



Isolation Precautions

Infection Control and Safety Foundation

Learning Objectives



LEARN HOW GERMS ARE
SPREAD



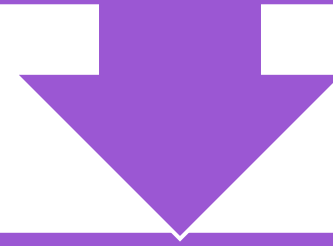
IDENTIFY THE DIFFERENT TYPES
OF ISOLATION PRECAUTIONS
AND WHEN TO USE THEM



RECOMMEND IMMUNIZATION
FOR HEALTH CARE WORKERS

Spread of Germs

All employees working in a health care facility should have a basic understanding of how to stop the spread of germs.



There are three different ways germs can be spread or transmitted:

Direct
Transmission

Indirect
Transmission

Airborne
Transmission



Direct Transmission



- The immediate transfer of germs to a receptive opening in the body where infection may occur.
- These openings may include the mouth, a break in the skin, nasal mucosa, or the reproductive tract.
- Examples:
 - Touching
 - Biting
 - Kissing
 - Sexual Intercourse
 - Sharing Needles





Indirect Transmission



- The delayed transfer of germs through an object or other vehicle to a receptive body opening.
- Examples:
 - Inanimate objects:
 - Toys
 - Handkerchiefs
 - Soiled Clothing or Bedding
 - Floors
 - Changing Tables
 - Consumable Material:
 - Food
 - Milk
 - Water
 - Biological Products
 - Blood
 - Feces
 - Insects or other Animals



Airborne Transmission

- The indirect spread of germs through microbial (very small) aerosols disseminated to a suitable portal of entry (usually the respiratory tract).
- Examples:
 - Sneezing
 - Coughing
 - Inhaling Germs



How can you stop the spread of germs?



GOAL OF ISOLATION PRECAUTIONS
IS TO STOP THE SPREAD OF
INFECTION AND GERMS!



FOLLOW THE ISOLATION
PRECAUTIONS

Scenario

- You have just roomed a 13 year old boy who is being seen today for a fever, red rash all over his body, and a cough.
- Ask yourself the following:
 - Are there special isolation precautions I need to take to protect myself?
 - If so, what are those precautions?
 - Do I need to communicate with other team members?
 - Is there special cleaning of items if the patient comes in contact with them?



Answer....

- Yes
- Yes
- Yes
- and YES!

YES.

