely is the event to occur?
- Impact on patients/residents or staff's safety
 - Will this failure directly impact safety?
- Capacity to detect
 - Are processes in place to identify this failure?
- Readiness to prevent?
 - Are policies, procedures, and resources available to address this failure?

Lack of accessible alcohol-based hand rub															
Lack of accessible personal protective equipment (PPE)															
Inappropriate selection and use of PPE															
Inadequate staff adherence to hand hygiene															
Inadequate staff adherence to glove and gown use when resident in Contact Precautions															
Inadequate staff adherence to facemask use when resident in Droplet Precautions															
Other (specify):															
Other (specify):															
Occupational health															
Low influenza immunization rates among staff															
Lack of notification of employee illness or working sick															
Low compliance with annual tuberculosis (TB) screening among staff															
Other															

IPC practice failures

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Other															

Adapt the spreadsheet to factor in new IPC infection events or IPC practices (such as COVID-19 pandemic or PPE shortages)

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IPC practice failures

Annual Risk Assessment (ACH Infection Events)

Numbers of HAI in an acute care facility over the past year

- Device-related HAI events
 - Central line-associated bloodstream infection (CLABSI)
 - Ventilator-Associated Pneumonia (VAP)
- Surgical site infections (SSI)
- *C. difficile* infections (CDI)
- MDRO infections
 - Methicillin-resistant *Staphylococcus aureus* (MRSA)
 - Vancomycin-resistant Enterococci (VRE)

Not an all-inclusive list!

Annual Risk Assessment (SNF Infection Events)

Numbers of HAI in a skilled nursing facility (SNF) over the past year

- Device-related HAI events
 - Catheter-associated urinary tract infections (CAUTI)
 - Central line-associated bloodstream infection (CLABSI)
 - Percutaneous-gastrostomy insertion site infections
- Wound infections
- Pneumonia
- Cellulitis/soft tissue infection

Not an all
inclusive
list!

Annual Risk Assessment (Infection Events)

Community and/or facility incidence or outbreaks

- Tuberculosis
- *Candida auris*
- Carbapenem-resistant organisms (CRO)
- Measles
- *Clostridioides difficile*
- Influenza
- COVID-19
- Scabies

Annual Risk Assessment (IPC Practice Failures)

Gaps in infection prevention care practices such as hand hygiene, Standard and Transmission-based precautions, environmental cleaning and disinfection

- Resource limitations
 - Personal protective equipment (PPE)
 - Staffing
- Adherence monitoring issues
 - Poor hand hygiene
 - Improper use of PPE

Annual Risk Assessment (IPC Practice Failures)

Occupational Health

- Low staff immunization rates
 - COVID-19 or influenza
- Low TB screening compliance
- Poor compliance with occupational health policy
 - Limited notification of employee illness
 - Staff working while sick

Annual Risk Assessment (IPC Practice Failures)

Patient or visitor risks

- Immunization rates (low)
 - Influenza, COVID-19, and pneumococcal
- TB screening rates
- Facility Policy education and compliance
 - Hand Hygiene
 - Respiratory Etiquette
 - Other
- Visitors visiting while sick

Annual Risk Assessment (IPC Practice Failures)

Environmental Factors

- Environmental Protection Agency (EPA) approved cleaning and disinfection products
- Appropriate cleaning and disinfection agent
- High touch surface cleaning
- Prevention of cross-contamination of surfaces
- Cleaning practices
 - high to low
 - clean to dirty
- Daily and terminal cleaning practices

Annual Risk Assessment (IPC Practice Failures)

Medical Equipment

- Medication and sharps safety management
- Cleaning and disinfection of devices
- Proper equipment storage and transport

Antibiotic Stewardship

- Program leadership
- Policies and procedures
- Education
 - Staff, patients, or family

Annual Risk Assessment (IPC Practice Failures)

Potential risk based on patient population type

- Consider risks based on resident characteristics
 - Level of care required?
 - Immunocompromised?
 - Invasive device use?
 - Ventilator
 - Central line
 - Urinary catheter
 - Patient resources and demographics?

Annual Risk Assessment (Gap Analysis)

Local Community

- Community rates of infectious disease such as COVID-19, MDRO's, tuberculosis, influenza, and novel pathogens
 - Review local public health reports for these data

Annual Risk Assessment (Gap Analysis)

Identify gaps in HCP Education

- Job-specific infection prevention training
- New hire and annual training
 - Hand hygiene
 - Standard and Transmission-based precautions
 - Bloodborne pathogen exposure
 - Environmental cleaning
 - Linen handling
 - Hazardous waste disposal
- Additional training when gaps in care practice adherence or increased infection rates noted

Annual Risk Assessment (Gap Analysis)

Are there gaps in patient, family, caregiver education?

