

## Fact Sheet

# Bowel MRO (Multiple antibiotic-Resistant Organisms) in pregnancy & newborns - Information for patients, family and visitors

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### Bowel Bacteria / Organisms

Human beings have many more bacteria cells in their bodies than human cells (billions of each). Although bacteria can make us sick, most are harmless. In fact, many bacteria are very useful and work to keep us healthy.

A healthy bowel (gut) contains many billions of bacteria, including Enterobacteriales and enterococci.

If these bacteria move from our bowel into other organs or the blood stream, they can cause **infections**. These infections include urinary tract infections (UTIs), blood infections (also called septicaemia) and wound infections. These infections are more likely to happen:

- after an operation,
- while on a breathing machine (ventilator)
- with treatment tubes and lines like intravenous (IV) drips.

These infections are also more likely in people with weak immune (infection-fighting) systems or with long-term health problems such as diabetes.

Sometimes they can happen even in healthy people. When these infections occur in our organs or blood we treat them with antibiotics.

### Multi-Antibiotic Resistant Bowel Organisms

Over recent years, some bowel organisms have developed resistance to many antibiotics. Resistance means these antibiotics no longer work to fight infections. We call these bacteria Multi-Resistant Organisms (MRO).

Some examples you may read about in other pamphlets include

- ESBL (extended spectrum beta-lactamase) – producing Enterobacteriales
- CRE (carbapenem-resistant) or CPE (carbapenemase-producing) Enterobacteriales, and other CPO (CP organisms)
- VRE – vancomycin resistant enterococci

### How do multi-antibiotic resistant bacteria occur?

We can develop MRO in our bowels if we have taken a lot of antibiotics. This is more common after antibiotic treatment in hospitals overseas. We can also catch them from other people or from touching surfaces contaminated with bowel MRO.

If we have MRO in our bowels, this is called being '**colonised with**' the MRO. It is also called being a '**carrier**' of the MRO. They mean the same thing.

Like other bowel bacteria, these bowel MRO usually live in the bowel without causing us any harm. However, if these bowel MRO move into other organs or our blood stream, they can cause **infections** that can be **hard to treat**.



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### Bowel MRO in pregnant women and babies

Pregnant women sometimes get infections during and after birth. This may happen if there is a caesarean section wound. It can also happen when there is childbirth injury to the perineum (area between vagina and anus).

A pregnant **woman** who carries bowel MRO does not have an increased chance of getting an infection. However, if she does get an infection that is caused by an MRO, it is harder to treat because some antibiotics don't work.

Infections in newborn **babies** also sometimes occur. Infections can spread from mother to baby during birth or in the days & weeks after birth. The baby of a woman who carries a bowel MRO does not have an increased chance of getting an infection. However, if an infection occurs with an MRO, it is harder to treat.

In newborn babies, MRO infection may also come from **other people**. It can also transfer from touching contaminated **surfaces**.



### Extra risks in the Newborn Nursery

In the newborn nursery, there are a lot of **premature babies** (born before 36 or 37 weeks). These babies are more likely to get infections. This is because their immune systems are not yet as strong as babies born full-term.

Because MRO infections can be very serious in premature babies, **we must reduce the spread of MRO in our newborn nursery**. To do this we need to know which pregnant women are carrying these bacteria by testing them before birth.

**We can't test everyone, so we focus our testing on:**

- **women whose babies are more likely to go to the nursery, especially multiple pregnancies (e.g. twins, triplets) which can pose risks across several rooms**
- **women more likely to be carriers of bowel MRO because they have had overseas medical treatment in the past 12 months; note - if pregnant women receive treatment overseas during pregnancy, we repeat the swab on their return.**

**We collect the swab from the rectum (inside the bottom) by about 20 weeks of pregnancy.**

**We use a standard bacterial swab; with the woman on her side, we gently pass the swab through the anal sphincter and gently rotate it; for an accurate result, we need to make sure there is some faecal matter (poo) on the swab.**

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### If your bowel MRO swab result is positive:

- **You** don't need treatment during pregnancy. When you come into hospital, we care for you in a single room with your own toilet. We ask that you do not use the visitor tea rooms or expressing rooms.
- Even if **your baby** has negative swabs for MRO after birth, the baby will still need a separate area or room.
  - If you give birth from 36 weeks, the neonatal team may review your baby. If everything is going well, your baby can **stay in your room**.
  - If you give birth before 36 weeks, we will care for your baby in a separate area of the **nursery**.
- **Staff** will wear gloves when touching you or your baby. They will clean their hands before and after.
- Staff may also wear an apron or gown when caring for you or your baby and will clean equipment and surfaces often.
- We ask **visitors** to wash their hands or use an alcohol hand rub before and after visiting. In some cases, we ask visitors to wear a gown and gloves. Visitors should not visit other patients in the hospital. They should also not use ward tea rooms or expressing rooms.

