

water alcohol
the Catheter
based and CVC hub
Hand Site scrub
INFECTION

Infection Control: You are the Expert

The engaged participant will be able to:

List

- Three most frequently cited deficiencies
- Two ways to make hand washing safer

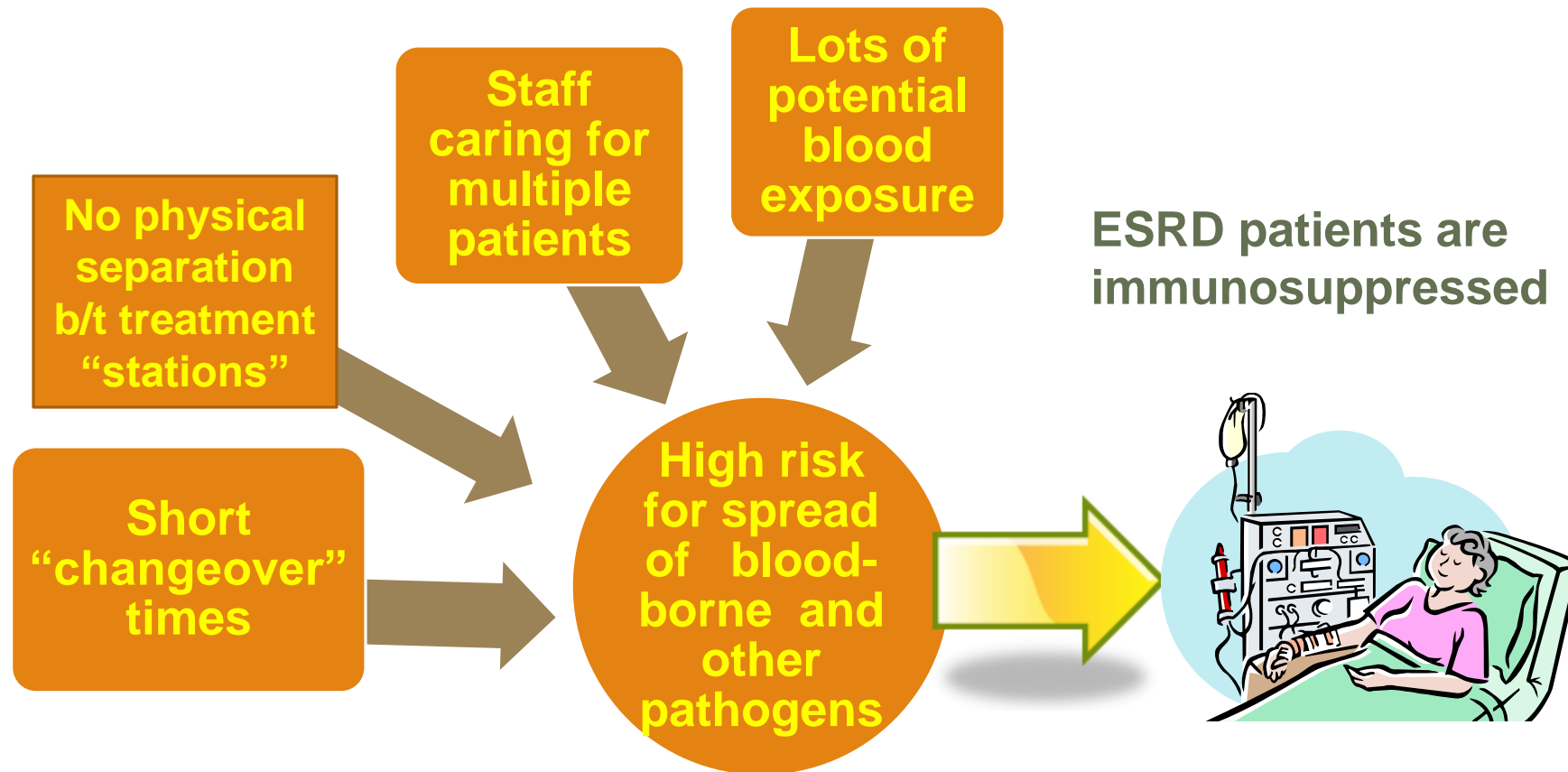
Recognize

- Most important practice for patient safety
- Most important practices for staff safety

Identify

- Practice opportunities to improve safety
- Survey “Triggers” to eliminate

The “Perfect Storm” in Hemodialysis



Atul Gawande on Infection Control

Better: A Surgeon's Notes on Performance

“Rising Infection Rates from Super Resistant Bacteria Have Become the Norm Around the World.”