- Appropriate infection prevention education for patients, family members, visitors, and others included in the caregiving network
 - Include:
 - How infections are spread
 - How they can be prevented
 - What signs and symptoms should prompt evaluation
 - Instructional materials that address varied levels of education, language, comprehension, and cultural diversity

Annual Risk Assessment (Gap Analysis)

Identify gaps in your occupational health program:

- Vaccinations:
 - Influenza
 - COVID-19
 - Others (such as MMR, Varicella)
- Respirator fit testing
- TB testing
- Infectious disease exposure investigations
- Post-exposure management

Annual Risk Assessment (Gap Analysis)

Identify gaps in your occupational health program:

- Occupational health Counseling
 - Infectious disease exposure risk
 - Work restriction
 - Latex allergies
- Compliance with CA regulation
 - [Bloodborne Pathogen Standard](http://www.dir.ca.gov/title8/5193.html)
(www.dir.ca.gov/title8/5193.html)
 - [Airborne Transmissible Disease Standard](http://www.cdph.ca.gov/Programs/CCDPHP/DEODC/OHB/CDPH%20Document%20Library/ATD-Guidance.pdf) (PDF)
(www.cdph.ca.gov/Programs/CCDPHP/DEODC/OHB/CDPH%20Document%20Library/ATD-Guidance.pdf)

Sample Infection Control Plan

Content of an Infection Prevention and Control Plan

- I. Facility Infection Prevention Risk Assessment
 - A. Use a template
 - B. Size, type, scope of services, procedures, surveillance data, geography, community
 - C. Patient population
 - D. Personnel (IP must have education in IP)
 - E. List prioritized risks
- II. Description of Infection Prevention and Control Program
 - A. Authority
 - B. Scope (must be organization-wide)
 - C. Personnel (number, qualifications, etc.)
 - D. Resources (computers/references/educational opportunities/ Infection Preventionist's professional activities/etc.)
- III. Goals and Objectives
 - A. Describe each broad goal
 - B. List at least one specific measurable objective for each goal- who, what, when, where, how
- IV. Strategies to reduce risks for each goal
 - A. Interventions associated with:
 1. Procedures
 2. Devices
 3. Medical equipment
 - B. Policies and procedures including Employee Health
 - C. Environmental issues- cleaning and disinfection, who, what, when, where.

Content of an Infection Prevention and Control Plan

Content of an Infection Prevention and Control Plan (page 2 of 2)

- V. Surveillance- focus on high-volume, high risk and problem prone procedures
 - A. Risk assessment
 - B. Plan and description of monitored indicators
 1. Outcome measures- SSIs, etc.
 2. Process measures- instrument/scope processing, etc.
 3. Antibiotic resistant organisms- MRSA, VRE, ESBLs, CRE, etc.
 4. Communicable disease reporting to health dept.
 5. Outbreak investigation plan
 6. Antibigram
 7. Reports (to whom sent and how often)
- VI. TB Exposure Control Plan (can be separate policy) CDC has an evaluation tool on their website
 - A. Risk assessment
 - B. Plan to reduce risk of transmission (plan can state that patients with TB or suspected TB are not seen in the ASC and if a patient presents with signs and symptoms of TB, they are immediately referred to the appropriate community resource.)
- VII. Exposure Control Plan for Bloodborne Pathogens (can be separate policy) follow OSHA sample
 - A. Include sharps safety and injury prevention
 - B. Log of sharps injuries/bloodborne pathogens exposures
- VIII. Performance improvement
 - A. Use goals and measurable objectives to improve performance
 - B. Be sure staff is aware of what is being monitored and why those indicators

[Sample ICP Plan](#)

(apic.org/Resource_/TinyMceFileManager/Education/ASC_Intensive/Resources_Page/Content_of_an_Infection_Prevention_and_Control_Plan.pdf)

Summary

An IPC plan:

- Explains how a facility will meet the IPC program objectives
- Includes findings from the annual risk assessment
- Outlines the role of the IP and the surveillance to be conducted
- Describes how infections will be recorded or reported
- Outlines strategies to prevent infections
- Defines adherence monitoring practices
- Explains how feedback will be given to the HCP

Case Scenario



You are a new infection preventionist (IP) working at an inpatient healthcare facility. You have not created an infection prevention and control (IPC) plan for the facility, but you have a copy of the previous IP's IPC plan from last year.

What do you need to do to ensure your facility has a current IPC plan?

- a. Nothing, facilities only need to update the IPC plan every three years
- b. Use the previous IP's plan. Most of the information is still pertinent
- c. Ignore the old plan and start a new IPC plan using a IPC plan template
- d. Review the previous IPC plan and use the template to create a new, comprehensive plan for the facility

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- ✓ Review the previous IPC plan and use the template to create a new, comprehensive plan for the facility

You are comparing the ICP template to the previous IPC plan. It appears that the previous IP used the same template as the basis for their IPC plan.

How should you update the previous IPC plan?

- a. Include findings from a new risk assessment
- b. Outline how adherence monitoring and staff feedback will occur
- c. Update the IPC plan based on annual infection prevention goals
- d. Include policies and procedures addressing infection transmission, recording, and reporting
- e. All of the above
- f. Use the current plan; there is no need to make any changes

How should you update the previous IPC plan?

