Frequently Asked Questions
Transmission of CRE bacteria through Endoscopic Retrograde Cholangiopancreatography (ERCP)

You may have recently heard or read about the spread of a bacteria, called CRE, through an advanced procedure called ERCP. Rest assured that patient safety is our primary concern. This handout aims to answer some of the questions you may have about this important topic.

Can I get these bacteria through colonoscopy or upper endoscopy?
No. This problem does not relate to common endoscopic procedures such as colonoscopy or upper endoscopy.

The recent cases of transmission of these difficult bacteria relate to a procedure called ERCP. ERCP is an advanced, highly technical procedure. ERCP requires a special type of endoscope called a duodenoscope. Most people will never need an ERCP.

The FDA and experts have determined that the special design of the duodenoscope is related to transmission of these bacteria. The duodenoscope is not the same instrument as a colonoscope and is not used for colonoscopy or routine upper endoscopy.

What is ERCP?
ERCP stands for endoscopic retrograde cholangiopancreatography. It is an advanced, highly technical endoscopic procedure.

ERCP is performed using a special device called a duodenoscope. The duodenoscope is different from what is used in routine upper endoscopy or colonoscopy. Most people will never have an ERCP.

ERCP allows gastrointestinal endoscopists to diagnose and treat problems in the bile ducts and pancreatic ducts such as stones, narrowing (called strictures) and even complete blockages of a duct. If left untreated, these problems can lead to further complications. For patients who do need it, ERCP is a critical and often life-saving procedure. For these patients, the benefits of the procedure far outweigh the low risk of infection.

Before an ERCP, the gastrointestinal endoscopist discusses the benefits and risks of this procedure with the patient and/or family members.

What are CRE bacteria?
CRE are a type of multi-drug resistant bacteria that cannot be destroyed by common antibiotics. CRE are called “superbugs” because of resistance to antibiotics. CRE infections are an important public health concern because treatment options are limited. CRE are a challenge for all areas of medicine, including gastrointestinal endoscopy.

People can carry CRE in their body without experiencing problems, but if it spreads to the bloodstream and to other parts of the body, it can cause a difficult infection. The risk of death is higher with these infections. The problem is that these CRE infections are resistant to common antibiotics.

Source: American Society for Gastrointestinal Endoscopy, February 2015
Unfortunately, many patients who need an ERCP are already in a weakened state or are critically ill. Therefore, in the rare case of transmission, treatment of a CRE infection is especially difficult for these patients.

**How did CRE bacteria spread in these cases?**
ERCP is a highly advanced procedure that requires a specialized device called a duodenoscope. The FDA and other experts have determined that the complex design of the duodenoscope, specifically the elevator or elevator channel, may present a challenge for high-level disinfection of the device. The FDA has advised that high-level disinfection reduces the risk, but may not completely eliminate it.

What we know is that, when manufacturers’ guidelines for cleaning duodenoscopes are followed, the risk of transmission is significantly reduced. Of course, all procedures carry infection risks. Further investigation is being done to better understand this complex and concerning problem.

**How common is infection by CRE bacteria through ERCP?**
Even though there have been many scary headlines about this problem, infection by CRE bacteria through ERCP is rare. It is important to keep in mind that most people will never need an ERCP.

For patients who do need an ERCP, it can be a critical and life-saving procedure. For these patients, the benefits of the procedure far outweigh the low risk of infection. About 500,000 ERCPs are performed each year. According to an FDA statement on February 19, 2015, there have been 75 medical device reports, representing approximately 135 patients in the US with possible microbial transmission from duodenoscopes. This means that less than 1% of people who have an ERCP have been infected.

**What is being done to improve patient safety?**
In medicine, patient safety is always our number one concern. Professional societies are working alongside other groups, such as the FDA, the CDC, manufacturers of the devices and with other experts to solve this important and complex problem. At CHI Memorial, we have elected to move ahead with gas sterilization of these kinds of instruments. We have protocols in position for communication should a patient be identified with CRE so that we can take extra steps for sterilization should a procedure be required. We are in a low prevalence area but will continue to be vigilant about monitoring for multi-drug resistant organisms of any kind.

**How are you keeping your patients safe?**
Patient safety is our number one concern. Our organization is committed to safety and quality in gastrointestinal endoscopy. Our staff receive regular updates on this important matter. At our unit, we strictly follow manufacturer’s guidelines for reprocessing (cleaning) devices, as well as reprocessing guidelines. We rigorously follow the best practices related to the training and periodic assessment of our technicians who reprocess our endoscopes.

*Source: American Society for Gastrointestinal Endoscopy, February 2015*