



An independent agency of the Commonwealth of Pennsylvania

Consumer Tips Guide for Patients and Their Families



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Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority



What is the Pennsylvania Patient Safety Authority?

The Pennsylvania Patient Safety Authority

The Pennsylvania Patient Safety Authority is an independent state agency created by Act 13 of 2002, the Medical Care Availability and Reduction of Error (“Mcare”) Act, to help reduce and eliminate medical errors by identifying problems and recommending solutions that promote patient safety. Under the Act, all Pennsylvania-licensed hospitals, ambulatory surgical facilities (outpatient surgery centers), birthing centers and certain abortion facilities are required to report “Serious Events” and “Incidents” to the Authority. More than 500 healthcare facilities are subject to Act 13 reporting requirements. While the public *does not* report to the Authority, if you have a complaint against a healthcare facility or healthcare professional more information is listed below.

How and Why Do Facilities Report?

Patient Safety Officers in healthcare facilities submit reports of Serious Events and Incidents through the Pennsylvania Patient Safety Reporting System (PA-PSRS), a confidential web-based system. More than 900,000 reports have been submitted through PA-PSRS since the program was initiated in June 2004 through 2008. Ninety-six percent of these reports are Incidents (events that do not cause harm to the patient), while four percent are Serious Events (events that harm the patient). The Authority develops and distributes *Patient Safety Advisories* and other related resources for facilities to learn from the data they have submitted. Over 170 articles have been distributed through the *Patient Safety Advisories*. Patient Safety Officers surveyed in 2008 found the *Advisories* useful (98%), relevant (97%), readable (99%), high in scientific quality (97%) and high in educational value (99%). Surveyed PSOs also said they made over 600 changes in their facilities as a result of specific information in *Patient Safety Advisory* articles in 2008.

Act 13 Definitions of a Serious Event and Incident:

Serious Event (Causes harm to the patient)

An event, occurrence or situation involving the clinical care of a patient in a medical facility that results in death or compromises patient safety and results in an unanticipated injury requiring the delivery of additional health care services to the patient. A patient or their representative should receive written notice from their healthcare provider if a Serious Event occurred to him/her during their hospital stay.

Incident (Does not cause harm to the patient)

An event, occurrence or situation involving the clinical care of a patient in a medical facility which could have injured the patient but did not either cause an unanticipated injury or require delivery of additional health care services to the patient.

What You Should Do If You Have A Complaint:

- Talk with the facility’s patient advocate or guest relations office as soon as possible. Do not be afraid to speak openly and honestly about your concerns regarding your care. Facilities that want to improve patient safety welcome feedback from patients in regard to their care.
- If you are not satisfied with the outcome of your discussions after filing a complaint internally with the healthcare facility, the following anonymous hotline numbers are available: For complaints against a healthcare facility, please contact the Department of Health at **1-800-254-5164**. For complaints against a licensed healthcare professional please contact the Department of State’s Bureau of Professional and Occupational Affairs at **1-800-822-2113**.

For more information on the Pennsylvania Patient Safety Authority go to www.patientsafetyauthority.org.



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Know How to Choose the Best Facility for Your Healthcare Needs

Many hospitals and other healthcare facilities are rated periodically on their ability to deliver healthcare services to their communities. While many of these ratings are a good starting point when determining where you should go when you need to use the healthcare system, it is important that you know the facts behind how the ratings were developed. The tips below will help you look more closely at what lies behind the healthcare facility rating systems so you can ensure the facility you choose for your particular procedure or care is the best one for you or your loved one.

Questions You Should Ask About Any Healthcare Rating Study:

How Important is this Rating for What I Need to Have Done?

When you're trying to decide where you should have a procedure, decide whether the ratings you're looking at are related to the procedure you need done. For example: A hospital may have been rated well for treating heart attack patients in an emergency department, but that does not mean the same hospital is also rated well for heart valve replacement. Many measures of healthcare quality are narrowly focused on specific diseases or treatments. You can give greater weight to ratings that are closely related to your specific disease or treatment.

Also consider how closely linked the measures used in the ratings are to an outcome that is important to you. For example, if you are having surgery and are concerned about choosing a hospital that is successful with preventing infections, ratings based on their surgical site infection rate would be more important than patient satisfaction with the hospital's staff friendliness.