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What type(s) of infection prevention program(s) use an IPC Plan?

- a. Only IPC programs in acute care facilities
- b. Only IPC programs in skilled nursing facilities
- c. Only outpatient IPC programs, such as hemodialysis
- d. All IPC programs should develop an IPC plan each year

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- ✓ All IPC programs should develop an IPC plan each year

While you are completing the facility risk assessment plan, you notice that the template lists many infection event topics that are not applicable to your facility. What should you do?

- a. Continue to complete the risk assessment plan, skipping over items that are not applicable
- b. Complete all items on the template
- c. Adapt the template to address items applicable to your facility
- d. Search for a new facility risk assessment that is more applicable to your setting

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- ✓ Adapt the template to address items applicable to your facility
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While you are completing your IC Risk Assessment you note that the template does not address several of the IPC Failures you have experienced, such as COVID-19 infections or PPE shortages. What should you do?

- a. Address only the items listed on the IC Risk Assessment template
- b. Add the new issues to the IC Risk Assessment form
- c. Purchase a new IC Risk Assessment
- d. Wait until the local health department adds these issues to your IPC Plan**

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- ✓ Add the new issues to the IC Risk Assessment form
- c. Purchase a new IC Risk Assessment
- d. Wait until the local health department adds these issues to your IPC Plan

While completing your gap analysis, what resources can you use to learn about infection control events that are occurring in your local community (such as outbreaks or community rates of infectious disease)? Select all that apply.

- a. CAHAN Reports
- b. Local health department (LHD) website
- c. In-person reports from your nursing staff
- d. Contact person at your local health department
- e. LHD publications
- f. Information from a community blogger

While completing your gap analysis, what resources can you use to learn about infection control events that are occurring in your local community (such as outbreaks or community rates of infectious disease)? Select all that apply.

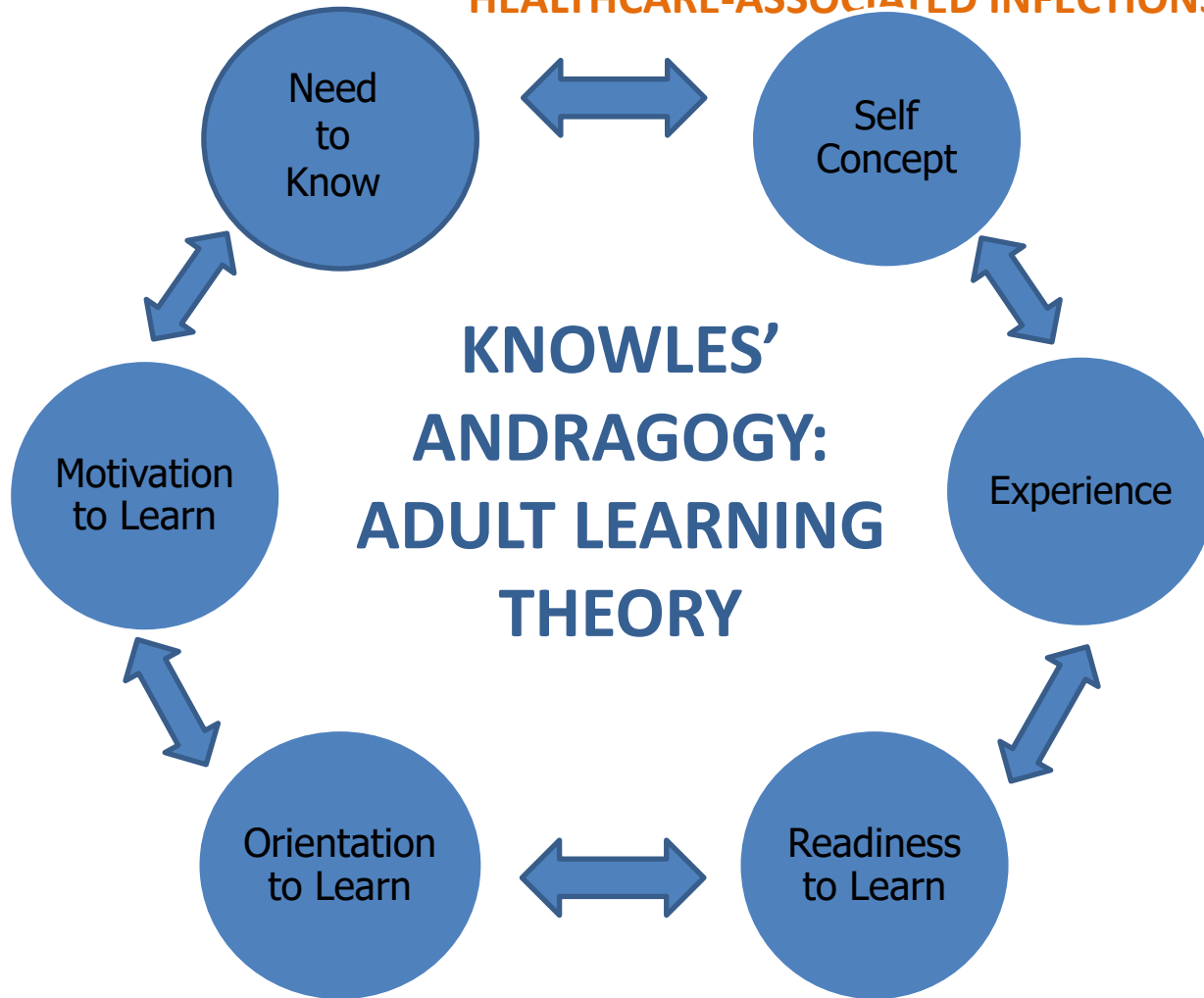
- ✓ CAHAN Reports
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- f. Information from a community blogger

