# Imperial County Antimicrobial Resistance Prevention Collaborative May 22, 2019

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#### **Agenda**

8:30-8:40AM	Welcome and Introductions
8:40-10:10AM	Standard and Transmission-Based Precautions Across the Continuum of Care
10:10-10:30AM	Activity: Case Scenarios
10:30-10:45AM	Next Steps
10:45-11AM	Break
11-12:30PM	Train the Trainer Program: Injection Safety for Medical Assistants



#### **WELCOME AND INTRODUCTIONS**



## STANDARD AND TRANSMISSION-BASED PRECAUTIONS ACROSS THE CONTINUUM OF CARE



#### **Objectives**

- Describe all 6 elements of Standard precautions
- Describe Transmission-based (isolation) precautions
- Review adherence monitoring results and tools for select Standard and Transmission-based precautions care practices



#### **HAI Prevention – What Works?**

- Recommendations are evidence-based
- Require careful evaluation of available studies, including risks and benefits
- Where scientifically valid studies are lacking, consensus expert opinion may also be considered



#### **Care Practices Should Prevent Infection**

- Avoid introducing pathogens into sterile body sites, such as during placement of a medical device or during surgery
  - Avoid introducing patient's own flora into a sterile site
  - Avoid introducing any pathogens acquired in the hospital



## **Care Practices Should <u>Prevent Infection</u> - Discussion**

Think about your health care clinic:

- What are some procedures you do in the clinic that can introduce the clients' own flora into a sterile body site?
- What steps can you take before a procedure to prevent an infection?

#### Examples:

- Needles can introduce the clients own flora into the skin
- Cleaning the skin with an alcohol wipe can reduce flora and prevent infection



#### **Care Practices Should Prevent Transmission**

- Avoid the transfer of pathogens from person-to-person
  - Avoid Health Care Personnel (HCP)-to-patient transmission, such as via contaminated hands of HCP
  - Avoid patient-to-HCP transmission of infectious diseases, such as by using appropriate isolation precautions



### Why Should We Use Standard and Transmission Prevention Practices?

- Basic practices that apply to all patient care, regardless of a patient's suspected or confirmed infectious state
- Apply to all settings where care is delivered
- Protect patients and HCP
- Prevent HCP and the environment from transmitting infections to other patients

Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All

Settings – CDC HICPAC Recommendations, 2016

(https://www.cdc.gov/hicpac/pdf/core-practices.pdf)



#### What are the Elements of Standard Precautions?

#### Practices to use all the time, in all settings:

- 1. Hand hygiene
- 2. Environmental cleaning and disinfection
- 3. Injection safety and medication safety
- 4. Risk assessment and use of appropriate personal protective equipment (PPE) based on activities being performed
  - PPE include gloves, gowns, and face masks
- 5. Minimizing potential exposures
  - Example: Using respiratory hygiene and cough etiquette
- Reprocessing of reusable medical equipment between each patient and when soiled

## **Standard Precautions Element 1: Hand Hygiene**

Hands of HCP are the most common mode of transmission of pathogens

Many HAI are preventable with hand hygiene!



#### **Hand Hygiene Efforts**

- Hand hygiene has been known to prevent spread of infection for 150 years
- CDC, the World Health Organization, and many other authorities have promulgated hand hygiene guidelines
- Healthcare facilities have hand hygiene policies and procedures
- Lots of studies, intervention trials, observation and measurement

Still, hand hygiene adherence in healthcare is inconsistent. There are many opportunities for improvement.



#### **Hand Hygiene Terminology**

- Hand hygiene: Performing handwashing, antiseptic handwash, alcohol-based hand rub, or surgical hand hygiene/antisepsis
- Handwashing: Washing hands with plain soap and water
- Antiseptic handwash: Washing hands with water and soap or other detergents containing an antiseptic agent
- Alcohol-based hand rub: Rubbing hands with an alcoholcontaining preparation
- Surgical hand hygiene / antisepsis: Extending the period of hand hygiene with antiseptic agent

Guideline for Hand Hygiene in Health-care Settings. MMWR, vol. 51, no. RR-16, 2002

#### **Indications for Hand Hygiene**

- Wash hands with soap and water:
  - When hands are contaminated
  - When hands are soiled
  - Before and after eating
  - After toileting
- If hands are not visibly soiled, use an alcohol-based hand rub for routinely decontaminating hands
- During outbreaks and if infection rates are high, consider using only handwashing with soap and water
  - Examples: C.difficile infections, Norovirus



#### **Indications for Hand Hygiene (continued)**

#### **Before**

- Patient contact
- Donning gloves
- Accessing devices
- Giving medication

#### **After**

- Contact with a patient's skin or environment
- Contact with body fluids or excretions, non-intact skin, wound dressings
- Removing gloves