- 1988 First Outbreak Of VRE
- 1990 Carried Abroad to 4/1000 ICU patients in US
- 1997 A stunning 23% of ICU patients infected



Center for Disease Control and Prevention Data



Antibiotic Resistant Organisms

- Annual illnesses: 2,049,442
- Annual Deaths: 23,000

Clostridium Difficile (C Diff)

- Annual illnesses: 250,000
- Annual Deaths: 14,000

Atul Gawande on Infection Control: Action

- The positive deviance idea:
 - building on capabilities
- YOU hold the solutions
- Identify and address obstacles
- All the obstacles
- Follow your team **scores**
- Diligence: “The constant and earnest effort to accomplish what is undertaken”
- ...First nature



V Tag	Deficiency	Times Cited	% Surveys
V0113	IC-GLOVES/HAND HYGIENE	558	36.0%
V0122	IC - CLEAN, DISINFECT SURFACES & EQUIPMENT/WRITTEN PROTOCOLS	512	33.0%
V0543	MANAGE VOLUME STATUS	330	21.3%
V0403	PE - EQUIPMENT MAINTENANCE - MANUFACTURER'S DFU	294	18.9%
V0116	IC - ITEMS TAKEN TO STATION DISPOSED/DEDICATED OR DISINFECTED	251	16.2%
V0147	IC - STAFF EDUCATION RE CATHETERS/CATHETER CARE	242	15.6%
V0117	IC - CLEAN/DIRTY AREAS, MED PREP AREA, NO COMMON MED CARTS	220	14.2%
V0111	IC - SANITARY ENVIRONMENT	212	13.7%
V0143	IC - ASEPTIC TECHNIQUES FOR IV MEDS	207	13.3%
V0115	IC - WEAR GOWNS, SHIELDS/MASKS; STAFF NOT EAT/DRINK IN TX AREA	193	12.4%

SAFER: Survey Analysis for Evaluating Risk

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

High
Harm could happen
at any time

Moderate
Harm could happen
occasionally

Low
Harm could happen but
would be rare

Immediate Threat to Life		

Limited

Pattern

Widespread

SCOPE

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

Gloves, Hand Hygiene

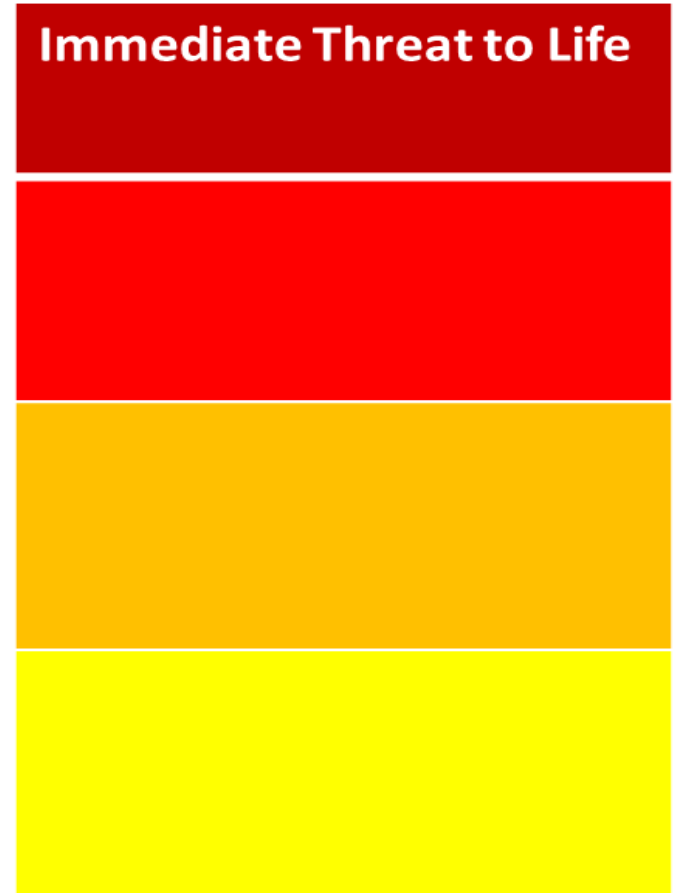
36%

High
Harm could happen
at any time

Moderate
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occasionally

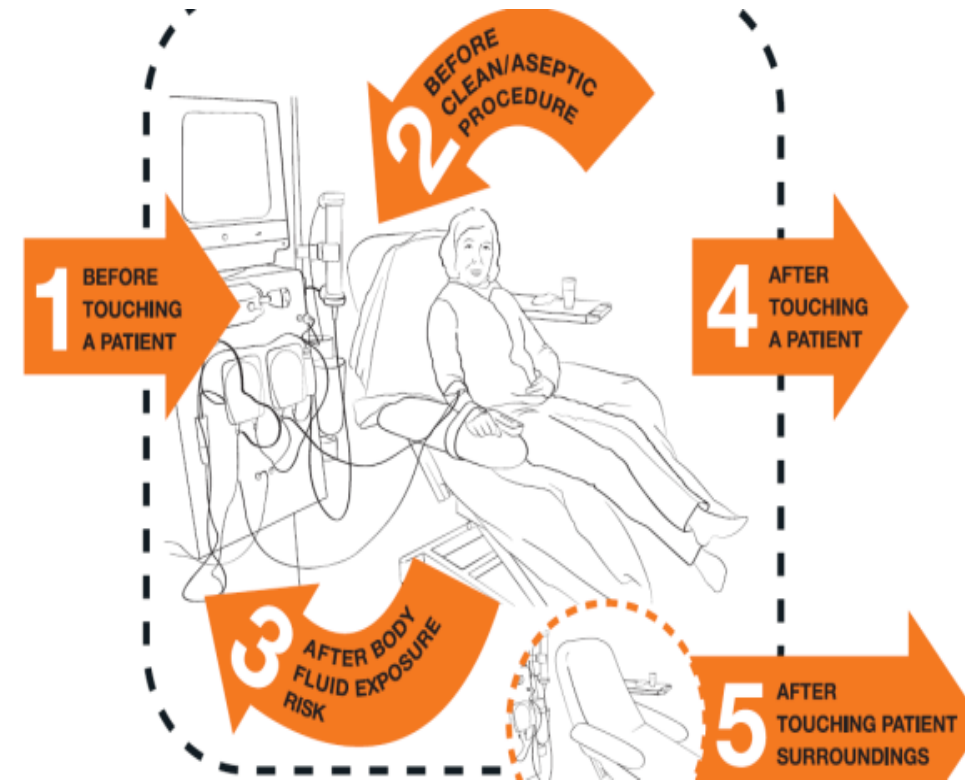
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Immediate Threat to Life