WELL DONE!

Adult Learning Principles: Making a Positive Impact on Learning

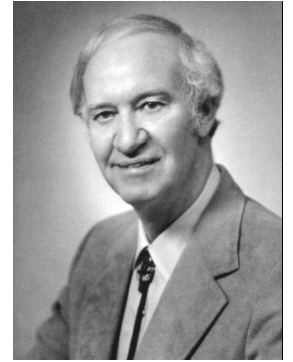
Objectives

- Review adult learning principles and how they can be applied to infection prevention education
- Discuss educational concerns for the adult learner when planning infection prevention education sessions
- Identify how to address at least one adult learning barrier while conducting infection prevention presentations



Knowles' Andragogy - Conceptual Model

- Need to Know: *Why do I need to know this?*
- Self Concept: *I am responsible for my own decisions*
- Experience: *I have experiences which I value, and you should respect*
- Readiness to Learn: *I need to learn because my circumstances are changing*
- Orientation to Learn: *Learning will help me deal with the situation in which I find myself*
- Motivation to Learn: *I learn because I want to*



[Malcolm Knowles](#)
(educationaltechnology.net/
andragogy-theory-
malcolm-knowles/)

Principles of Adult Education

- Learners may decide to listen or not based on the topic
 - Why do I need to know this?
 - What's in it for me?
 - How can I use this?
- Self-concept and taking ownership for learning
 - Adults are self-directed
 - Take responsibility for their own learning experiences
 - Apply what they heard, or ignore it if it doesn't apply
- New knowledge is based on past experiences
 - Build on knowledge already acquired

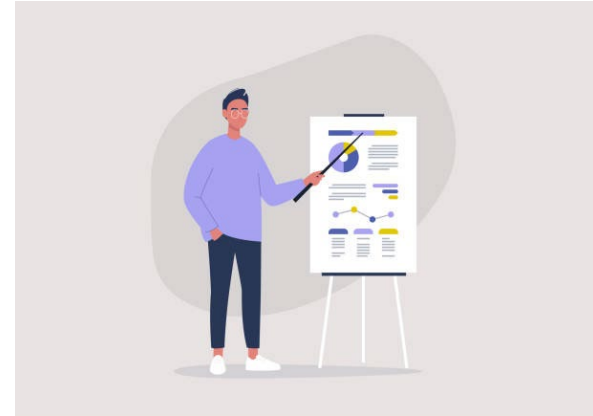
Principles of Adult Education (continued)

- Readiness to learn
 - Applies new knowledge immediately to current setting
- Orientation to learn
 - Problem oriented
 - Not content oriented
- Motivation to learn
 - Job satisfaction (performance evaluation)
 - Sense of relatedness/belonging
- Sign of successful learning is a change in behavior
 - Adherence monitoring is one way to measure this



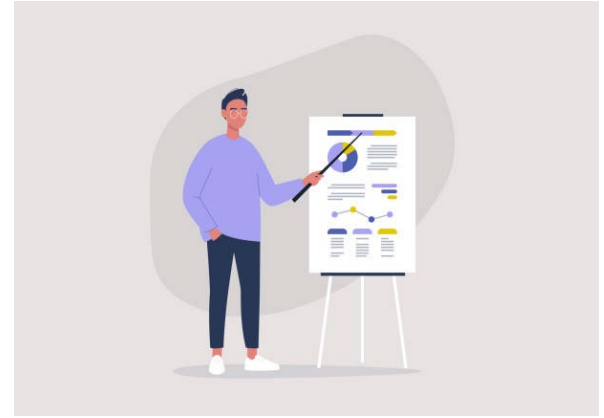
Types of Adult Learners

- Visual learners
 - Lectures are of no benefit
 - Use pictures, diagrams, step-by-step instructions
- Auditory learners
 - Lectures for these types
 - Must be able to hear the content



