



INSIGHTS

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ISSUED QUARTERLY

IN THIS ISSUE...

The Risk of Going to the Hospital

- Exposure to superbugs

The Big Three

- Bacterial Infections

Food Safety

- Listeriosis
- Storing perishable foods

The Risk of Going to the Hospital

- You may be exposed to the increasingly resistant superbugs

If you go into the hospital, you expect to get help, not acquire a new medical problem. But with the rates of hospital-acquired infections rising and the level of antibiotic resistance increasing, anyone who checks into a hospital increases their risk of checking out with a nasty new bug or remaining in hospital longer to recover. Or, worst case scenario-dying of the new illness. Every year, approximately 250,000 people in Canada get sick with a hospital-acquired infection, and 8,000 of them die.

Overcrowding, the age of the facility, sicker patients, the liberal use of antibiotics, and more organisms are reasons why hospital infection rates are going up. Methicillin-resistant staphylococcus aureus (MRSA) is a bacterial infection which is highly virulent and invasive. It can infect blood, bones and flesh and is increasingly drug-resistant. C. difficile, a bacteria spread through contact with infected stool, which was once considered more of a nuisance than a serious illness, is evolving into much more lethal and antibiotic-resistant strains. People are dying from it.

As information about infection rates for C. difficile emerges, it's inexplicable that the Ontario government hasn't required mandatory public reporting about this and other infectious diseases before now, and it's hard to understand why the province wants to wait until September 30th before making reporting mandatory.

The facts surrounding C. difficile-one of the three major so-called 'superbugs' are disturbing. The province of Quebec says the infection, often caused by lack of hand washing followed by body contact, has contributed to 2,000 deaths there since 2003. Quebec instituted mandatory reporting in 2004, but not before doctors there began a primitive ledger of their own in an attempt to trace the spread of infections.



Hospitals are doing their best to trace the diseases, since there is nothing like public disclosure to make this happen faster.

The Ontario Conservative and New Democrats claim their province has been too slow to come up with a plan to deal with C. difficile, and insist some of the 460 deaths in seven Ontario hospitals could have been prevented. They also say the public has a right to know the extent of the C. difficile outbreak in all 157 hospitals in the province - data that Ontario's former health minister George Smitherman says isn't available. "It's not the simplest matter to ask 157 unique corporations to present information up in a consistent

format." the Health Minister said, "In the absence of this kind of consistent reporting, there's no baseline information. I will learn that information on exactly the same day as the rest of the people in Ontario learn it." David Caplan has since replaced Mr. Smitherman as Health Minister. Let's hope he knows how to open up a spreadsheet!

Data on C. difficile prevalence in Ontario is scant because the super bug has never been a reportable disease. The three most common infections to worry about: Methicillin-resistant staphylococcus aureus (MRSA), Vancomycin-resistant enterococci (VRE), and Clostridium difficile (C. difficile) are primarily spread on the hands of health-care workers. Dr. Michael Gardam, director of the Infection Prevention and Control Unit at Toronto's University Health Network compares infecting a patient by touching them with dirty hands to harming a patient by administering the wrong dose of medicine. A dosage error is considered a "medically adverse event" whereas spreading an infection is seen as "a cost of doing business." But whether you give someone the wrong dose and he dies, or you infect him and he dies, "What's the difference?" he asks.

Hospitals are no doubt doing their best to trace the diseases, since there is nothing like public disclosure to make things happen faster. Hospitals are exempt from Freedom of Information laws,

continued on reverse...

Risk, ...continued from reverse

which is lamentable, given their importance to public health, but public reporting of statistics should be given a high priority.

Stopping an outbreak before it starts and therefore reducing the rates of infection comes down to one basic issue - clean hands. The most prevalent hospital-acquired infections are spread on the hands of doctors, nurses and other health-care providers. The only way to stop the spread is for health-care workers to clean their hands between patients so they don't carry germs from one to another.

Hand sanitizer stations would help. In fact, alcohol-based sanitizers kill more germs than soap and water, but they must be placed everywhere. In understaffed hospitals, workers don't have time to go looking. In overcrowded wards where staff may see several patients in one room, it's easy to forget to clean hands before attending to the next person. Staff need to be re-educated on when to clean hands. "Most wash after seeing a patient but not before seeing the next patient," Gardam says. "In between, they may have picked up a chart or touched a bed rail."