#### **Efficacy of Hand Hygiene Products**



\*less effective in presence of organic material



#### Recommended Hand Hygiene Technique

#### Alcohol-Based Hand Rub

- Apply to palm of one hand, rub hands together covering all surfaces until dry
- Volume based on manufacturer recommendation

#### Handwashing

- Wet hands with water, apply soap, rub hands together, paying close attention to between the fingers and nails, for at least 15 seconds
- Rinse and dry with disposable towel
- Use towel to turn off faucet



#### **Nails**

- Nail tips should be kept to ¼ inch in length
- Polish may be worn but must be intact (not chipped)
- Artificial nails and gel polishes should not be worn by HCP





#### **Gloving and Hand Hygiene**

- Always wear gloves when contact with blood or infectious material is possible
- Remove gloves after caring for each patient
  - Remove gloves, perform hand hygiene, and reglove when transitioning care from a soiled to a clean area
- Perform hand hygiene upon removing gloves
- Do not wash gloves
- Do not reuse gloves



#### **How to Improve Hand Hygiene Compliance**

- Make hand hygiene a facility priority
  - Involve a multidisciplinary team
  - Involve a physician champion
- Encourage patients and families to remind HCP to perform hand hygiene
- Make hand rubs easily available (example: place at entrance to patient room or at bedside)
- Monitor adherence to hand hygiene and provide feedback of gaps
  - Train secret shoppers
  - Explore electronic monitoring systems



#### Standard Precautions Element 2: Environmental Cleaning and Disinfection

- Require routine cleaning of environmental surfaces as indicted by level of patient contact and degree of soiling
  - Clean high touch areas more frequently
  - Promptly clean and decontaminate spills of blood and other potentially infectious materials
- Select EPA-registered disinfectants with activity against pathogens most likely to contaminate the patient area
  - Follow manufacturers' instructions for proper cleaning and disinfecting products



## **Contaminated Environmental Surface Leading to Patient Infection**

- Surface must become contaminated by contact or droplet spread
- 2. Organism must survive on the surface
- 3. Surface must be touched by another person who picks up sufficient inoculum
- 4. Person must omit or poorly perform hand hygiene
- 5. Person must transmit the organism to another person or object in sufficient quantity to cause disease



## **Standard Precautions Element 3: Injection Safety**

- Injection safety protects patients
- Injection safety protects HCP



#### Hepatitis B and C Outbreaks Associated with Unsafe Infection Practices

- 61 outbreaks of hepatitis B and C in non-hospital settings in U.S. were reported to CDC in 2008-2017
- Outbreaks were associated with injection safety breaches:
  - Reuse of syringes
  - Contaminated medication vials used for more than one patient
  - Use of single-dose vials for more than one patient

CDC, 2015



## Aseptic Technique for the Preparation and Administration of Injected Medications

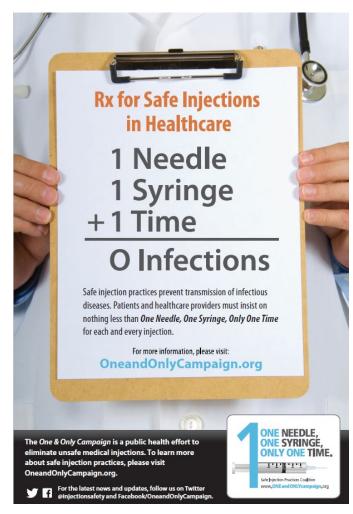
- Perform hand hygiene
- Draw up medications in a designated clean medication area
  - Area must <u>not</u> be adjacent to areas where potentially contaminated items are placed





#### **Needles and Syringes: One Time Use ONLY**

- Needles should be used for only one patient
- Syringes should be used for only one patient
  - Includes:
    - Manufactured prefilled syringes
    - Cartridge devices
    - Insulin pens



**CDC One and Only Campaign** 

(http://www.oneandonlycampaign.org)



#### **Injection Safety for Diabetic Patients**

- Insulin pens containing more than one dose of insulin are only meant for one person
- For glucose testing, clean the glucometer after every use







## Always Clean the Tops of Medication Vials Before Entry

- Cleanse medication vial access diaphragms using friction with 70% alcohol
- Allow the alcohol to dry before inserting a device into the vial
- Clean the tops of vials with alcohol even if they have lids or caps
  - Manufacturers guarantee that medications and solutions are sterile
  - They do not guarantee that the outside of the container or medication vial is sterile



#### Single-Dose Vials: One Patient and Only Once

- Carefully read the vial label to determine if it is single-use
- Never enter a medication vial with a used syringe or needle
- If the vial says "singledose" and has already been accessed, throw it away

- Single use medications should not be stored for future use
- Discard according to the manufacturer's expiration date
- When in doubt, throw it out!