When viewing statistics on hospital or doctor performance on specific procedures, also consider how many of those procedures the individual hospital or doctor has done. There is evidence that the more procedures a doctor performs, the better the patient outcome. You may prefer a doctor who has done 1,000 procedures with five complications to one who has done only 100 procedures with no complications.

How is the Study Funded?

Look into how the rating study was funded. You want to be sure there are no conflicts of interest in regard to the study. Some rating organizations, for example, require a hospital or other provider to pay a fee to obtain a rating and be listed with a positive rating on the organization website. Such organizations may not include all similar facilities or providers because not all will choose to participate. You can consider information to be more reliable—and less likely to be biased—if the funder has no financial or other interest in the outcome of the ratings or participation of the provider.

Where Does the Information Come From? What is the Methodology (Process) Behind the Study?

Data used in hospital ratings can come from many sources, including patient ratings of satisfaction, surveys of hospital officials or doctors and nurses, billing data used in collecting payments, or from review of a sample of medical charts. Data can also be collected or reported by employees of the hospital or by outside researchers. The data sources and who collects the data can both influence the hospital ratings. Give greater weight to ratings that are independent of personal opinions and that are collected by objective researchers.

To look at some healthcare facility studies go to the Pennsylvania Patient Safety Authority consumer web page at www.patientsafetyauthority.org and click on “Patients and Consumers” then “Links to More Consumer Information.” As you scroll down the page there are several healthcare organizations such as the Pennsylvania Healthcare Cost Containment Council (PHC4), that offer comparative studies.



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Help Your Doctor Diagnose You Correctly

You as the patient play a very important role in helping your doctor determine what is wrong with you if you are not feeling well. Often, if you do not tell the doctor everything you know, he or she may not diagnose you correctly. The Pennsylvania Patient Safety Authority recently published information regarding missed or delayed diagnosis. Errors related to missed or delayed diagnosis are often the cause of patient injury. In one study, 53 autopsies were examined between 1966 and 2002. The study showed an error rate of four to 50 percent. Furthermore, the study showed in four percent of these cases death could have been avoided if the patient had been diagnosed and treated correctly. Help your doctor by educating yourself on how you can become a better patient.

(Additional Source: Agency for Healthcare Research and Quality)

Diagnostic Error: Diagnostic error is a diagnosis that is missed, incorrect, or delayed, as detected by a definitive test or finding done later. Not all misdiagnosis results in harm and harm may be due to either disease or intervention.

How You Can Become A Better Patient

- Tell your doctor the complete story, because even symptoms that may seem minor could be important.
- Establish a timeline. Knowing the chronological order of symptoms and complaints could be very important for your doctor.
- Keep records of all test results, discharge summaries, and whatever data might be needed by the next doctor who does not have access to information from the last doctor or healthcare organization.
- Do not minimize complaints. If you do, your doctor may follow your lead and do the same.
- Bring important information like medications, your medical history, and a list of your symptoms in writing.
- Bring a companion to help you hear and understand everything your doctor says to you.
- Understand that your doctor diagnoses your condition by considering the history of your medical problem, the results of a physical examination, and the findings of medical tests. With each step, the doctor looks for patterns that fit an illness. Help your doctor see patterns by disclosing all relevant information in a concise manner. Do not be afraid to ask if your doctor needs more information.
- Find a doctor who knows how to listen.
- If you think your doctor has overlooked something, tell him.
- Do not be afraid to ask questions like the following: What else could it be? Is there anything that does not fit? Could it be that I have more than one problem?
- Feel free to offer your own suggestions.
- Ask about when you can expect test results, and call your physician if you do not hear about the results. Do not think that “no news is good news.”

To learn more about diagnostic error and review possible cases of diagnostic error in Pennsylvania, go to the 2010 September *Pennsylvania Patient Safety Advisory* article “Diagnostic Error in Acute Care” at the Authority’s Website, www.patientsafetyauthority.org.