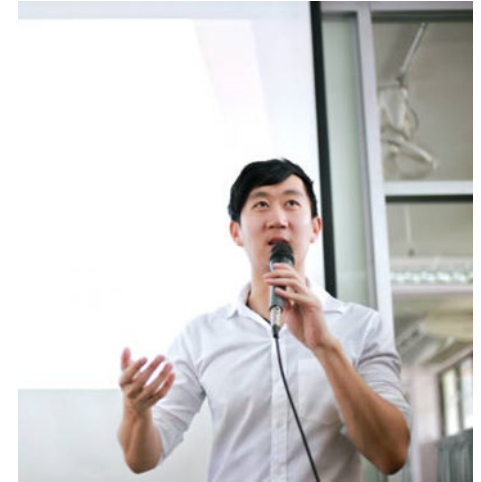
Types of Adult Learners

- Kinesthetic learners
 - Hands-on to learn a concept
 - Skills lab is an example
 - Virtual presentations, lectures, or providing handouts have limited effectiveness
- Combination of visual, auditory, or kinesthetic
 - Use a combination as much as possible when presenting



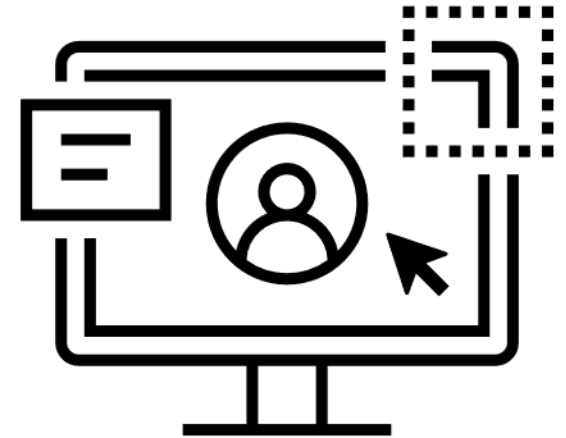
Planning for Different Types of Adult Learners

- Auditory Learners – Can they can hear you?
 - Use microphones
 - Arrange room or space to accommodate
 - Limit outside noise
- Kinesthetic learners – How can they learn?



Planning for Different Types of Adult Learners

- Lectures aren't helpful to visual learners
 - Focus on what the facility is managing, not theoretical concepts or studies
 - Use posters or other visual aids
 - Attendees' participation
 - Immediate application of concepts

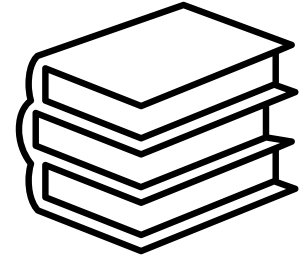


Motivation to Learn

- Job satisfaction increases motivation
 - Some adults are motivated by their performance evaluation
 - Some are motivated by a job well done
 - Some by seeing positive changes in their workplace
 - If staff seem supported and happy, there is more likelihood of positive changes in the facility after the presentation

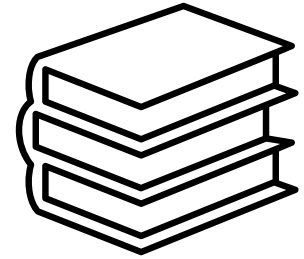


Readiness to Learn in Adults



- How to apply previous learning to new setting
 - When scheduling a learning event obtain information from the facility
 - Who will be attending
 - Nursing staff, respiratory therapists, housekeepers - everyone?
 - Facility leadership may think *all* need to hear the message
 - If PPE donning and doffing demo, those who do not enter resident rooms will never apply what is learned

Readiness to Learn in Adults



- How to apply previous learning to new setting
 - When scheduling a learning event obtain information from the facility
 - Explain to the leadership that the information is for certain job categories
 - Provide a listing of job categories that should be present ahead of time

The Adult Audience

- Adults have a wealth of experience
 - Treat them with respect of their experiences and knowledge
- Reason for attending
 - Satisfy an immediate need
 - Knowledge gap
 - Validate what is already known



The Adult Audience (continued)

- Mandated by the facility
- Interested in what is said
 - Information will impact how they deliver care
 - Impacts how they care for their patients
- Focus on the safety of the patients and themselves

Staff Learn Based on Their Need to Know

- If a patient was admitted and found to have an MDRO
 - Sense of urgency increases the staff's willingness to learn



Staff Learn Based on Their Need to Know (continued)

- If actual transmission has occurred:
 - Staff will listen more closely
 - Staff will voice concern about taking home MDRO
 - Staff will ask specific questions
 - May have done research or wants clarity about a concept
 - If potential case has not been admitted:
 - Is theoretical
 - “That won’t happen here” attitude
 - If education is not mandated, staff may choose to not participate
 - Pushback if education does not occur during scheduled work hours

Planning Presentations Conducive to Learning

- Audience as message receivers
 - Plan the event to be interactive to engage the audience
 - Plan to ask the audience what they think is a good solution
 - If they fear their leadership reaction, give some ideas that may start conversations