**CDC Injection Safety** 

(www.cdc.gov/injectionsafety)



#### **Multi-Dose Vials**

- Limit the use of multi-dose vials
  - When possible, dedicate them to a single patient
  - A multi-dose vial is recognized by it's FDA-approved label
  - Discard multi-dose vials when the beyond-use date has been reached
  - Any time the sterility of the vial is in question, throw it out!



<u>CDC Injection Safety</u>
(www.cdc.gov/injectionsafety)

#### **Multi-Dose Vials (continued)**

- Multi-dose vials used for more than one patient must be kept in a centralized medication area
- Multi-dose vials should never enter the immediate patient treatment area (examples: patient rooms, operating rooms)
- Multi-dose vials should be dated by the HCP when first opened and discarded within 28 days (unless the manufacturer specifies a different expiration date for an opened vial other than 28 days)



#### Use Intravenous Solution Bags for One Patient Only

- Do not use bags of intravenous solution as a common source of supply for more than one patient
- Everything from the medication bag to the patient's IV catheter is a single interconnected unit



#### **Wear Facemasks for Epidural Procedures**

 Wear a facemask when placing a catheter or injecting material into the epidural or subdural space

#### **Examples:**

- Myelogram
- Epidural or spinal anesthesia



#### **Sharps Safety**

- Sharps injuries occur most frequently due to inappropriate sharps disposal by HCP:
  - Insufficient maintenance of sharps containers in every area
  - Improper design of sharps disposal container
  - Inappropriate placement of sharps disposal container
  - Overfilling sharps disposal container





#### **Sharps Disposal Container Requirements**

- Must be puncture-resistant, durable during installation and transport, and of appropriate size and shape for the task
- Must be clearly visible
- Must be easy to access by being placed in an upright position and easy to operate
- Must have ease of storage and assembly, require minimal worker training requirements, be easy to operate, and have a flexible design

**CDC Injection Safety Workbook** 

(https://www.cdc.gov/sharpssafety/pdf/sharpsworkbook\_2008.pdf)



# Management of Needle Sticks and Other Exposures to Blood or Other Bodily Secretions

- Wash the needle stick site or cut with soap and water until clean
- Flush splashes to the nose, mouth, or skin with water
- Irrigate eyes with clean water, saline, or sterile irrigant
- Immediately report the incident to your supervisor
- Immediately seek medical evaluation per your facility's policy



# Injection Safety Checklist

- Use to assess your facility's injection safety practices
- Download and share with all staff

# CDC Injection Safety Checklist

(www.cdc.gov/injectionsafe ty/PDF/SIPC\_Checklist.pdf)

## INJECTION SAFETY CHECKLIST

The following Injection Safety checklist items area subset of items that can be found in the CDCInfection Prevention Checklist for Outpatient Settings: Minimum Expectations for Safe Care.

The checklist, which is appropriate for both inpatient and outpatient settings, should be used to systematically assess adherence of healthcare personnel to safe injection practices. (Assessment of adherence should be conducted by direct observation of healthcare personnel during the performance of their duties.)

Injection Safety	Practice Performed?	If answer is No, document plan for remediation
Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids or contaminated equipment.	Yes No	
Needles and syringes are used for only one patient (this in dudes manufactured prefilled syringes and cartridge devices such as insulin pens).	Yes No	
The rubber septum on a medication vial is disinfected with alcohol prior to piercing	Yes No	
Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient.	Yes No	
Single dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient.	Yes No	
Medication administration tubing and connectors are used for only one patient.	Yes No	
Multi-dose vials are dated by HCP when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial.  Note: This is different from the expiration date printed on the vial.	Yes No	
Multi-dose vials are dedicated to individual patients when ever possible.	Yes No	
Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g., operating room, patient room/cubicle).  Note: If multi-dose vials enter the immediate patient treatment area they should be dedicated for single-patient use and discarded immediately after use.	Yes No	

# Join the CDC One & Only Campaign

- A partnership of healthcare organizations, patient advocacy organizations, industry partners, and other public health partners
- Commit to injection safety!