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Leaving the Hospital? Don't Go Home Without Important Information

More than 800 reports have been submitted to the Pennsylvania Patient Safety Authority that show problems occurred as patients were discharged that could have resulted in patient harm. About 30 % of the patients did not receive written or verbal instructions before leaving the facility. Some patients received the wrong drug or wrong instructions for taking a drug while at home. The Emergency Department was the care area where about 300 reports identified a problem occurring. In about 500 others the problems occurred with patients who were in the hospital for any length of time and about to go home. The causes given for the problems include: patients who left without written instructions (mostly from the ED), patients who did not receive complete instructions, or patients who received another patient's instructions because of a mistake in the discharge process.

What You Should Know Before Leaving the Hospital:

Education:

- Be sure your healthcare provider tells you and/or a family member everything about your diagnosis/disease. You should not leave the facility with any questions regarding your health.
- Get any available reading materials about your procedure or disease-specific educational materials.
- Tell your healthcare provider the names of your current medications.
- Make sure you understand how to take your new drug, how often to take the new drug and what you can expect as far as the drug action and side effects.
- Have your healthcare provider give you written materials about your medications so you can refer to the instructions at home.
- Your healthcare provider should give you written instructions telling you when you can return to your normal activities and normal diet.
- Know about any problems that may develop at home (for example: a bad reaction to your medication). You should know when to call your physician if any problems develop and when to dial 911.
- Repeat your discharge instructions back to your healthcare provider to make sure that you understand the instructions.
- Before you leave the hospital make sure that all intravenous lines or access ports that you *do not need* for other medications are removed by your healthcare provider.

Test Results and Services:

- Your healthcare provider should tell you when you can expect your test results and whom you should call for those test results.
- Your healthcare provider should schedule any follow-up appointments with physicians/specialists as needed.
- Your healthcare provider should give you referrals for services that have been ordered by your physician (for example, physical therapy, occupational therapy).

Questions to Ask:

- Make sure you ask your healthcare provider any questions you have about your procedure or disease, follow-up care, medications, follow-up test results and potential problems that may not happen until after you leave the hospital.

For more information on discharge instructions go to the June 2008 *Pennsylvania Patient Safety Advisory* article "Care at Discharge—A Critical Juncture for Transition to Posthospital Care" at www.patientsafetyauthority.org. For more copies of these healthcare consumer tips, click on "News and Information" at the same website.

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What You Need to Know Before Having an MRI Scan

In 2008, the Pennsylvania Patient Safety Authority received about 150 reports describing events in which patients with certain implanted objects or in which patients were not screened properly for metallic items were scheduled for MRI scans. These events resulted in some patients going into the MRI scanning room with implanted pacemakers and other metallic objects. The magnetic field of the MRI scanner may exert forces on certain implanted objects that are susceptible to the effects of the magnetic field, potentially causing the object to move within the body, which could result in serious harm. The most frequently reported problem involved 68 reports (about 46%) of patients with implanted heart devices (e.g. pacemakers, heart defibrillators) getting past the safeguard of the screening process and entering into the MRI scan room or being stopped from entering the scan room by the final screening process. Other reports identified MR screening forms with incorrectly or inadequately answered questions. Many reports described miscommunication between facility departments (e.g. medical/surgical and radiology departments). Patients can protect themselves from possible injury by understanding the screening process prior to an MRI scan and by providing as much information as possible during the screening process.

The MR Safety Screening Process - What you Should Know

The screening process for an MRI scan is often a multi-level process consisting of the following:

- A preliminary question-and-answer interview with you via a telephone call when the appointment is scheduled by non-MR personnel.
- At the time of the appointment in the reception room, an MR screening form is filled out by you or a representative if you are unable to do so.
- A more thorough screening is performed by MR personnel before you enter the MRI scanning room. Questions are asked to determine your medical history and metal exposure history in relation to the MRI scan.
- If your medical history cannot be obtained and if the MRI scan cannot be rescheduled, then MRI personnel should physically examine you for signs of scars or other marks that may show that you've had an object implanted.
- If a question remains regarding an implant or potential implant, an MR safety director should decide whether or not to proceed with the MRI scan.

Also:

- Make sure you answer all questions on the screening form as accurately as possible to avoid confusion or misunderstanding as to *any* implants you have received.
- Don't be embarrassed to ask or answer any question. For example, one report submitted to the Authority put a patient at risk because he/she did not initially disclose they were wearing a "house arrest" ankle bracelet.
- If you experience any discomfort during your MRI scan, you should alert the MR technician right away.

