People getting medical care can have serious complications called healthcare-associated infections (HAIs). Some of the most costly and preventable types of HAIs can occur when a person has a central-line or urinary catheter, or after a surgery. A central line is a tube placed in a large vein to access the bloodstream. A urinary catheter is a tube placed in the bladder to drain urine. Patients with these devices have a much higher chance of getting an infection, yet in many circumstances use of these devices are essential in the course of treatments. HAIs can also occur after a surgery, in the part of the body where the surgery took place. These infections, however, are largely preventable when healthcare providers use CDC-recommended infection prevention steps.

They are also more preventable when you, the healthcare consumer, are empowered to take part in HAI prevention when you have medical care.

Many Kansas hospitals are sharing data with the Kansas Department of Health and Environment (KDHE), as a part of a nationally coordinated effort, to learn about how these HAIs affect patients treated in Kansas hospitals. This is a brief summary of HAI information learned from data collected in 2012. For more information, the full report is available at: www.kdheks.gov/epi/hai.htm
Central Line-Associated Bloodstream Infections

What is a central line?
A central line is a tube that a physician usually places in a large vein of a patient’s neck or chest. It is used to administer medications, fluids, nutrition, or to obtain samples for blood testing.

What is a central line-associated bloodstream infection?
A bloodstream infection can occur when bacteria or other germs travel along a central line and enter the blood. When not put in correctly or kept clean, central lines can become a pathway for germs to enter the body and cause serious bloodstream infections.

How well are we doing?
In 2012, participating Kansas hospitals reported 34% fewer bloodstream infections from central line devices in intensive care units (ICU) than the nation. Forty hospitals contributed central line usage and infection data for 57 ICUs, representing 97% of all ICU beds in the state. The percentage of central lines used in Kansas hospital ICUs increased from the prior year, but remained lower than the national average by 6% (*See Limitations section on pg. 4).

What can I do to help prevent a central line-associated bloodstream infection?

- Ask your doctors and nurses to explain why you need the central line and how long you will have it.
- Ask your doctors and nurses if they will be using methods that prevent infections when inserting and caring for your central line.
- Make sure that all doctors and nurses caring for you clean their hands with soap and water or an alcohol-based hand rub before and after caring for you.
- If the bandage covering your central line comes off or becomes wet or dirty, tell your nurse or doctor immediately.
- Inform your nurse or doctor if the area around your central line is sore or red, or if you feel feverish.
- Do not let family and friends touch the central line tubing or bandage.
- Make sure family and friends clean their hands with soap and water or an alcohol-based hand rub before and after visiting you.
- Make sure you wash your hands with soap and water or an alcohol-based hand rub before handling your central line.

* If you do not see your care providers clean their hands, please ask them to do so.
Catheter-Associated Urinary Tract Infections

What is a urinary catheter (sometimes called a Foley)?
A urinary catheter is a thin tube placed in the bladder to drain urine. Urine drains through the tube into a bag that collects the urine. These are used if you are unable to urinate on your own, during and after some types of surgery, during some tests of the kidneys or bladder, or when precise measurements of urine production are needed.

What is a catheter-associated urinary tract infection?
A urinary tract infection can occur when bacteria or other germs travel along an urinary catheter, resulting in an infection in your bladder or your kidney.

How well are we doing?
In 2012, participating Kansas hospitals reported 23% fewer urinary tract infections from urinary catheter devices in intensive care units (ICU) than the nation. Forty hospitals contributed catheter usage and infection data for 58 ICUs representing 97% of all ICU beds in the state. The percentage of urinary catheters used in Kansas hospital ICUs increased from the prior year, but remained lower than the national average by 6% (*See Limitations section on pg 4).

What can I do to help prevent a catheter-associated urinary tract infection?
• Ask your doctors and nurses to explain why you need the urinary catheter and how long you will have it.
• Ask your doctors and nurses if they will be using methods that prevent infections when inserting and caring for your catheter.
• Before the catheter is inserted, the skin in the area where the catheter will be placed should be cleaned.
• Make sure that all doctors and nurses caring for you clean their hands with soap and water or an alcohol-based hand rub before and after caring for you.

Ask your healthcare provider each day if you still need the catheter.
• If you do not see your care providers clean their hands, please ask them to do so.
• Always clean your hands before and after doing catheter care.
• Always keep your urine bag below the level of your bladder.
• Do not tug or pull on the tubing.
• Do not twist or kink the catheter tubing.
• Ensure the bag is regularly emptied. The drainage spout should not touch anything while emptying the bag.
Surgical Site Infections

What is a surgical site infection?
A surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place. Sometimes these only involve the skin but occasionally are more serious and can involve tissues under the skin, organs, or implanted materials.

Symptoms can include:
- Redness and pain around the area where you had surgery
- Drainage of cloudy fluid from your surgical wound
- Fever

How well are we doing?
In 2012, participating Kansas hospitals reported data, for the first time, on surgical site infections from two types of surgeries, abdominal hysterectomies and colon surgeries. Thirty-nine hospitals reported rates that were comparable to those expected based on national reference data from 2006-2008, and to national data from 2012. (*See Limitations section on pg. 4).

What can I do to help prevent a surgical site infection from happening to me?

Before surgery:
- Tell your doctor about all medical problems you may have such as allergies, diabetes, and obesity.
- Quit smoking. Ask your doctor for help.
- Do not use a razor to shave the part of your body where you will have surgery.

At the time of surgery:
- If someone tries to shave the area with a razor, speak up and ask if clippers could be used instead.
- Ask if you will recieve antibiotics within 60 minutes before the surgery starts. In most cases you should recieve at least one dose.
- Make sure that all doctors and nurses caring for you clean their hands with soap and water or an alcohol-based hand rub before and after caring for you.

After surgery:
- Do not let family and friends touch the surgical wound or dressing.
- Make sure family and friends clean their hands before and after visiting you.
- Make sure you wash your hands before and after caring for your wound.
- Make sure you understand how to care for your wound before you leave the hospital.
- Make sure you know who to contact if you have questions or problems.
- Ask if the antibiotic you recieved before surgery will be stopped within 24 hours, in most cases they should be stopped.

* If you have any signs of an infection, such as redness, pain, drainage, or fever, call your doctor immediately.
Limitations of the Data
This data was self-reported by participating hospitals and has not been validated. Variation in interpretations of infection definitions by each hospital could potentially bias the estimated results. More evaluation work is needed to better understand the lower reported utilization rates for central lines and catheters, which may have an impact on the infection rates being reported. Because this is the first year of data collection for surgical site infections, it is not yet known if these estimates indicate improvement or how well the data represent the true occurrence of these HAIs in Kansas hospitals. Despite these limitations, these results are encouraging and, as additional data are collected, more specific results will be possible.

Resources for Healthcare Consumers
The Society for Healthcare Epidemiology of America (SHEA)

Centers for Disease Control and Prevention (CDC)
Catheter-associated Urinary Tract Infections: www.cdc.gov/HAI/ca_utl/utl.html
Surgical Site Infections: www.cdc.gov/HAI/ssi/ssi.html

Contact Information
Healthcare-Associated Infections Program
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