Hand Hygiene & The World Health Organization (WHO) Campaign: “My 5 moments for hand hygiene”

1. Before touching a patient
2. Before clean/aseptic procedures
3. After body fluid exposure/risk
4. After touching a patient
5. After touching a patient’s surroundings



Hand Hygiene:

The Basics:

- Apply alcohol-based hand rub with 60-90% alcohol to cover all hand surfaces, rub to dry, or
- Wet hands, apply soap to all surfaces, rub at least 20 seconds, rinse thoroughly
- Do not re-contaminate hands after washing
- Long/ Artificial nails have been identified in outbreaks

Gloving

The Basics:

- **Wear** gloves
 - For procedures with potential for exposure to **blood, dialysate, any potentially infectious substances**
- **Change** gloves
 - When (possibly) soiled
 - When going from clean to dirty task or area
- **Provide** gloves to patients and visitors as needed

Lets Talk:

Sinks v Hand Sanitizer



Hazards of Biofilm

Hand Sanitizer Resistant Bugs

Use of Gloves



Hand Hygiene Before Gloving

The Whole Glove and Nothing But a Glove

V113 Triggers

Findings that will deepen survey:

- Observed breaches of hand hygiene
- Observed breaches of glove-use practices

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

**Clean, Disinfect Surfaces/
Equipment,
Written Protocols**

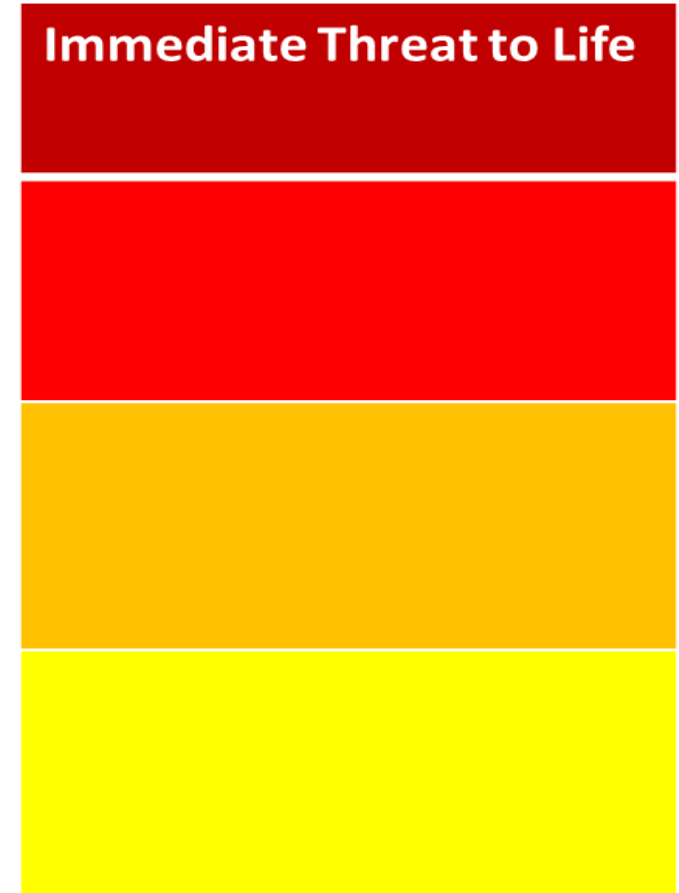
33%

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Harm could happen
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Moderate
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Harm could happen but
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Immediate Threat to Life



Clean and Disinfect Surfaces

The Basics:

- Should have written protocols
 - Training
 - Audits
- Manufacturer's Guidelines (DFU)
- Cloth must be **wet** with
- Appropriate disinfectant

Item or Surface	Low Level Disinfection	Intermediate Disinfection
Gross Blood Spills or Items Contaminated with Gross Blood		X
Hemodialyzer Port Caps		X
Interior Pathways of Dialysis Machine		X
Water Treatment and Distribution System	X	X
Scissors, Hemostats, Clamps Blood Pressure Cuffs, Stethoscopes	X	X
Environmental Surfaces, including exterior surfaces of hemodialysis machine	X	
Blood Anywhere		XX

Cleaning and Disinfection of the Dialysis Station

Notes: All items listed in this checklist must be disinfected using an EPA-registered hospital disinfectant prepared and used in accordance with manufacturer's instructions (V122)

Staff PPE must be gown, face shield or mask/eye protection, and gloves (V115, 113)

--Centers for Medicare & Medicaid Services
ESRD Core Survey Version 1.6 Page 7 of 12

#6

Cleaning and Disinfection of the Dialysis Station

Lets Talk

Thorough?