Table. List of Items on or in patients and Frequency of Reports

FERROMAGNETIC ITEM	NUMBER OF REPORTS
Pacemaker/implanted cardiac device/heart valve	68*
Aneurysm clip	5
Bullet/BB pellet/gunshot wound	4
Hearing aid/ear implant	3
Orbit (eye) metal	3
Abdominal aortic aneurysm stent	2
Acupuncture needle	1
Inferior vena cava filter	1
“House-arrest” ankle bracelet	1
Knife	1
Metal artifact	1
Metal buckle	1
Metal plate/screw	1
Pain pump (implanted)	1
Sweater (with 18% metal fabric)	1
Tattoo	1
Tissue expander	1
Face mask (with metal nose piece)	1*
Unknown implant	1
Total	97**

* These two items were recorded on the same Authority report.

** This total number of reports excludes the 49 reports received with descriptions of only improper screening and 2 reports concerning pregnant patients scheduled for MRI scans ($148 - 49 - 2 = 97$).

The American College of Radiology (ACR) developed the “ACR Guidance Document for Safe MR Practices” which is widely used by the healthcare industry. The guidance recommends a four-zone model for the screening process. Each zone in the model represents a different safety level of magnetic field exposure for the general public. The four zones are as follows:

- **Zone 1:** Patients can roam freely in Zone 1. These areas include all areas just outside the MR environment such as corridors and entrances.
- **Zone 2:** Includes the area between the public accessible Zone 1 and the more strictly controlled MR environments of Zones 3 and 4. Zone 2 areas typically include the reception, waiting and patient dressing and holding rooms. The general public is usually not free to move throughout Zone 2 without the supervision of MR personnel.
- **Zone 3:** This area is restricted to unscreened non-MR personnel and metal objects or equipment. Serious injury or death could result in Zone 3 due to interactions between the individuals, objects or equipment and the MR environment’s static and magnetic fields. Supervision is under the control of the appropriate MR personnel. Access to Zone 3 should be physically restricted from the general public through the use of a locking system.
- **Zone 4:** This is the area containing the MRI scanner and it has the strongest magnetic fields. Zone 4 should be clearly marked as being potentially dangerous due to strong magnetic fields. Zone 4 should also be marked with a red light and lighted sign stating “Magnet Is On.”

Table. Many ferromagnetic and non-ferromagnetic objects could be present on or in the body. Ferromagnetism refers to the process by which certain materials such as iron become permanent magnets or show strong interactions with magnets.

For more information on the MRI scan data or to view excerpts from reports go to the 2009 March Pennsylvania Patient Safety Advisory article “Safety in the MR Environment: MR Safety Screening Practices” at www.patientsafetyauthority.org.

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Patients and Families Should Obey Rules to Prevent Choking Deaths

Patients who are in the hospital often may ask a loved one to bring them some food or a milkshake to make them feel better. The Patient Safety Authority has received reports that show patients have died from choking because family members have given their loved ones food when the patient was not supposed to have it. Patients and their families need to be aware of what or *if* their loved one can eat or drink while in the hospital and obey the rules. Dysphagia, or difficulty swallowing, can be a problem for many patients for many different reasons including but not limited to: stroke, head injuries, old age, medication side effects, surgery and infections. Fifty percent of adult patients in hospitals are reported to have problems swallowing, while 66 percent of residents in long-term care facilities have the same difficulty. It is important for patients and their families to know if they have problems swallowing. Reports to the Authority show patients are not always screened properly to know if a patient is more at risk for choking. Therefore, while the hospitals must look at their screening processes to better determine at-risk patients, patients and their loved ones must be sure to follow the rules while in the hospital or nursing home facility.

Real Life Pennsylvania Cases

A patient had moderate to severe dysphagia [problems swallowing] following stroke. Family [members] brought in solid food, which the patient ate and [immediately began] to choke. Despite immediate resuscitation efforts, the patient expired [died].

A patient with recent history of stroke was placed on pureed dysphagia diet after nutrition and speech evaluations. After being fed [a meal] by [a family member], the patient became [short of breath]. Suctioning [the patient] produced the [meal] contents. The patient was intubated, transferred to the cardiac care unit, [and died as a result] of aspiration [choking].