CDC One & Only Campaign

**PublicHealth** 

(https://www.cdc.gov/injectionsafety/1anonly/html)

# Standard Precautions Element 4: Personal Protective Equipment

- HCP need immediate access to PPE and training to be able to select proper PPE based on
  - Nature of the patient interaction
  - Potential for exposure to blood, body fluids or other infectious material
- Types of PPE
  - Gloves
  - Gowns
  - Face masks and respirators
  - Goggles and face shields





#### **PPE - Gloves**

- Wear gloves when it can be reasonably anticipated that you may have hand contact with
  - Blood or other potentially infectious material
  - Mucous membranes
  - Non-intact skin
  - Potentially contaminated skin
  - Potentially contaminated equipment



#### **PPE - Gowns**

- Wear a gown during procedures and activities that could cause contact with blood, body fluids, secretions, or excretions
  - To protect skin
  - To prevent soiling of clothing
  - Wear a gown according to the need anticipated by the task performed



#### **PPE - Masks and Protective Shields**

- Use protective eyewear and a mask, or a face shield
  - To protect the mucous membranes of the eyes, nose and mouth
  - During procedures and activities that could generate splashes or sprays of blood, body fluids, secretions and excretions
- Select masks, goggles, face shields, and combinations of each according to the need anticipated by the task performed



#### **PPE Removal**

- Remove and discard PPE, other than respirators, upon completing a task <u>before</u> leaving the patient's room or care area
  - If a respirator is used, it should be removed and discarded (or reprocessed if reusable) after leaving the patient room or care area and closing the door
- <u>Do not</u> use the same gown or pair of gloves for care of more than one patient
- Remove and discard disposable gloves upon completion of a task or when soiled during the process of care
  - Do not wash gloves for the purpose of reuse



# Standard Precautions Element 5: Minimize Potential Exposure

- Use respiratory hygiene and cough etiquette
- Prompt patients/residents and visitors with symptoms of respiratory infection to contain their secretions and perform hand hygiene after contact with respiratory secretions
  - Provide tissues, masks, hand hygiene supplies and instructional signage or handouts at point of entry and throughout the facility
- If possible, separate patients/residents with respiratory symptoms as soon as possible



# **Standard Precautions Element 6: Reprocessing of Reusable Medical Devices**

 Clean and reprocess (disinfect or sterilize) reusable medical equipment prior to use on another patient or resident

#### Example:

- Blood glucose meters and other point-of-care devices
- Blood pressure cuffs
- Oximeter probes
- Surgical instruments
- Endoscopes
- Maintain separation between clean and soiled equipment to prevent cross contamination



## **Standard Precautions Summary**

 Standard precautions are basic practices that apply to all care settings and all patient care (regardless of a patient's suspected or confirmed infectious state)

Hand hygiene	Respiratory hygiene				
Injection safety	Cleaning and disinfection				
Assess risk / use PPE	Reprocessing equipment				



#### What are Transmission-Based Precautions?

- Isolation guidance based on modes of disease transmission
- Updated by CDC, 2007
  - Guideline for Isolation Precautions: Preventing
     Transmission of Infectious Agents in Healthcare Settings
- Describes care precautions for infected/colonized patients/residents
- CMS requires all hospitals and skilled nursing facilities to implement Transmission-based precautions if needed
  - Hospitals Part 42 Subpart C Basic Hospital Functions Section § 482.42
  - SNF Part 43 Subpart B Long Term Care Facilities
     Section § 483.65



## **Transmission-Based Precautions Training**

- Hospitals and SNF expected to train staff on
  - Disease mode of transmission
  - Correct use of Transmission-based Precautions and PPE
- Train staff upon hire and at least annually
- Training should include assessment of competency



## **Types of Transmission-Based Precautions**

#### 1. Contact precautions

- Mode of transmission: direct contact with patient or contaminated environment
- Examples of use: *C. difficile*, scabies

#### 2. **Droplet** precautions

- Mode of transmission: respiratory droplets
- Examples of use: Influenza, pertussis

#### 3. Airborne precautions

- Mode of transmission: small aerosolized particles
- Examples of use: Tuberculosis, measles



# Why are Transmission-Based Precautions Important?

Using proper Transmission-based precautions prevents the spread of infection from

- Patient/resident to HCP
- Patient/resident to HCP to patient/resident
- Patient/resident to patient/resident



# Implementation of Transmission-Based Precautions

- Implement Transmission-based precautions
  - Based on the patient's clinical presentation and <u>likely</u> infection diagnoses (examples: syndromes suggestive of transmissible infections such as diarrhea, meningitis, fever and rash, respiratory infection)
  - As soon as possible after the patient enters the healthcare facility (including reception or triage areas in emergency departments, ambulatory clinics, or physicians' offices)



# Implementation of Transmission-Based Precautions (continued)

- To the extent possible, place patients who may need Transmission-based precautions into a single-patient room while awaiting clinical assessment
- Notify accepting facilities and the transporting agency about suspected infections and the need for Transmission-based precautions when patients are transferred
- Adjust or discontinue precautions when more clinical information becomes available (example: laboratory results)



#### **Contact Precautions**

- Intended to prevent transmission of infectious agents (examples: *C. difficile*, MDRO colonized wound, scabies) via contact with a patient or contaminated environment
  - Used for epidemiologically important microorganisms
  - Places a barrier between the HCP and infectious agent
  - Used in addition to Standard precautions