Chair, minor equipment
Prime waste receptacle

Not so much?



Controls, Rims

V122 Triggers

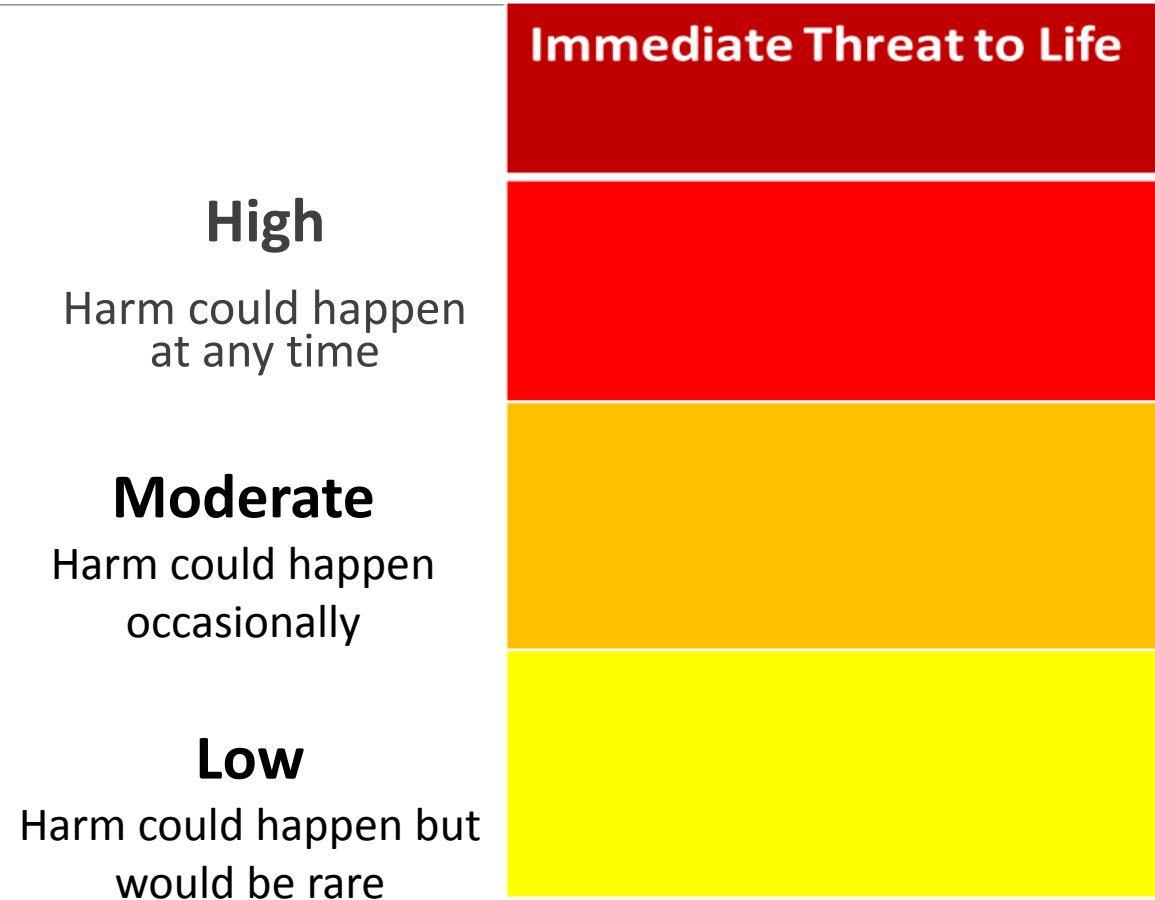
Findings that will deepen survey:

- Blood spills not cleaned up
- Blood spatters on surfaces or equipment
- PD effluent spill not cleaned, spattered

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

ITEMS TAKEN TO STATION
DISPOSED, DEDICATED
OR DISINFECTED

16.2%



ITEMS TAKEN TO STATION DISPOSED, DEDICATED OR DISINFECTED

The Basics

- All equipment that can be disinfected **MUST** be disinfected
 - Dialysate jugs and machine lines
 - TV if touched by patient
- Non-disposable items that can not be disinfected must be dedicated
- Medications brought to station must be used or discarded:
no carts from station to station

Lets Talk:

Linens



Provide: Launder
Patient Education

Shared Objects



Mobile or station specific:
Disinfect between patients

V116 Triggers

Findings that will deepen survey:

- Observed supplies taken to station not D-D-D
- Location of supplies not for use by patient in station