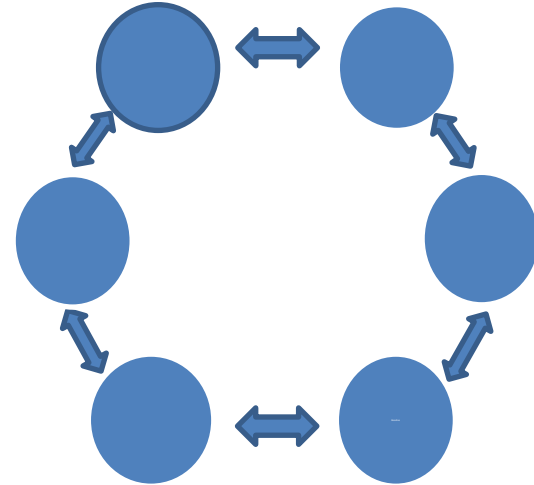


Planning Presentations Conducive to Learning

- Apply the content to the facility
 - Obtain equipment
 - Give examples of areas that the staff are familiar with
- Humor delivered correctly and sensitively to engage the audience
 - If used inappropriately humor can sound flippant or condescending

Designing Presentations for Different Types of Learners

- Some learn in group setting
 - Bouncing idea off each other is stimulating
 - Others may find it confrontational
 - Depends on the culture of the facility
 - Leadership can help by starting the conversation
- Some learn sitting by themselves
 - How to navigate both these types
 - Offer an opportunity to download resources or handouts



Planning the Inservice

ADULT LEARNING THEORY



Ideas for Inservices

- Adherence monitoring results review
 - Hand hygiene
 - Use 'Glo-Germ' type demonstrations
 - PPE donning and doffing
 - If adherence is below goal, a hands-on demonstration and return demonstration with small groups may be needed
- Housekeeping practice observations that general staff need to know
 - Cite findings during rounding
 - Everyone assumed everyone else was cleaning the bed rails, when actually no one was

Infection Prevention Education for Staff

- Special situations that require staff education
 - Example: Local public health determined there is MDRO transmission
 - » An MDRO was discovered after patient admission
 - Outbreak or ongoing transmission of an MDRO
- Discovery of practice gaps during adherence monitoring
 - Goal is to correct practice gaps before MDRO patient is admitted

Infection Prevention Education for Staff

- Required infection prevention education
 - New employee orientation
 - » OSHA Bloodborne Pathogens
 - » ATD Standard



Planning Your Presentation

- More topics to consider
 - If leadership requests an IP education session, discuss content with the nurse educator
 - Review education expectations
 - Potential additional topics that staff are requesting
 - May have materials that pertain ready – no reinventing the wheel!



Facility Situations That Call for Immediate Change

- Choosing words that get their attention
 - ‘Urgent’, ‘public health emergency’
- Your body language
 - Leaning in indicates interest in questioner
 - Leaning away indicates possible rejection and dismissal
- Top issues to cover within the first five minutes
 - Interruptions – how to reset the conversation



Barriers to learning – What If's

- Abundance of background noise in the venue
 - Confirm there are microphones available
 - Reduce the background noise by contacting departments ahead of time to reschedule what is making the noise
 - Floor buffing or vacuuming during the presentation is disruptive
- Staff feel pressured to get back to their duties
 - Plan for make-up sessions

Barriers to learning – What If's

- Leadership doesn't support learning
 - Staff are allowed to miss inservices without repercussions
 - Rooms are reserved but taken by another department the day of the inservice
 - Fail to increase staffing to allow regular staff to attend
 - No scheduling allowance for off-shifts, weekends, LOA, or per diem
- Planning for late arrivals and disruptions

Presentation Slides

- Presentation Slide Development
 - Too many animations
 - Distract from the message
 - Size of the font depends on the room size
 - Regular font can't be seen in the back of a large conference room
 - Text color
 - Color blindness or low vision may not be able to see color changes

Presentation Slides

- Presentation Slide Development
 - Font styles
 - **Serif means ‘footed’**
 - **Sans serif means ‘without feet’**
 - The two lines above are both font size 24 but different font types
 - Note how one looks larger than the other

Planning for a Great Presentation

Consider the worst presentation or class lecture you've attended

- Did the instructor
 - Acknowledge the audience?
 - Explore audience reactions?
 - Allow for questions?
 - Embarrass attendees?
 - Bore the audience?
 - Monotone or flat affect
 - Too much excitement/inappropriate excitement

Making a Connection with the Audience

- Applicability of what you are teaching
 - How to reach different levels of job descriptions
 - Housekeepers
 - Dietary aides
 - DONs
 - CNAs

Presentation Visual Aids

- PowerPoint and Virtual platforms (Zoom, Teams, Webex, GoToMeeting)
 - Practice using platform **BEFORE** the presentation
 - Pictures/video need to relate to the topic
 - Don't overwhelm the audience
- Posters
 - Colors that are eye catching but not too overwhelming
 - Too many colors or pictures may take away from the message

Handouts

- Handouts
 - What and when to distribute
 - Multiple pages – double sided or stapled
 - Electronic links
 - QR codes
 - Handout access
 - For additional materials