Types of Precautions



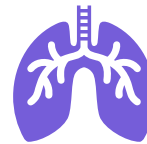
Standard
Precautions



Contact
Precautions



Droplet
Precautions



Airborne
Precautions



Enhanced
Precautions

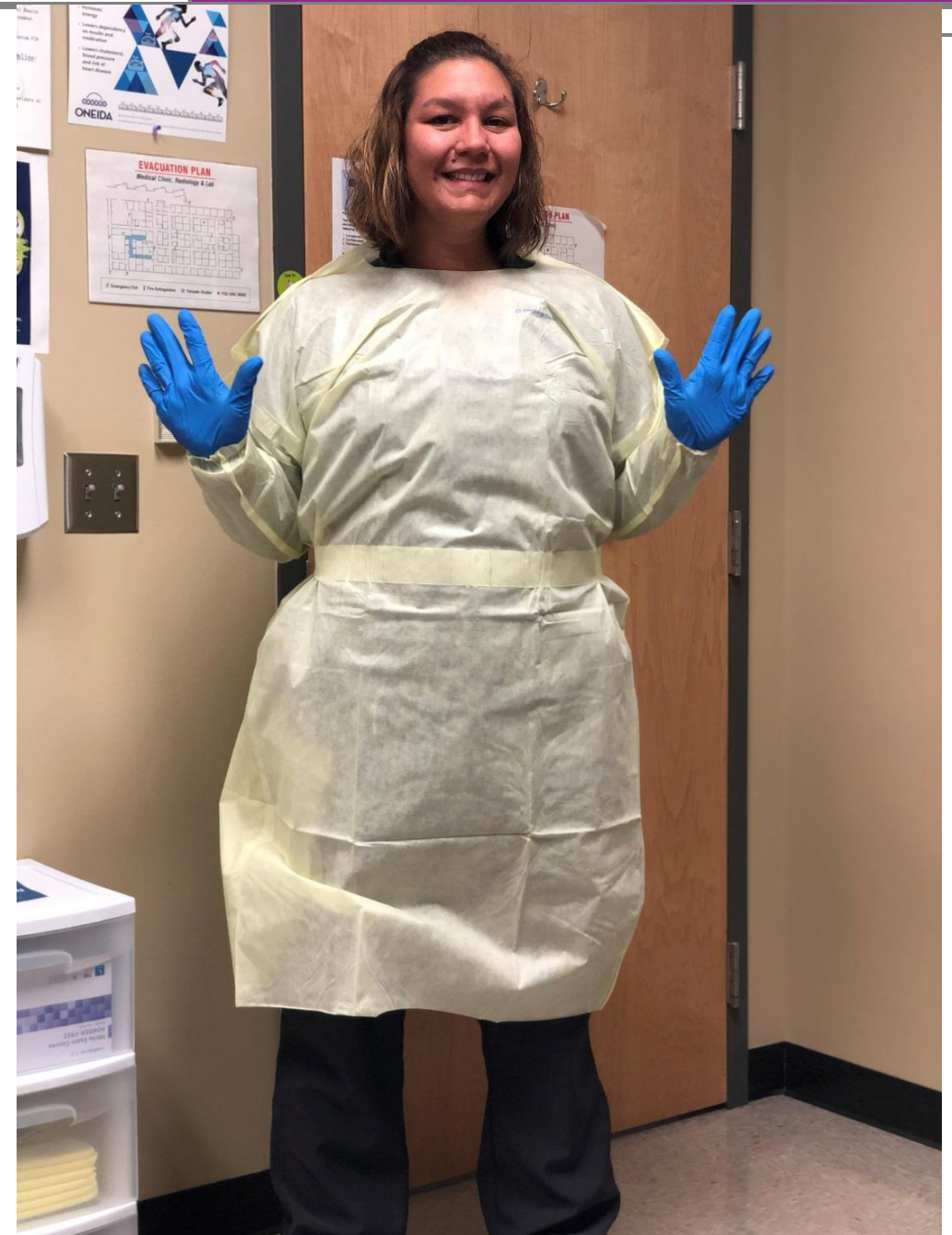
Standard Precautions

- Universal Precautions
- Treat everyone as if their blood and body fluids are infectious
- Should be used for **ALL PATIENTS**
- Includes:
 - Hand Hygiene
 - Gloves
 - Sharps Disposal
 - Cleaning of Reusable Equipment
 - Disinfecting Equipment Used for Patient Care