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

STAFF EDUCATION RE
CATHETERS/
CATHETER CARE

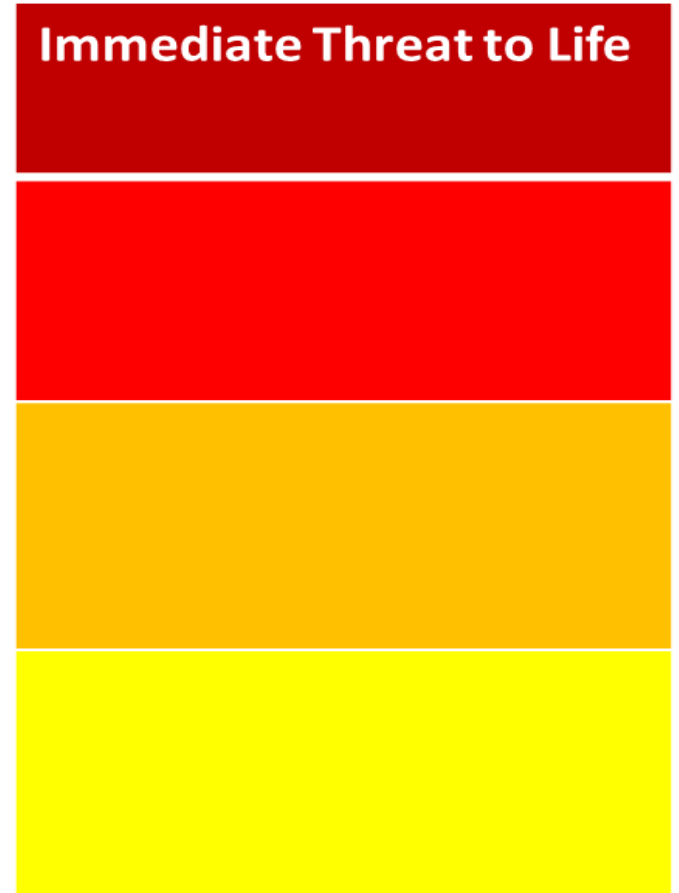
15.6%

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Harm could happen but
would be rare

Immediate Threat to Life



Staff Education for Catheters, Catheter Care

The Basics:

- Educate staff in measures to prevent catheter related infections
- Assess knowledge and adherence periodically
- No routine use of antibiotic lock solutions
- CMS Checklists 1, 2, and 3 establish expectations

Staff Education for Catheters, Catheter Care

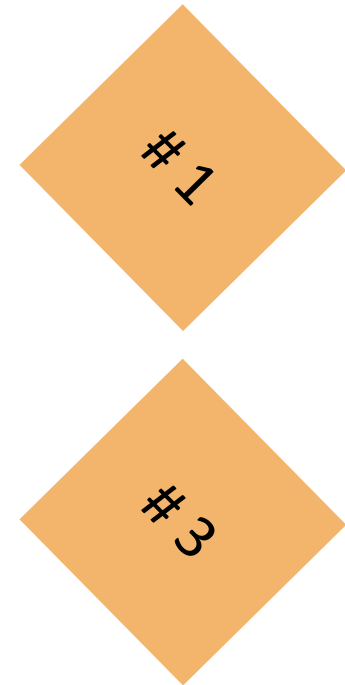
Notes: Patient should wear a mask whenever CVC is accessed

Staff PPE must be gown, mask, eye protection, and gloves

All antiseptics and disinfectants must be used per manufacturer's instructions

There are hub disinfection options

Note Glove Changes in Discontinuation: Checklist 3



Lets Talk:

Checklists



Audit Tool

Self Audit Tool

○ Audits



Not just numbers

V147 Triggers

Findings that will deepen survey:

- Breaches in aseptic practice for CVC

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

**CLEAN/DIRTY AREAS,
MED PREP AREA,
NO COMMON MED CARTS**

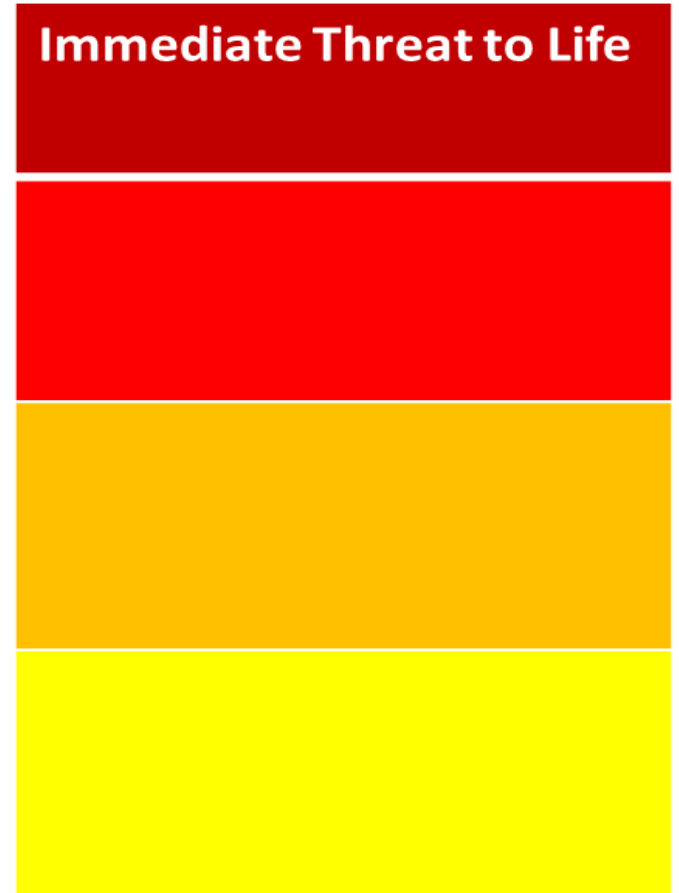
14.2%

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Moderate
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occasionally