Some Examples of Patients Who Are More At Risk for Having Problems Swallowing:

- People who have suffered a stroke, head injuries, have had cervical spine surgery and infections may have trouble swallowing. Old age and certain medications can also cause a person to have more trouble swallowing and thus make that person more at risk for choking.
- Some signs that you or a loved one may have trouble swallowing include the following: coughing when swallowing, delay in swallowing and drooling. People who have problems breathing (e.g., persons with sleep apnea) should also be aware that they may also have trouble swallowing properly. For sleep apnea signs, go to the Authority's web site at www.patientsafetyauthority.org and click on "News and Information: Patients and Consumers."

Talk to Your Healthcare Provider:

- If you're in the hospital and are told you cannot have solid foods, do not ask a family member to bring you something to eat. If you are a family member and your loved one in the hospital asks you to bring in food, check with a nurse or doctor before giving your loved one anything to eat or drink to be sure it is safe to give.
- If a hospital worker brings you something to swallow that doesn't seem right (e.g., solid food, wrong medication) don't be afraid to ask a nurse if you will be able to swallow it.

For more information on dysphagia (trouble swallowing) go to the 2009 December *Pennsylvania Patient Safety Advisory* article "Does Your Admission Screening Adequately Predict Aspiration Risk?" at www.patientsafetyauthority.org. For more consumer tips, go to the same web site.

Produced by the Pennsylvania Patient Safety Authority

Color-Coded Wristbands Create Risk in Healthcare Facilities



Real-life Case in Pennsylvania Hospital

A hospital in Pennsylvania submitted a report to the Patient Safety Authority describing an event in which clinicians nearly failed to rescue a patient who had a cardiac arrest because the patient had been incorrectly designated as “DNR” (do not resuscitate). The source of the confusion was that a nurse had incorrectly placed a yellow wristband on the patient. In this hospital, the color yellow signified that the patient should not be resuscitated. In a nearby hospital, in which this nurse also worked, yellow signified “restricted extremity,” meaning that this arm is not to be used for drawing blood or obtaining intravenous (IV) access.

What You Should Know:

- About four out of five Pennsylvania facilities responding to a recent statewide survey use color-coded patient wristbands to communicate important medical information.
- Of those who use them, 98% say the color has a significant meaning.
- Color-coded wristbands are most commonly used in hospitals (87%), but they are also used in ambulatory surgical facilities (67%).
- More facilities in Pennsylvania are adopting standard meanings for specific colors. While the adoption of the standard colors and meanings is not mandatory, the Authority and the Hospital and Healthsystem Association of Pennsylvania (HAP) recommends that if facilities are using color-coded wristbands they adopt the standards set forth by the Colors of Patient Safety Task Force in northeastern Pennsylvania.
- Pennsylvania is not alone in standardizing its colors and meanings. Due to the Authority’s Supplementary *Patient Safety Advisory* that raised awareness of the issue, several states have adopted the standards in the manual developed by the Colors of Patient Safety Task Force. Most recently, the U.S. Army adopted the standardization protocols set forth by Pennsylvania.

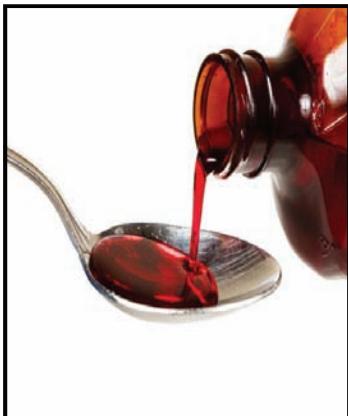
What You Can Do:

- Remove all wristbands that you have placed on yourself before entering a healthcare facility for medical attention if they do not give any information about your medical condition. (e.g. Lance Armstrong, “Livestrong” yellow wristbands)
- Know the purpose of a wristband placed on you or a loved one by a healthcare provider.
- Ensure any writing on the wristband is clearly understood.
- Do not be afraid to ask the healthcare provider what colors mean for each wristband in that particular hospital.
- Do not be afraid to confirm the meaning of the wristband color with any “new” nurse or healthcare provider on your case or a loved one’s while in the hospital.
- If you are transferred to another healthcare facility during care, be sure to confirm the meaning of the colored wristbands in the new facility.