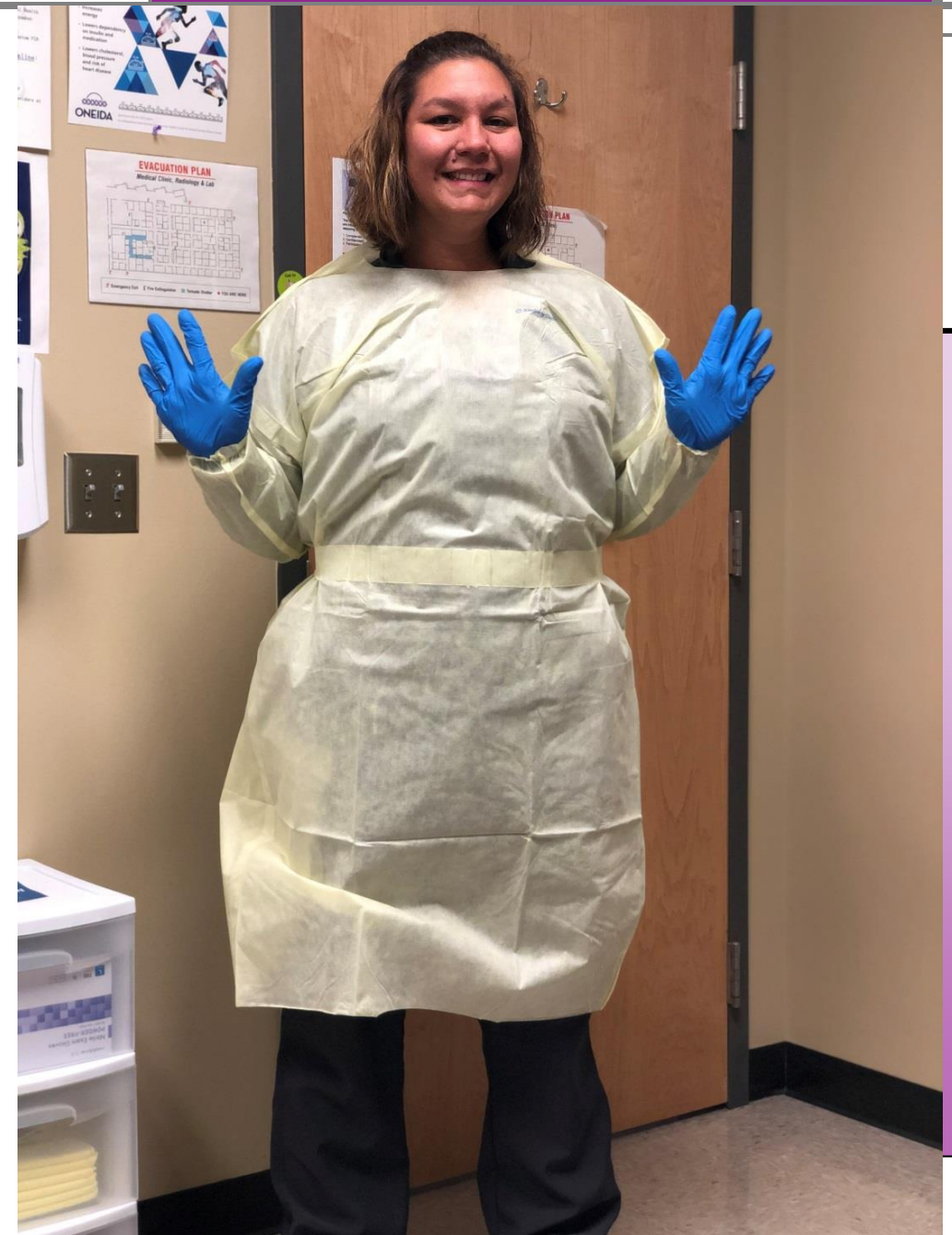
Contact Precautions

- Designed to reduce the risk of spreading germs through direct contact with infected body fluids or through indirect contact with contaminated surfaces
- In addition to standard precautions, the following must be followed to maintain contact precautions:
 - Separate patient exam room and/or waiting area
 - Gloves
 - Fluid resistant gowns
 - Disinfect equipment that had patient contact
 - Communication: post sign outside of patient exam room to notify staff of required precautions



Contact Precautions

- Help prevent the spread of the following:
 - MRSA
 - RSV
 - VRE
 - Infected open wounds
 - Diarrheal Illness