## **Contact Precautions (continued)**

#### Includes:

- Gown and gloves donned prior to entry into room and discarded prior to exit
  - Hand hygiene prior to donning gloves and after removing gloves
- Placing patients in single rooms (preferred)
  - Alternatives include spatial separation or cohorting



## **Droplet Precautions**

- Intended to prevent transmission of pathogens (examples: Influenza, pertussis, mumps, Meningococcal disease) via respiratory or mucous membrane contact with respiratory secretions
  - No special air handling or ventilation required
  - Used in addition to Standard precautions



## **Droplet Precautions (continued)**

#### Includes:

- Surgical or procedure mask donned prior to entry into room and discarded prior to exit
- Placing patients in single rooms (preferred)
- Transporting patient in a surgical mask



#### **Airborne Precautions**

- Intended to prevent transmission by inhalation of infectious agents (examples: Herpes zoster, varicella zoster, tuberculosis) that can remain suspended in the air
  - Requirements include:
    - Increased ventilation rate
    - Air exhausted directly to the outside or through HEPA filtration
    - Facility respiratory protection program (examples: education, fit-testing)
  - Use in addition to Standard precautions



# **Airborne Precautions (continued)**

#### Includes:

- Respirator (N-95 or PAPR) donned prior to entry into room and removed after exit
- Placing patients in single rooms
- Transporting patient in a surgical mask



## **Airborne Precautions in Outpatient Clinics**

Most outpatient clinics CANNOT perform Airborne precautions because they do not have monitored negative pressure rooms

For patients requiring Airborne isolation (examples: those with tuberculosis or measles):

- Triage before entry to the clinic, if possible
- If in clinic, place in a private room with a surgical mask on
  - Close the room door and open the window (if possible)
  - Staff must wear N-95 respirators/PAPRs during care
  - Contact local health department
  - Discharge from clinic as soon as possible



# **Enhanced Standard Precautions for California Skilled Nursing Facilities**

- Developed by CDPH and the California Association of Health Facilities (CAHF), 2010
- Created to simplify precautions for preventing transmission in SNF
  - Use in addition to Standard precautions when Standard precautions may be insufficient to prevent transmission
  - Incorporates aspects of contact, droplet, and airborne precautions
- Intended to facilitate communication for patients on contact precautions transferring between hospitals and SNF



# INTERFACILITY TRANSFER COMMUNICATION



# Why is Interfacility Communication Important?

- Provides information to receiving facility so proper room placement and Transmission-based precautions can be implemented or continued
- Provides important information about a patient/resident's current clinical status
- Gives both the transferring and receiving facility a way to share the patient/resident's history of infection and vaccination
- Relays information about devices such as urinary catheters and central lines



# **Interfacility Communication Transfer Tool**

#### HEALTHCARE FACILITY TRANSFER FORM

Use this form for <u>all</u> transfers to an admitting healthcare facility.

Affix patient labels here.

Patie	ent Name (Last, First):						
Date	Date of Birth: MRN:			Transf	Transfer Date:		
Rece	eiving Facility Name:						
Seno	ling Facility Name:						
Cont	tact Name:		Contact P	hone:			
SOLATION PRECAUTIONS	Patient currently on isolat  Yes No  If yes, check all that apply: Contact precautions Droplet precautions Airborne precautions		otective eq	uipment (PPE)	to consider at		

# Interfacility Communication Transfer Tool (continued)

	Patient has multidrug-resistant organism (MDRO) or other lab results for which the patient should be in isolation?				
	□ Yes □ No				
	If yes, specify organism(s) and include specimen source and collection date.				
	Organism	Source	Date		
S	□ C.difficile				
ORGANISMS	☐ Carbapenem-resistant Enterobacteriaceae (CRE) (e.g.,				
A	Klebsiella, Enterobacter or E.coli)				
RG	□ Extended-spectrum beta lactam-resistant (ESBL) (e.g.,				
0	E.coli, Klebsiella)				
	☐ MDR gram negatives (e.g., Acinetobacter, Pseudomonas)				
	☐ Methicillin-resistant Staphylococcus aureus (MRSA)				
	□ Vancomycin-resistant Enterococcus (VRE)				
	Other, specify:				
	e.g., lice, scabies, disseminated shingles (Herpes zoster), norovirus, influenza, tuberculosis				

Include copy of lab results with antimicrobial susceptibilities.