Low
Harm could happen but
would be rare

Immediate Threat to Life



CLEAN/DIRTY AREAS, MED PREP, NO CARTS

The Basics:

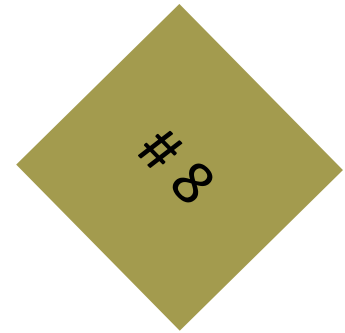
- Clean areas designated for preparing, handling and storage of meds and clean supplies
- Clean areas separate from areas for used supplies, equipment
- Handle and store meds separate from blood, soil
- Deliver meds individually, no common cart

CLEAN/DIRTY AREAS, MED PREP, NO CARTS

Notes: Medications must be prepared in a clean area on a clean surface away from dialysis stations.

The exception to this is drawing saline syringes from patient's saline bag **in an emergency situation** at the station, following aseptic technique after wiping port with disinfectant prior to aspirating.

Hand hygiene, don clean gloves and other PPE as indicated by potential exposure (e.g., gown and mouth/nose/eye protection if injecting into blood lines)



Lets Talk:

Saline



Is a medication

Space for Separation

Challenging.

Protect Boundaries

V117 Triggers

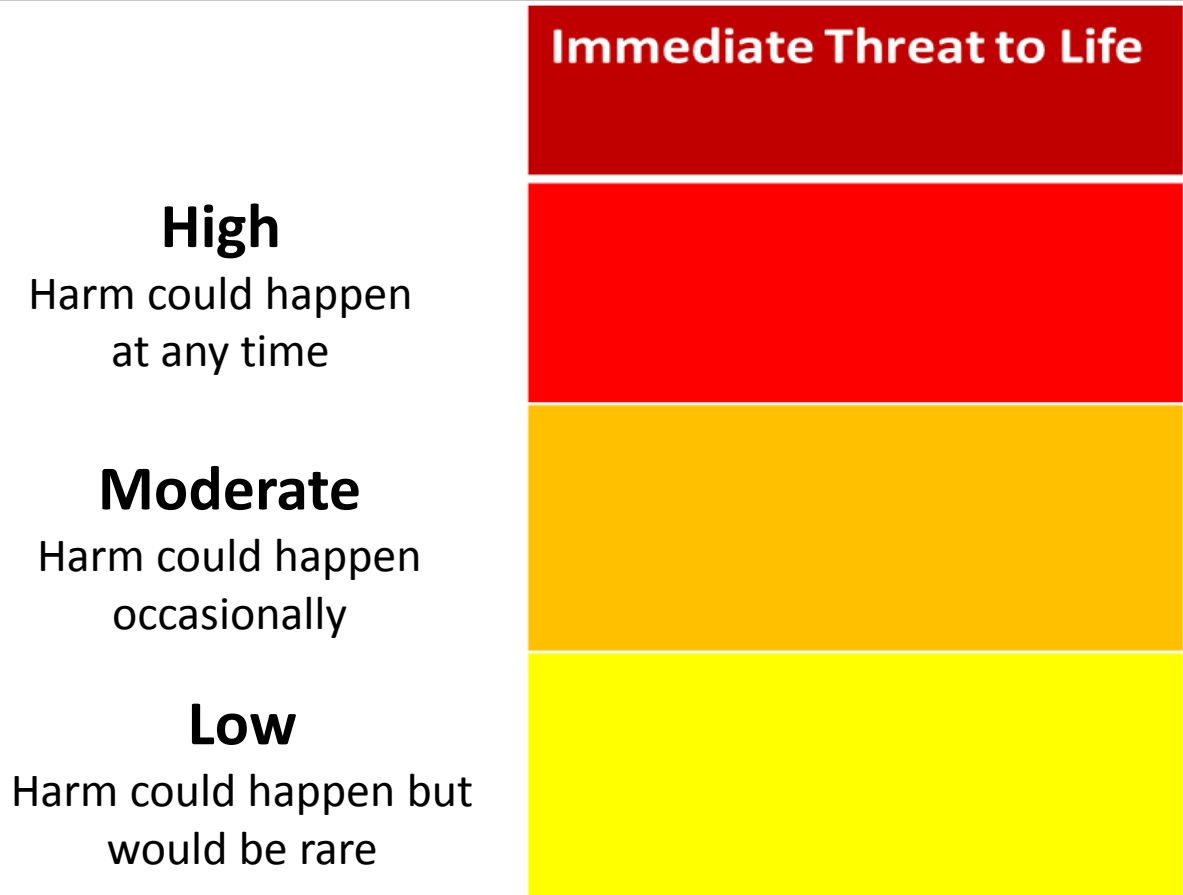
Findings that will deepen survey:

- Medications not prepared in clean area away from the dialysis stations
- Medications for multiple patients taken to patient stations

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

SANITARY ENVIRONMENT

- 13.7%



SANITARY ENVIRONMENT

The Basics:

- Provide and monitor sanitary environment
- Prevent transmission of infection within unit and between unit and public areas
- Environment meets standard hospital precautions plus additional hemodialysis precautions
- Universal Precautions and Body Substance Isolation

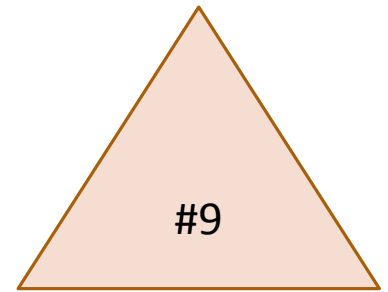
SANITARY ENVIRONMENT

Supplies are kept in designated clean areas, sufficient distance from dialysis stations to prevent contamination

Supplies for next patient are not brought to the station before the prior patient's treatment is terminated

Carts or trays containing supplies are not taken to or moved between dialysis stations

Staff do not keep patient care supplies in pockets or on their person



Lets Talk:

Thermometers



Etc. (pHoenix meters....)

V111 Triggers

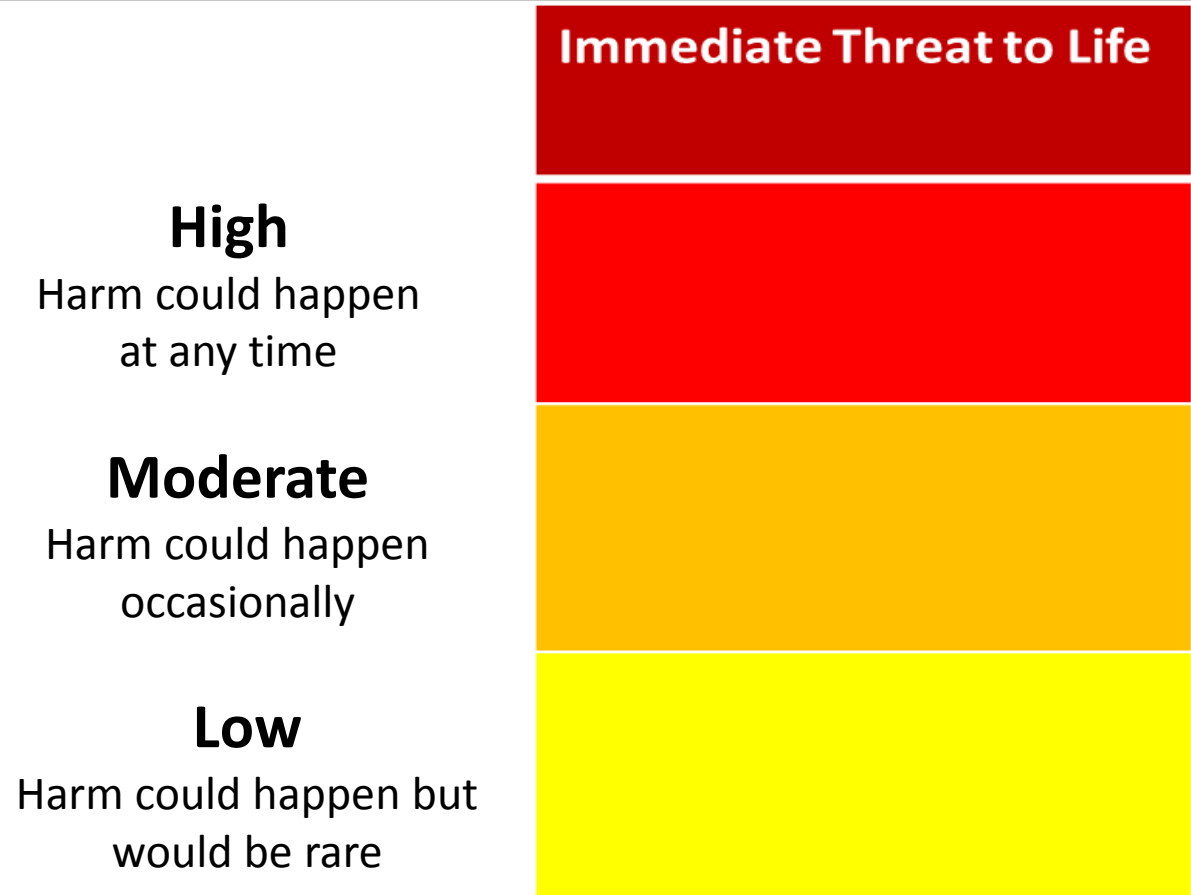
Findings that will deepen survey:

There is no a specific trigger, it captures the effect of the more specific deficiencies

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

ASEPTIC TECHNIQUES FOR IV MEDS

13.3%



ASEPTIC TECHNIQUES FOR IV MEDS

The Basics:

- Ensure compliance with aseptic techniques dispensing and administering IV medications
- Timely disposal of expired drugs
- Multidose vials managed aseptically
- Single dose used only once