Consider “need to know” vs. “nice to know” information

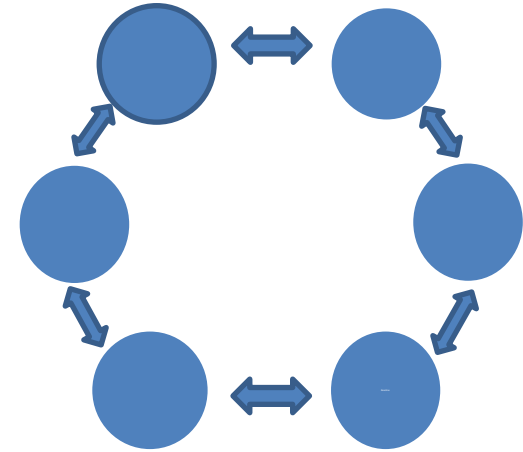
Rehearsals

- Rehearse presentations before scheduled event
 - Film or use a mirror to practice
 - Focus on controlling unconscious movements (um, ah)
 - Distracting movements
 - Nervous habits or stumbling
 - Facial expressions that could be misinterpreted
 - Rehearse presentation to someone who can provide honest feedback

Rehearsals (continued)

- Rehearsals help with pre-event nervousness
- Smooths out a rough delivery
 - Repeated practice of hard to pronounce words
 - Changing around the order of topics to make sense
- Timing
 - If scheduled for thirty minutes, time the presentation and allow ten to fifteen minutes for questions
 - Add or subtract material to adjust for timing





Executing Education Sessions

ADULT LEARNING THEORY



Setting Up the Presentation Venue



- Request a conference room or quiet area for presentation
 - Reserve and verify reservations
 - Is the room quiet or noisy from background sound?
 - Are non attendees sharing the presentation space?
 - Ensure no other activities are scheduled in that space

Attendees

- Know your audience
 - Experience and level of knowledge about the subject
 - Are there leadership an attendee(s)?
 - Leadership may be curious or planning for facility changes
 - Leaders may interrupt or interject information
- During presentation, watch your audience reactions
 - Can they hear you?
 - Can they understand you?

Encourage Participation

- Audience participation
 - Present topic information first
 - Engage the audience by asking questions
 - Build question and answer sessions into presentation
 - Allows for new information to be assimilated into preexisting knowledge
- Use technology to encourage audience participation
 - Use phone access apps: games, surveys, and questions



Body Language of the Audience

- Reading non-verbal cues
 - Turning their head around constantly
 - Looking at their watch/phone
 - Moving away vs. moving toward you
 - Tapping their feet
 - Nervousness or pressure to go back to work
 - Arms crossed over their chest or stomach
 - One is defensive, one is protective
 - Looking bored vs. looking overwhelmed
 - Cues incongruent with your message



Plan for Audience Challenges

- Negativity
 - Staff challenge information as incorrect
 - Unhappy to stay after shift for inservice
 - Sign in and leave immediately
- Limit your inservice length
 - Provide two shorter inservices instead of one long inservice
 - Most important information at the beginning
 - Place 'nice to know' information at the end if there's time



Plan for Audience Challenges

- Theoretical topics without immediate relevance to audience
Example: No MDRO cases in the facility at the time of your presentation about *Candida auris*
 - *Address concerns*
 - *Engage audience with case studies or interactive activities*
- Use immediate application of knowledge
Example: Issue of transmission of MDRO in the community
 - “How would you use the tools we discussed to manage *Candida auris* transmission on your unit?”

Conducting Q&A Sessions

- Steer away from questions unrelated to the presented topic
 - Offer to present that topic at a later date
- Keep a time limit for questions and answers
 - Be respectful of time
 - Offer to discuss any questions after excusing others
- Write down questions that were asked after others had left
 - Important points that may have caused confusion
 - Information that wasn't in the original presentation
 - Return the answer in a written email or update

