Multiple Drug-Resistant Organisms (MDRO)

Bacteria are germs that can make you sick. Everyone has bacteria living on the skin, in the mouth, and in the intestines. These bacteria do not make them sick. This is normal and is called colonization. However, when you are very sick, have surgery, or get a serious injury, these bacteria can enter tissues. This can cause an infection that must be treated with antibiotics.

Most often, antibiotics work well to treat infections from bacteria. However, over time, certain bacteria can develop resistance to common antibiotics. This means the usual antibiotics can’t kill the bacteria. These bacteria are called multiple drug-resistant organisms or MDROs. When antibiotics are not used the right way, they can cause bacteria resistance. Examples of using antibiotics incorrectly include:

- Taking antibiotics to treat viruses like the flu.
- Not taking all the antibiotics ordered by your doctor.

Enterococcus (EN-ter-oh-kock-us) and Staphylococcus (STAFF-ih-low-KOCK-us) are two bacteria commonly found on the body. Enterococcus is in the intestines, and Staphylococcus is on the skin or in the mouth or nose. Both of these bacteria can become resistant. When they are resistant, they are called Vancomycin-resistant Enterococcus (VRE) and Methicillin-resistant Staphylococcus aureus (MRSA).

There are other types of resistant bacteria, but these are the most common. Someone who has VRE or MRSA on their body is more likely to get an infection than someone with normal bacteria on their body.

How do MDROs spread?

MDROs spread by direct contact (touch) from one person to another. Someone who has an MDRO living on their skin can still pass it to others, even if they don’t have an infection.

MDROs can also spread by indirect contact. First, a person with an MDRO touches equipment, toys, clothing, bed linens, bed rails, bathroom fixtures, or tables. Then someone else touches the surface later, before the surface is disinfected. Some of these bacteria can live for weeks on a surface not cleaned and disinfected.

How can I keep MDROs from spreading?

The most important way to prevent MDROs from spreading is by washing your hands. While you are in the hospital, make sure that you, your family, and your child are washing your hands often and well. You can also make sure that the hospital staff wash their hands before and after touching your child. Good hand hygiene includes washing with soap and water or using a hand sanitizer.

What else can I do in the hospital to keep MDROs from spreading?

If your child has an MDRO now or had an MDRO before, they will be placed in contact MDRO isolation. Your child’s nurse will put a special sign on your child’s door. This tells the hospital staff what to do when they enter your child’s room or care for them.

The hospital staff will do the following:

- Wash their hands using soap and water or a hand sanitizer.
- Wear gloves and gowns in your child’s room or when touching equipment your child has used.
- Wear a mask when suctioning secretions (snot) from your child’s airways.
- Carefully disinfect equipment, toys, and supplies right after taking them from your child’s room.
What do we need to do at home?

Even though a doctor treated your child’s MDRO infection, they may still be colonized with an MDRO (still have it on their body). Always tell your child’s healthcare providers that your child has had an MDRO.

Your child could get another infection caused by an MDRO. Here’s how to prevent future infections:

- Clean your hands and your child’s hands often. Make sure people who live with you clean their hands often, too. You can use soap and water or an alcohol-based hand sanitizer.
- Clean your hands before and after changing any wound dressings or bandages. Keep all wounds clean and change bandages as directed until the wounds heal.
- Make sure your child finishes any prescribed antibiotics. Do not stop before your child takes all the prescribed medicine. Make sure your child gets every dose.

How will my child’s doctor treat the MDRO?

Ask your child’s doctor to find out how they will treat your child’s infection. Most of the time, your child will receive antibiotics. Make sure your child takes antibiotics exactly as prescribed, both in the hospital and at home. Do not let your child skip antibiotic doses, even if the infection is getting better.

It also means:

- You must check with your child’s nurse to see if they can go out of their room. Most children with an MDRO can go for walks or wheelchair rides as long as they wash their hands. They must not have contact with other patients and families in the hospital. They also cannot go to the playroom, Forever Young Zone, or cafeteria.
- Visitors and family need to wash their hands carefully before going into the room. They also need to ask the nurse about wearing a gown and gloves.

Hand washing with soap and water

1. Wet hands with warm, running water.
2. Apply liquid soap or use a clean bar of soap. Lather well.
3. Rub your hands together vigorously for at least 15–20 seconds. Be sure to scrub all surfaces of your hands and fingers.
4. Rinse well. Dry your hands with a clean or disposable towel.
5. Use a towel to turn off the faucet.

Hand washing with a hand-rub product

1. Use a product that contains at least 60 percent alcohol. Apply product to the palm of your hand. Read the product label to see how much to apply.
2. Be sure to over all surfaces of your hands and fingers. Rub your hands together until they are dry.
3. Use a towel to turn off the faucet.

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• Household cleanliness is important. Use routine household cleaning and disinfecting products.

Frequently asked questions

Does colonization mean that my child’s entire body has this bacteria?
• Different bacteria live on different parts of the body. If your child is colonized with an MDRO, these bacteria live in harmony with other bacteria on your child’s skin or in their intestines.

Will my child always have an MDRO on their body?
• Colonization may be transient. This means that your child may at one time test positive for the organism (the MDRO is there). In the future, your child may test negative (the MDRO is not there anymore).

Are other household members usually colonized too? Should we be tested?
• Because you live together in the same house, touch the same surfaces, share linens, and are generally close, you may be colonized with an MDRO, too.
• It is not necessary to test the whole family.
• If you go to a hospital or clinic, tell your healthcare provider that someone in your household is colonized with an MDRO.

How contagious is my child?
• Your child is only contagious when they have an open wound, sore, or infection.
• The CDC (Centers for Disease Control) recommends the following:
  – Keep draining wounds covered with clean, dry bandages.
  – Clean hands regularly with soap and water or a hand sanitizer. Always clean your hands right after touching infected skin or items that touched a draining wound.

Do I need to tell my child’s school that they have an MDRO?
• No, this is not necessary. We all have bacteria, or germs, living on our skin. Usually bacteria is not spread with the kind of contact children have at school.

Can my child swim in a public pool?
• Swimming at the pool is usually just fine. Do not let your child go to a public pool if they have an active infection.

What if I have more questions?
If you have more questions about MDROs, please talk to your child’s healthcare provider or the hospital infection preventionist.