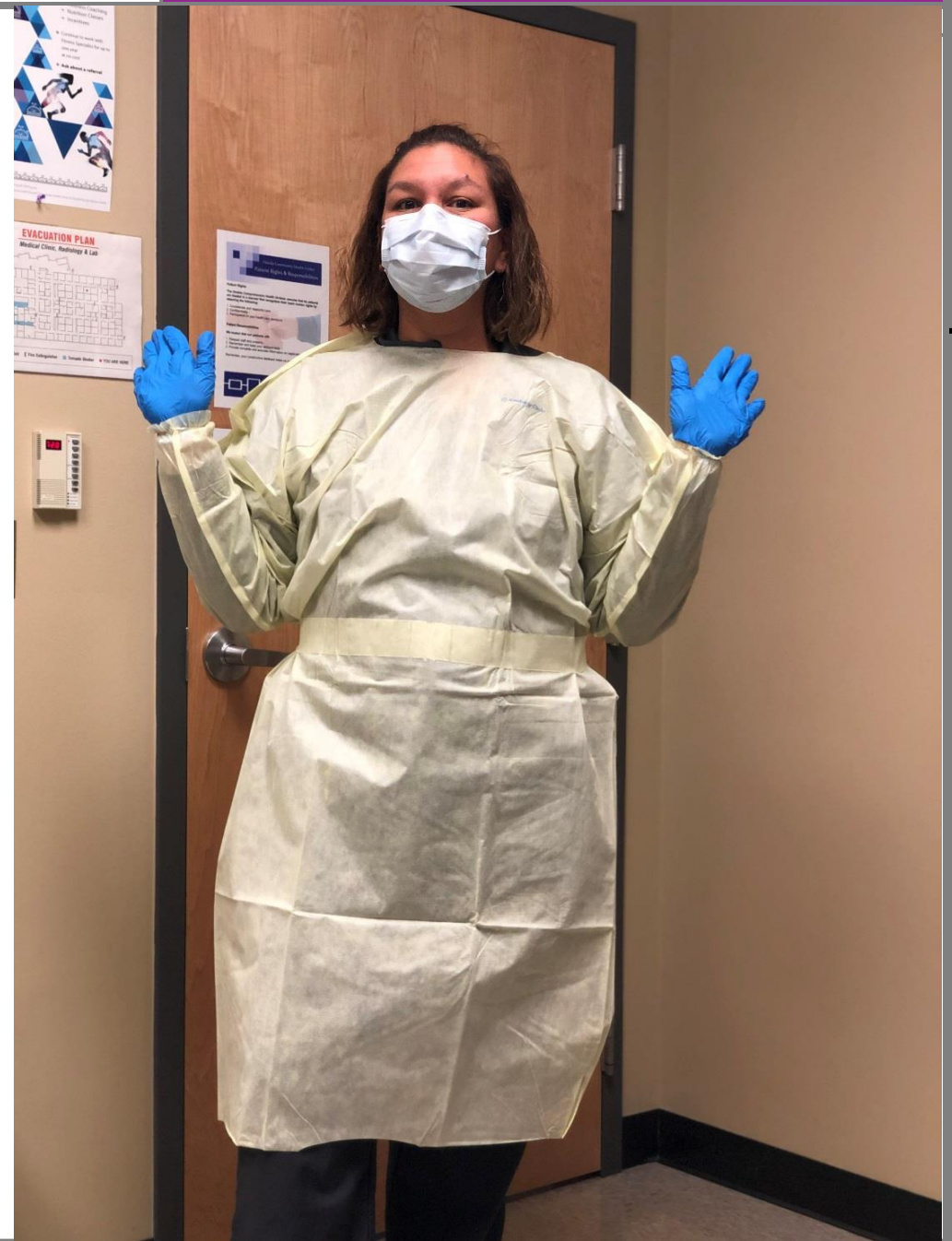
Droplet Precautions

- Designed to reduce the risk of spreading germs through LARGE respiratory droplets (greater than 5 microns) generated during coughing, sneezing, talking, or certain procedures.
- In addition to standard precautions, the following is necessary to maintain droplet precautions:
 - Separate patient exam room and/or wait area
 - Staff wears a standard mask when working within 3 feet of the patient
 - Patient wears a standard mask
 - Communication: post sign outside of patient exam room to notify staff of required precautions



Droplet Precautions

- Help Prevent the spread of the following:
 - Influenza
 - Pertussis (whooping cough)
 - Rubella
 - Mumps
 - Neisseria meningitis



Airborne Precautions

- Designed to reduce the risk of spreading germs through respiratory droplet nuclei (small particles less than five microns) that may remain suspended in the air for long periods of time.
- In addition to standard precautions, the following is necessary to maintain airborne precautions:
 - Use of Airborne Infection Isolation (All) or negative pressure rooms are best
 - N95 Respirator
 - Ensure “Cover Your Cough” instructions and supplies are available
 - Communication: post sign outside of patient exam room to notify staff of required precautions