### **ADHERENCE MONITORING TOOLS**



# **Monitoring Hand Hygiene**

Discip line	, , , , , , , , , , , , , , , , , , , ,					✓ Successful
N	☐ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	☑ leaving room	>
N	☑entering room* ☐ befo	re task 🛭 a	after body fluids	□ after care*	☐ leaving room	0
CNA	☐ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	$\ {\ \ } {\ \ } {\ \ }$ leaving room	~
CNA	☑ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	$\square$ leaving room	0
CNA	☑ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	☐ leaving room	0
CNA	☐ entering room* ☐ before	ore task 🛚	after body fluids	☐ after care*	☑ leaving room	~
MD	☑ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	☐ leaving room	0
MD	☑ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	☐ leaving room	0
N	☑ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	☐ leaving room	<b>~</b>
N	☑ entering room* ☐ befo	ore task 🛚	after body fluids	☐ after care*	☐ leaving room	0
Т	otal # HH Successful ("# ✔ "): 4		l Opportunities erved: <b>10</b>	(Total # HH S	rence: <mark>40</mark> _ uccessful ÷Total s Observed x 100	



# **Monitoring Environmental Cleaning**

	EVS		EVS		Adherence by	
	Staff		Staff Staf			sk
Environmental Cleaning Practices	1		2		# Yes	# Obs
Detergent/disinfectant solution is mixed according to manufacturer's instructions.	Yes	No	Yes	No		
Solution remains in wet contact with surfaces according to manufacturer's instructions.	Yes	No	Yes	No		
A new clean, saturated cloth is used in each room. The cloth is also changed when visibly soiled and after cleaning the bathroom.	Yes	No	Yes	No		
Environmental Services staff use appropriate personal protective equipment (e.g. Gowns and gloves are used for patients/residents on contact precautions upon entry to the contact precautions room.)	Yes	No	Yes	No		
Objects and environmental surfaces in patient care areas that are touched frequently* are cleaned and then disinfected when visibly contaminated or at least daily with an EPA-registered disinfectant.	Yes	No	Yes	No		

# Yes\_\_\_\_\_ # Observed \_\_\_\_\_ #Yes/#Observed = % Adherence

# **Monitoring Contact Precautions**

Contact Precautions Practices	Pt/Res	Pt/Res	Adherence by Task		
	1	2	#Yes	#Obs	
Gloves and gowns are available near point of use.	Yes No	Yes No	2	2	
Signs indicating the patient/resident is on contact precautions are clear and visible.	Yes No	(Yes No	2	2	
The patient/resident housed in single-room or cohorted based on a clinical risk assessment.	Yes No	Ves No	2	2	
Hand hygiene is performed before entering the patient/resident care environment.	Yes No	Yes No	1	2	
Gloves and gowns are donned before entering the patient/resident care environment.	Yes No	Yes No	2	2	
Gloves and gowns are removed and discarded, <b>and</b> hand hygiene is performed before leaving the patient/resident care environment. <i>Soap &amp; water if C. difficile</i> infection.	Yes No	Yes No	0	2	
Dedicated or disposable noncritical patient-care equipment (e.g. blood pressure cuffs) is used	Yes No	Yes No	2	2	
Total #Yes 11 Total #Observed 14 Total #Yes/Total #Observed = % Adherence 79 %					



# 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

Jane D. Siegel, MD; Emily Rhinehart, RN MPH CIC; Marguerite Jackson, PhD; Linda Chiarello, RN MS; the Healthcare Infection Control Practices Advisory Committee

Acknowledgement: The authors and HICPAC gratefully acknowledge Dr. Larry Strausbaugh for his many contributions and valued guidance in the preparation of this guideline.

Suggested citation: Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

https://www.cdc.gov/infectioncontrol/guidelines/isolation



## **Summary**

- Correct use of Standard and Transmission-based precautions prevents disease transmission
- Perform adherence monitoring to Transmission-based precautions and give feedback to staff to prevent the spread of infection



# ACTIVITY: CASE SCENARIOS



### **Scenario 1**

Mrs. Sheila Hernandez is a diabetic patient who visits your clinic. She cut her left foot three weeks ago, and it has not been healing well. After her last visit, the wound culture indicated she had a methicillinresistant Staphylococcus aureus (MRSA) infection in her wound. The nurse practitioner changed Mrs. Hernandez's antibiotics to cover MRSA.





### Scenario 1 - Exercise 1

Today, Mrs. Hernandez is at the clinic for a wound assessment and dressing change.

- What type of precautions would you use to assess and change the dressing for Mrs. Hernandez's foot wound?
- Do you need to use any personal protective equipment (PPE)? If so, what type of PPE should you use?