Gardam's advice on avoiding infections is to be proactive about making sure everyone who touches you cleans their hands first.

If your hospital room doesn't contain a hand sanitizer, buy your own and place it beside your bed. It's tough to ask staff directly to wash their hands, but providing the sanitizer can be a pointed reminder. Be just as scrupulous about washing your own hands so you don't spread any infections to yourself.

Dr. Gardam has one more piece of advice...take your health-care provider's advice to be discharged from hospital just as soon as you can be. Staying is not a good idea. "You don't want to hang around here," says Gardam. "These organisms are quite scary."

Until next time...

Sources: Carp Magazine - April 2008
K-W Record - May, July 2008

The Big Three - Bacterial Watch

MRSA

What is it?

Methicillin-resistant staphylococcus aureus is a bacterial infection resistant to most antibiotics, including Methicillin. The bacteria are found on the skin and in noses of people without causing infection. The germ is very hardy and can survive on unwashed hands and surfaces for hours. It can cause serious wound infections at surgical sites, pneumonia or bacteremia, which is a bacterial infection in the blood.

Who's at risk?

People with weakened immune systems; patients who have been in hospital a long time, have had many medical procedures or are receiving kidney dialysis or intravenous medication. In most cases, patients who contract MRSA are 65 or older.

VRE

What is it?

Vancomycin-resistant enterococci was first identified in 1986 in France and can now be found all over the world. This particular enterococcus is a bacterium that lives in the intestinal tract. It is most

often benign until it comes into contact with an antibiotic at which point it can spread throughout the body. It can then be spread through contact in infected stool and can live on surfaces for weeks. VRE infections can occur in the urinary tract, at surgical wound sites and in the blood.

Who's at risk?

Similar to those at risk for MRSA as well as patients on antibiotic therapy.

C. Difficile

What is it?

Clostridium difficile is a bacterium that produces a toxin that causes swelling in the intestinal tract. It is spread through contact with infected stool and can live on surfaces for months. Symptoms include diarrhea, fever and abdominal swelling. A new more powerful strain of C. difficile now exists that may cause more frequent relapses of the illness.

Who's at risk?

Patients on antibiotics or some types of chemotherapy; older patients and those who have been in hospital for a long time.

FOOD SAFETY

Listeriosis

Listeria monocytogenes

These pathogens can grow slowly at refrigerator temperatures.

Methods of Transmission

- ▮ Contamination via hot dogs, luncheon meat, cold-cuts, fermented or dry sausage and other deli-style meat and poultry
- ▮ Soft cheeses and unpasteurized milk

Symptoms and Potential Impact

- ▮ Fever, chills, headache, stiff neck, backache, sometimes upset stomach, abdominal pain and diarrhea. May take up to 3 weeks to become ill.
- ▮ At-risk patients (including pregnant women) may later develop more serious illness from this bacteria that could result in death
- ▮ Pregnant women who think they have eaten contaminated food should seek medical advice.

Refrigerate Perishable Food

Food safety is the best reason ever to 'chill out!' Follow these basic guidelines to protect your perishables - and yourself and your family. And remember: always refrigerate perishable food within 2 hours (1 hour when the temperature is above 32 C).

Raw Meat, Poultry and Seafood

Place in containers or sealed plastic bags to prevent their juices from dripping onto other food in the refrigerator. This could cause cross-contamination. If you're not planning to use the food within a day or two, freeze it.

Eggs

Store in the original carton and place in the main compartment of the refrigerator - not in the door. When ready to use, do not wash them.

Produce

Store perishable produce in the refrigerator. Throw away fresh fruits and vegetables that have not been refrigerated within 2 hours of cutting, peeling, or cooking. If any fruit or vegetable has touched raw meat, poultry, or seafood and will not be cooked immediately, do not eat it - throw it away.

Leftovers

Refrigerate (or freeze) leftovers within 2 hours in clean, shallow, covered containers to prevent harmful bacteria from multiplying.

Source: USDA Food Safety and Inspection Service