### What you can do to prevent your baby & other people from becoming colonised with MRO

- Most babies become colonised with the MRO if other family members are colonised.
- You can reduce this by washing your hands with soap and water and drying them well:
  - After going to the toilet.
  - Before & after touching your baby.
  - Before & after changing your baby's nappy.
  - Before preparing and eating food.
  - Before and after touching common items or surfaces in public.
  - After touching animals.
- We ask that you use your own toiletries. This includes towels, face cloths, nail scissors, tweezers, razors and toothbrushes. Please don't share them with other people.
- Cover any skin wounds.
- You can wash your clothing and towels, dishes and cutlery as usual. The same applies to washing the baby's things at home.



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### FREQUENTLY ASKED QUESTIONS

#### How can I get rid of the MRO?

- There is currently no recommended treatment for getting rid of MRO if you are a carrier.
- The good news is that the MRO often disappear by themselves with time (months to years). This will happen especially if you **don't have** unnecessary courses of **antibiotics**.
- Having antibiotics is likely to keep bowel MRO in your body for longer.
- It is very important that you wash your hands. This is to reduce the spread of MRO to other people.

#### If I need antibiotics for a caesarean or fever in labour, will I get the same ones everyone else gets?

- We may give you different antibiotics depending on the type of MRO and why you need antibiotics. Your doctor will decide what antibiotics to give you.

#### If I am an MRO carrier, will my baby also become a carrier?

- Where the mother is a carrier of an MRO, most babies will also become carriers. This will happen either at birth or during the days & weeks afterwards. No treatment can prevent this. Careful hand washing will reduce the spread to others. If you and your baby are able to avoid antibiotics, you will usually both get rid of the MRO in the future.

#### What is the chance of my baby getting sick with the MRO if it is born healthy?

- A baby who becomes a carrier of a bowel MRO does not have an increased risk of getting sick with an infection.
- If your baby does get an infection with the bowel MRO, it is harder to treat and may need different antibiotics.
- Preterm / premature babies (born before 36 or 37 weeks), have a higher chance of infection in general. This includes infection with MRO.

#### Is the risk to my baby lower if I have a caesarean section rather than a vaginal birth?

- There is no evidence that babies born by caesarean are less likely to become MRO carriers. This is because the MRO is usually picked up by the baby in the days and weeks after birth, as well as during birth. Caesarean is not recommended to prevent the baby being colonised with the MRO.

#### Can I have skin to skin contact with my baby if I carry a bowel MRO?

- For babies who are staying with their mothers, there are no limits to skin contact.
- For babies in the nursery, each situation is different. The nursery team and infection control team will give you individual advice.

#### Can I breastfeed my baby if I carry a bowel MRO?

- Breast milk protects the baby from infection. In most situations, we encourage breastfeeding.

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### Do you test my baby after we go home?

- Once your baby goes home there is not usually any further testing for infection.
- Careful hand washing and personal hygiene are very important. Follow the usual discharge instructions for cleaning and sterilising the baby's equipment.

### Should I have a bowel MRO swab with my GP every year?

- Having a regular check for bowel MRO is not recommended.
- However, if you are admitted to hospital for medical treatment, please make sure you tell the doctors and nurses treating you that you have had an MRO in the past. Also let your treating team know if you have had medical care overseas in the previous 12 months.

### Should the other people in my family be tested for bowel MRO?

- Routine testing of other family members is not necessary. While you are in hospital, we will assume your partner is also positive for the bowel MRO.
- If other household members go to hospital for medical treatment, they must let their treating doctors know that you have had a bowel MRO. They will then usually have a swab.
- If a member of your household has had a bowel MRO and you go to hospital for treatment, you must also always let your treating team know.

### Where can I find more information?

Ask your doctor or midwife/nurse. You can also ask to speak with someone from the hospital's infection prevention and control team.

Further online information is available at:

[www.cec.health.nsw.gov.au/patient-safety-programs/assurance-governance/healthcare-associated-infections](http://www.cec.health.nsw.gov.au/patient-safety-programs/assurance-governance/healthcare-associated-infections)

Australian Commission on Safety and Quality in Health

[www.safetyandquality.gov.au/wp-content/uploads/2017/12/CPE-Guide\\_Patient-information.pdf](http://www.safetyandquality.gov.au/wp-content/uploads/2017/12/CPE-Guide_Patient-information.pdf)



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