For more information on this December 2005 *Supplementary Advisory* article, go to www.patientsafetyauthority.org. For more copies of these healthcare consumer tips, click on “News and Information” at the same website.

Patient Safety Tips

Produced by the Patient Safety Authority



Protect Yourself from Norovirus and Other Gastrointestinal Illnesses

The Pennsylvania Patient Safety Authority data shows a significant increase in cases of norovirus and norovirus-like gastrointestinal illnesses in the first quarter of 2010, particularly in nursing homes. Norovirus and norovirus-like cases in Pennsylvania nursing homes increased from 813 cases at the end of 2009 (October-December) and then surged to 4,090 cases in the beginning of 2010 (January-March). Pennsylvania hospitals also reported an increase in norovirus and norovirus-like cases in the beginning of 2010. The Authority issued guidance and an educational toolkit for nursing homes and hospitals to use to avoid the virus and control outbreaks. For residents and patients, the Authority distributes consumer tips so everyone is aware of the risks and does everything possible to protect themselves from norovirus and other gastrointestinal illnesses.

How You Can Protect Yourself from Norovirus

Norovirus is a highly contagious severe gastrointestinal illness commonly referred to as the “stomach flu.” The virus spreads through the vomit and feces of people sick with the illness. Contact with only a few particles can make you sick. There is no vaccine and antibiotics are not effective against norovirus. Norovirus spreads easily and rapidly through confined areas such as households, daycare centers, schools and healthcare facilities. It is most frequently seen in the winter months.

How is Norovirus spread?

Anyone can get norovirus. People can swallow the virus and become sick from the following:

- Eating food or drinking liquids contaminated with norovirus from an infected food handler or server.
- Eating raw shellfish harvested from waters contaminated with raw sewage.
- Touching contaminated objects (faucets, utensils, linen) and then putting contaminated objects or fingers into the mouth.
- Contact with the vomit and feces of people who are ill with the virus while taking care of them or sharing food or utensils.

What are the symptoms of Norovirus?

Symptoms include nausea, vomiting, diarrhea, stomach cramps, low fever, chills, headache and fatigue. Symptoms usually start as early as 12 hours after exposure to the virus. Vomiting is more common in children. Most people get better on their own in about three days. If you experience a decrease in urination, have dry mouth and throat, and feel dizzy when standing up, you may be dehydrated because of vomiting and diarrhea. This is a serious problem that may require hospitalization. Symptoms can be more severe especially in infants, older adults and people with chronic illnesses. If they persist you should seek medical attention.

How to Prevent or Care for Norovirus at Home

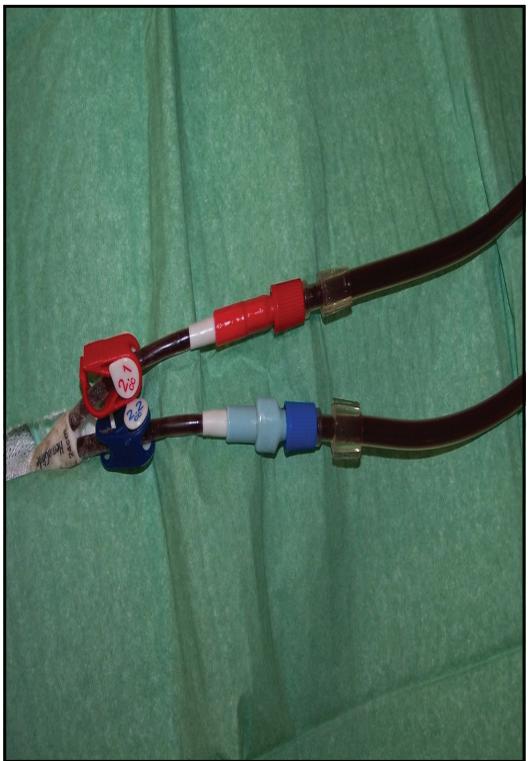
- All family members should wash their hands with soap and water before and after food preparation, using the bathroom, changing diapers, caring for sick persons, or cleaning soiled surfaces or linens.
- Preventive hand washing should be done for 15 to 20 seconds, and for at least one minute if sick or caring for someone who is sick.
- Carefully wash fruits and vegetables, and steam oysters before eating them.
- Do not share food, utensils or drinking containers.
- Anyone ill with diarrhea should not prepare food for other people.
- Immediately wash clothing and linens soiled with vomit or diarrhea in hot soapy water.
- Immediately clean and then disinfect surfaces that are soiled with feces or vomit or touched frequently (e.g., door knobs, light switches) with bleach-based household cleaner. Fresh cleaning solution can be made with one and a half cups of bleach to a gallon of water.
- If sick, rest in bed and stay home from work or school until you recover. People who have had the virus are still contagious after symptoms end, so healthcare, daycare and foodservice workers should stay out of work for three days after they have recovered from symptoms.
- Drink plenty of fluids (e.g., chew on ice chips, sip water) to avoid dehydration.