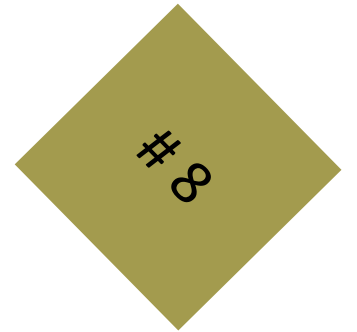
ASEPTIC TECHNIQUES FOR IV MEDS

Multiple dose vials are only entered with a new, sterile syringe and needle, labeling with date opened and discarded within 28 days or by manufacturer's instructions

Wipe stopper with alcohol or other antiseptic

Withdraw medication into sterile syringe; Label syringe if medication not immediately administered;

Medications may be prepared for multiple patients at one time, but administration must be to one patient at a time, leaving remainder of medications in the clean preparation area



Lets Talk:

Distributing meds



No carts, trays or
handfulls

V143 Triggers

Findings that will deepen survey:

- Single dose vials punctured more than once or used for multiple patients
- Poor aseptic technique

LIKELIHOOD TO HARM A PATIENT/STAFF/VISITOR

WEAR GOWNS, SHIELDS or MASKS

STAFF DOESN'T EAT or DRINK IN TREATMENT AREA

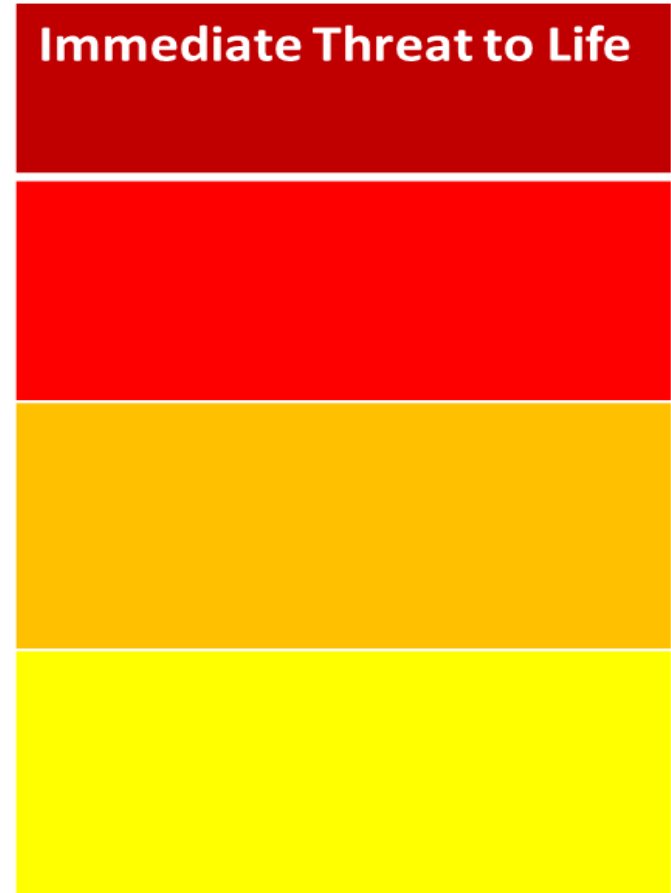
- 12.4%

High
Harm could happen at any time

Moderate
Harm could happen occasionally

Low
Harm could happen but would be rare

Immediate Threat to Life



STAFF PROTECTION

The Basics:

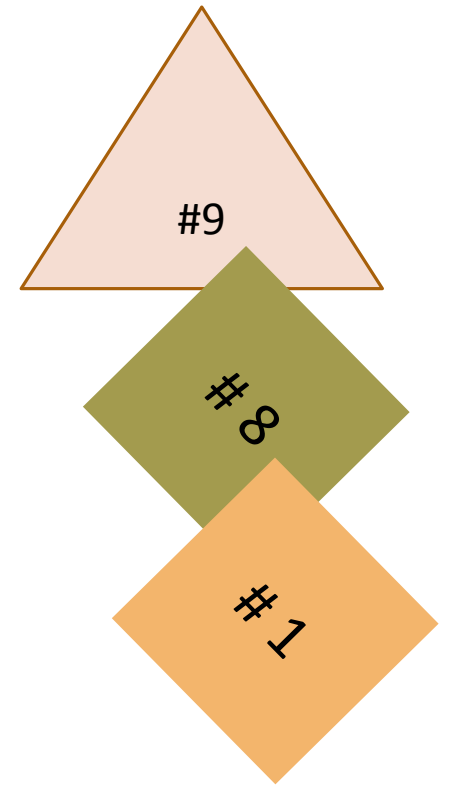
- Personal Protective Equipment worn to reduce risk
- Always wear during initiation and discontinuation of treatment
- During any risk of exposure to blood under pressure
- No eating, drinking or smoking in unit or lab area

STAFF PROTECTION

Guidance for use of gown, gloves, mask, goggles or face shield are found throughout the observation checklists,

Must wear personal protective equipment when in direct contact with patient or source of contamination

“Rule of thumb” is to be prepared for splashes and spatters whenever the task poses that risk



Lets Talk:

If your health is not enough...



V115 Triggers

Findings that will deepen survey:

There is no a specific trigger, threads throughout all observations



Infection
Precautions

“Until that moment, when I stood there looking at the sign on his door, it had not occurred to me that I might have given him that infection. But the truth is I may have. One of us certainly did.”

Atul Gawande Better: A Surgeon's Notes on Performance

Thank You

FOR ALL YOU DO