Include copy of lab results with antimicrobial susceptibilities.

rau	ent Name (Last, First): He	rnandez, Sheila	1			
	, , , , , , , , , , , , , , , , , , , ,		•	_		
	Date of Birth:         MRN:         Transfer Date           May 16, 1961         May 22, 2019					
-	eiving Facility Name:	cal Hospital		22, 2010		
	LO	саі поѕрікаі				
end	ding Facility Name:	County Outpotio	nt Clinic			
`ont	tact Name:	County Outpatie	Contact Phone:			
Hans R. Washed, RN			555-555-5555			
	T					
<b>ISOLATION PRECAUTIONS</b>	Patient currently on isolation precautions?					
	☑ Yes □ No					
ECA	If yes, check all that apply: Personal protective equipment (PPE) to consider at					
PR	☐ Contact precautions☐ Droplet precautions	receiving fa	icility:			
ON	☐ Airborne precautions		Wa) G			
A	Z / in bottle precautions		37 1	2		
S			Gloves 🛛 G	owns		
	<u> </u>					
	Patient has multidrug-resistant organism (MDRO) or other lab results for which the patient should be in isolation?					
	☑ Yes ☐ No					
	If yes, specify organism(s) and include specimen source and collection date.					
		Organism		Source	Date	
S	☐ C.difficile					
ORGANISMS	☐ Carbapenem-resistant El Klebsiella, Enterobacter or		e (CRE) (e.g.,			
	Extended-spectrum beta lactam-resistant (ESBL) (e.g., E.coli, Klebsiella)					
	☐ MDR gram negatives (e.g., Acinetobacter, Pseudomonas)					
	☑ Methicillin-resistant Staphylococcus aureus (MRSA)			Left foot wound	05/02/19	
	☐ Vancomycin-resistant Enterococcus (VRE)					
				1	_	
					$\perp$	

Scenario 1 – Exercise 2

Mrs. Hernandez's foot infection is worse; she needs to be transferred to the local hospital.

Fill in an Infection **Control Transfer Form** to inform the ambulance & hospital staff about her condition.



#### **HEALTHCARE FACILITY TRANSFER FORM**

**ISOLATIO** 

☐ Airborne precautions

Use this form for all transfers to an admitting healthcare facility.

Affix patient labels here.

Patie	ent Name (Last, First): H	ernandez, Sheil	a					
	of Birth: 16, 1961	MRN:		Transfer Date: May 22, 2019				
Rece	iving Facility Name: L	ocal Hospital						
Sending Facility Name:  Imperial County Outpatient Clinic								
Contact Name: Hans R. Washed, RN			Contact Phone: 555-555-5555					
N PRECAUTIONS	Patient currently on isola  ✓ Yes □ No  If yes, check all that apply  ✓ Contact precautions		rotective equipm	ent (PPE) to consider at				
N PR	☐ Droplet precautions	/						

☑ Gloves

☐ Masks

☑ Gowns

	Patient has multidrug-resistant organism (MDRO) or other lab results for which the patient should be in isolation?					
	☑ Yes ☐ No					
	If yes, specify organism(s) and include specimen source and collection date.					
ORGANISMS	Organism	Source	Date			
	□ C.difficile					
	☐ Carbapenem-resistant <i>Enterobacteriaceae</i> (CRE) (e.g., Klebsiella, Enterobacter or E.coli)					
	☐ Extended-spectrum beta lactam-resistant (ESBL) (e.g., E.coli, Klebsiella)					
	☐ MDR gram negatives (e.g., Acinetobacter, Pseudomonas)					
	☑ Methicillin-resistant Staphylococcus aureus (MRSA)	Left foot wound	05/02/19			
	☐ Vancomycin-resistant <i>Enterococcus</i> (VRE)					
	Other, specify: e.g., lice, scabies, disseminated shingles (Herpes zoster), norovirus,					
	influenza, tuberculosis					

Include copy of lab results with antimicrobial susceptibilities.

### Scenario 2

Jonathan is a 5-year-old boy who fell off his bicycle and landed on a sharp rock. The clinic's doctor is going to clean the boy's wound and place four stitches in his leg. The doctor will be using a new multidose vial of anesthetic to numb the skin.





### Scenario 2 - Discussion

# What steps can the doctor take to prevent an infection?

\*\*Hint\*\* Consider what you have learned about infection prevention relating to:

- Hand hygiene
- Standard & Transmission-based precautions
- Environment (cleaning and disinfection)
- Injection safety



# Scenario 2 – Solutions (1)

Measures the doctor can take to prevent further infection:

#### Hand hygiene

- Perform hand hygiene before suturing
- Use gloves on clean hands
- Use sterile gloves for suturing
- Perform hand hygiene after suturing
- Wash hands after removing gloves
- Once gloves are soiled, remove them and perform hand hygiene



# Scenario 2 – Solutions (2)

Measures the doctor can take to prevent further infection:

- Standard & Transmission-based precautions
  - Use appropriate PPE if the wound is draining
  - Clean the skin around the wound before suturing
  - Remove debris and rinse out the wound before suturing
  - If child has a contagious illness, place in Transmissionbased precautions
  - Bandage the wound after the procedure
  - Teach the child not to touch the wound
  - Teach the child and family about hand hygiene to prevent wound infection