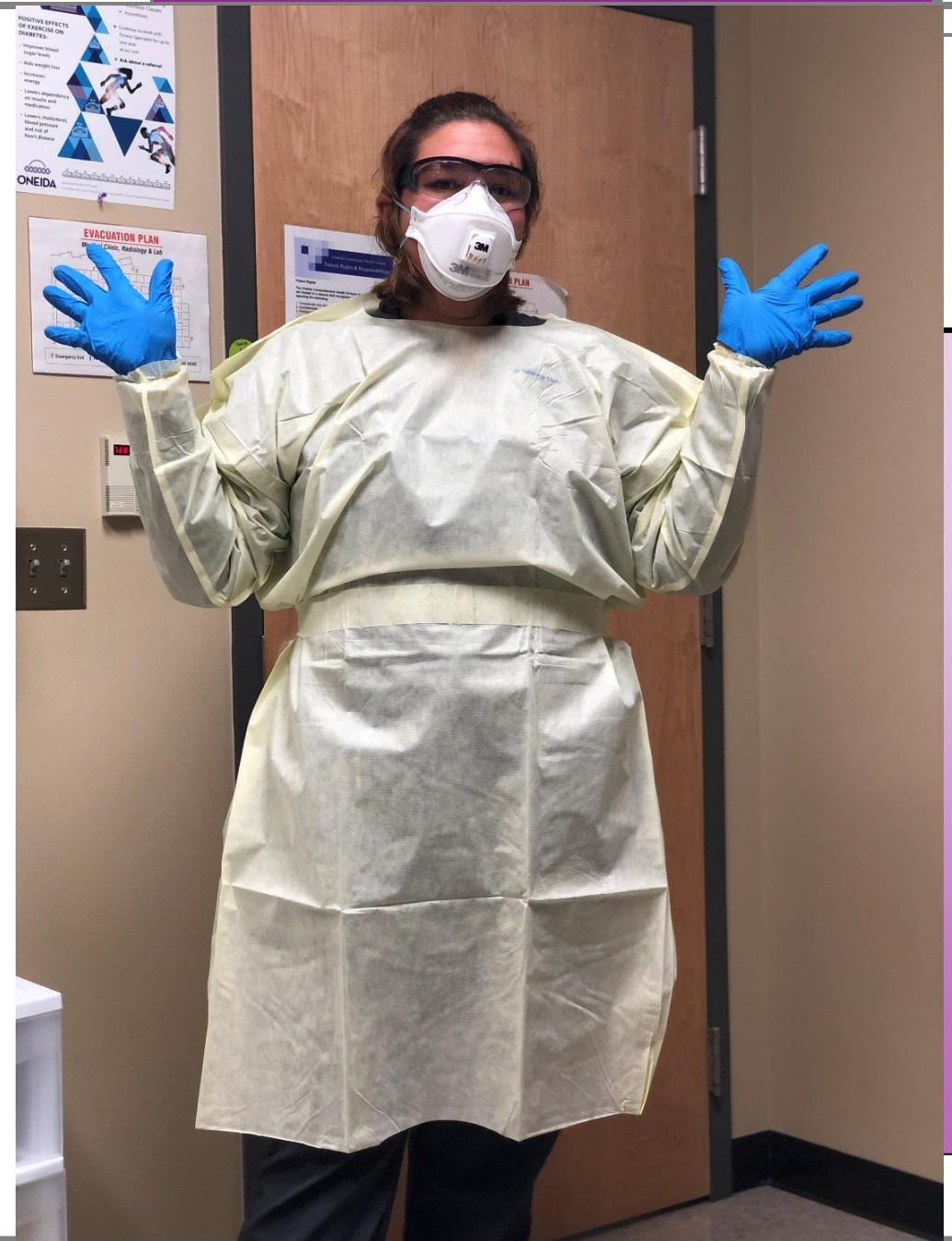
Airborne Precautions

- Help prevent the spread of the following:
 - Mycobacterium tuberculosis (TB)
 - Varicella-Zoster (Chicken pox)
 - Measles
 - Severe Acute Respiratory Syndrome (SARS)



Enhanced Precautions

- Includes contact precautions plus protective eyewear.
- Suggested to be worn when:
 - Risk of splash back
 - Wound debridement
 - Toenail clippings



Donning (putting on) PPE



Step 1



Step 2



Step 3



Step 4

Doffing (taking off) PPE



Step 1



Step 2



Step 3



Step 4

Doffing PPE



Proper removal of PPE is extremely important as it is contaminated and could easily spread germs if not removed correctly.



Remember that you cannot always see if your PPE is contaminated, so treat every part of PPE as if it is containing an infection that you do not want!

Unseen germs



Proper Hand Hygiene is the #1 disease prevention strategy!



If you anticipate encountering blood or bodily fluids....put gloves on



If the patient is coughing....have the patient put on a mask.



If you are completing a procedure that you are likely to be splashed....put on eye protection



If you are performing a task that you anticipate a lot of blood....put on a disposable gown



If you are using reusable equipment....check expiration date before use

Known/Suspected Disease



When your patient has a KNOWN or SUSPECTED infectious disease you will want to take the additional isolation precaution interventions we have discussed in this presentation.



That includes good communication with others on the patient's health care team

Lab
Radiology
Custodial
Medical
transport



How can you protect yourself?

If you are unsure or know you have not received these vaccinations, contact your medical provider today.

- Immunizations
 - An important preventative measure for control of many infectious diseases is to have all staff and patients appropriately immunized.
 - Check patient's immunization status each visit
 - Educate on the benefits of appropriately immunized children and adults
 - See the current Advisory Committee on Immunization Practices (ACIP) immunization schedules for guidance
 - Recommended Immunizations for Healthcare Workers:
 - Varicella (chicken pox)
 - Measles
 - Mumps
 - Rubella
 - Influenza
 - Hepatitis B
 - Pertussis

References

Resources used in the development of this presentation:

Infection Control in Ambulatory Care
Friedman/ Petersen, 2004
Chapter 6; pages 39-46

Communicable Disease Handbook: A Quick Reference Guide
Brown County Health Department, Jan 2011
Pages 6-9

Centers for Disease Control and Prevention Website