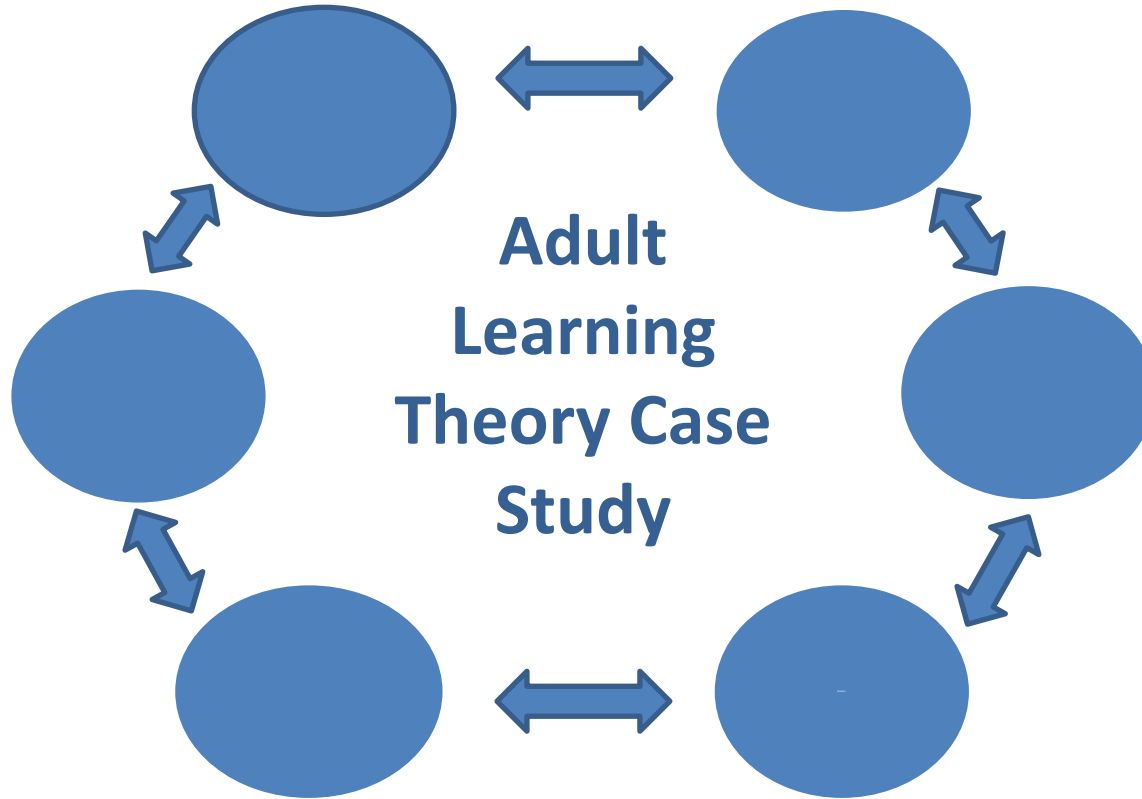
Adult Attendee Considerations

- Adults have different learning styles
- Present urgent items first
 - May have limited attention span
 - Pressure to return to work, fatigue, other priorities (children, family issues)
 - Plan for those who are on leave, vacation, working off-shift
 - Create a sign in sheet and handouts for those who cannot attend
 - Consider videotaping presentation



Summary

- Adults are responsible, self-directed learners that build on knowledge already acquired
- Adults must be ready, oriented and motivated to learn
- Learning styles may be visual, auditory, kinesthetic, or a combination
- Instructional materials should address learner's educational needs
- Be cognizant of instructional and environmental learning barriers
- Be prepared! Rehearse presentations and have back-up plans to address challenges during presentations



APPLICATION OF LEARNING THEORY

IP Education Case Scenario

- You are a new IP at a 400-bed hospital. Your position responsibilities include providing an infection control orientation presentation for approximately 50 medical center orientees.
- The previous IP covered mandated OSHA bloodborne pathogen education with a video. As the new IP, you would like to get to know the new oncoming staff by presenting the materials in person.
- After being introduced, you attempt to run your PowerPoint slides, but the laptop won't run your slides off the travel drive, due to IT security issues.

What can you do?

How Would You Proceed?

- Did you bring any back-up materials for the presentation?
 - What materials could you use to present this information?
 - Did you bring handouts to the session? If not, what other materials could you use?
- How you plan for future situations when your electronic devices do not work during a presentation?

Case Study Review

- Apologize for the glitch
- Come prepared
 - Have handouts printed and ready to distribute
 - Use whatever you have available
 - White board or chalk board
- Run previous IP's video or use handout to guide discussion
- Summarize content, then facilitate Q &A discussion
- Prepare for future orientations by troubleshooting computer issues prior to session

Resources

- Adult learning theories: Implications for learning and teaching in medical education.
<https://www.tandfonline.com/doi/full/10.3109/0142159X.2013.828153>
- Educating Public Health Professionals for the 21st Century
paeaonline.org/wp-content/uploads/imported-files/Educating-Public-Health-Professionals-for-the-21st-Century.pdf
- Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2014). *The adult learner: The definitive classic in adult education and human resource development*. Routledge.

Resources

- Illeris, K. (Ed.). (2018). *Contemporary Theories of Learning: Learning Theorists... In Their Own Words* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315147277>
- Lawler, P. A. (1991). *The Keys to Adult Learning: Theory and Practical Strategy*. <https://files.eric.ed.gov/fulltext/ED345108.pdf>
- Sudak, D. (ed.) 2021. *Handbook of Psychiatric Education* (2nd ed.). Washington D.C.: American Psychiatric Association

Questions?

For more information,
please contact

HAIPprogram@cdph.ca.gov

Include “ACH IP Basics Class” in
the subject line

Post Test

Now that you have completed
this module,

Click on the “Post Test” link
when it pops up

To Return to

and take the post test

If the Post Test link does not pop up, you will be sent a link via e-mail