# Scenario 2 – Solutions (3)

Measures the doctor can take to prevent further infection:

- Environment (cleaning and disinfection)
  - Place in a clean, disinfected room
  - Promptly clean and decontaminate areas with blood or body fluids
  - Clean and disinfect room after care



# Scenario 2 – Solutions (4)

Measures the doctor can take to prevent further infection:

#### Injection safety

- Draw up anesthesia in a designated, clean medication area
- Clean vial top with alcohol after removing dust cover
- Allow vial top to dry before withdrawing anesthesia
- Discard anesthesia if it is expired
- Use sterile needles and syringes
- Use a new suture needle for suturing
- Discard used needles in the sharps container
- Discard full sharps container



# COLLABORATIVE NEXT STEPS



## **Next Steps**

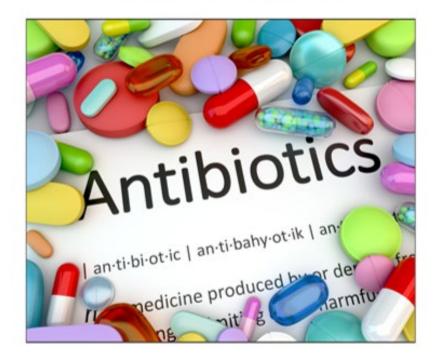
- Join our email distribution list to receive updates!
- Tell us about your experience with tool implementation at your facility What is working? What do you need help with? What needs to be done for progress to be made?
- Visit our collaborative webpage for AR education materials, collaborative information, and announcements -<a href="https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ImperialCountyAR">https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ImperialCountyAR</a> Collaborative.aspx



# IMPERIAL COUNTY ANTIMICROBIAL RESISTANCE (AR) PREVENTION COLLABORATIVE WEBPAGE



# Imperial County Antimicrobial Resistance (AR) Prevention Collaborative

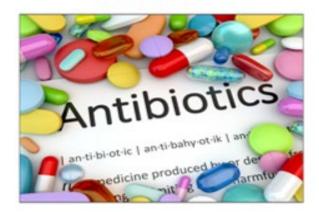


Hospitals, skilled nursing facilities, and clinics have teamed up with the Imperial County Department of Public Health and the California Department of Public Health Healthcare-Associated Infections Program to promote appropriate antibiotic prescribing in all healthcare settings.

Visit our collaborative webpage!



#### Imperial County Antimicrobial Resistance (AR) Prevention Collaborative



Hospitals, skilled nursing facilities, and clinics have teamed up with the Imperial County Department of Public Health and the California Department of Public Health Healthcare-Associated Infections Program to promote appropriate antibiotic prescribing in all healthcare settings.



Resources for Patients and Families



Resources for Healthcare Providers



**Collaborative Resources** 

# How do I access the webpage?

 https://www.cdph.ca.gov/Pr ograms/CHCQ/HAI/Pages/Im perialCountyAR Collaborativ e.aspx

#### OR

Enter "Imperial AR
 Collaborative CDPH" in
 browser, and choose Imperial
 County AR Collaborative
 Webpage



# Imperial County AR Prevention Collaborative Webpage

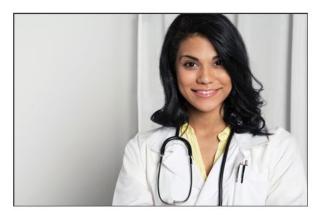


### Resources for Patients and Families

- Antibiotic Use Information
  - Handouts
  - Flyers
  - Videos
  - Coloring pages (in production)



# Imperial County AR Prevention Collaborative Webpage



### Resources for Healthcare Providers

- Antibiotic Stewardship Commitment Posters
- Checklist for Antibiotic Stewardship
- Communications Training
- Educational Resources and Articles
- Prescription Pads for Symptom Relief
- Adherence Monitoring Tools



# Imperial County AR Prevention Collaborative Webpage



#### **Collaborative Resources**

- Project Plan & Timeline
- Meeting Agenda and materials
  - Meeting Agendas
  - Slide Presentations
  - Recorded Webinars
- Assessment Tools (coming soon!)



# **ACTIVITY: EXPERT OPINIONS NEEDED!**



# What Would Make the Webpage More Useful?

#### Activity

- Name two items you find useful on the webpage?
- What would make the webpage more useful to you?
- What items are we missing from the webpage?



## **Next In-Person Meeting**

SAVE THE DATE Invite your colleagues!

Thursday, August 22, 2019 8:30AM-12:30PM

Imperial County Public Health Department 935 Broadway, El Centro, CA 92243 Agenda to follow.



### **Questions?**

#### **Contact:**

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