***Adapted from information from the Centers for Disease Control and Prevention and the Pennsylvania Department of Health.**

For more information about norovirus, go to the 2010 December *Pennsylvania Patient Safety Advisory* article, “Controlling the Annual Threat of Norovirus Gastroenteritis Outbreaks,” at www.patientsafetyauthority.org.

Patient Safety Tips

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What You Need to Know About Central Line-Associated Bloodstream Infections (CLABSIs)

If you or your loved one are in the hospital or nursing home, you may need to have a procedure done that allows fluids or blood to get into your bloodstream quickly called a central line or central venous catheter (CVC). This procedure works like an IV, but is placed in larger veins (e.g. neck, upper chest, leg). It is important for you to make sure if you must have a CVC placed, that the CVC is cleaned properly and is taken out when it is no longer necessary. Central lines can become infected and then cause your blood to become infected. Blood stream infections are very serious and can cause death, particularly if you have other health conditions that weaken your immune system. The Pennsylvania Patient Safety Authority has analyzed data from Pennsylvania hospitals regarding central line-associated bloodstream infections (CLABSIs). Pennsylvania hospitals are above the national average in regard to preventing CLABSIs, however analysis shows hospitals may not be following the steps needed to ensure CLABSIs are prevented as much as possible and even eliminated. Please educate yourself and your loved ones on CLABSIs so you can help prevent a serious and sometimes deadly infection.

(Provided by the Institute for Healthcare Improvement (IHI) and the Centers for Disease Control and Prevention (CDC))

What is a central line?

A central line or central venous catheter (CVC) is a long hollow tube similar to the intravenous lines placed in a patients' arm except that they are placed into larger veins found in the patient's neck, upper chest, leg or arm. It can remain in place in some cases for several weeks. Central lines are used to give large amounts of fluid or blood quickly, and to give special nutrition when foods or liquids can't be given through the gastrointestinal system. They are also used to give medicines that can only be given through large veins or medicines that must be given by IV for a week or longer.

What is a central line-associated bloodstream infection?

Infection can occur when bacteria grow in the line and spread into the bloodstream. This is called a "catheter-related bloodstream infection" (CLABSI). If you have a temperature above normal, fever, chills, or the skin around the CVC is painful, red, swollen or oozing, this could indicate the beginning of an infection. These serious, sometimes deadly infections can often be successfully treated with antibiotics. Sometimes the only way to cure the infection is to remove the catheter.

What are some of the things that hospitals are doing to prevent CLABSI?

Doctors and nurses can help prevent CLABSI by using all of the following steps:

Everyone who touches the central line must wash their hands with soap and water or an alcohol-based hand sanitizer before inserting the catheter, changing the bandage, or touching the catheter to take blood or to give medications.

- The person who inserts the line should wear a mask, hair covering, sterile gown and sterile gloves. The patient should be fully covered with a large sterile drape.
- The patient's skin should be cleaned with an antiseptic skin cleanser when the line is put in and when the dressing is changed.
- Choose the best vein to insert the line where the risk for infection is small. Often, this is the sub-clavian vein (in the chest) which is not as likely to get an infection as veins in the arm or leg.

Check the line for infection and decide every day if the patient still needs to have the catheter. The catheter should be removed as soon as it is no longer needed.

What can patients and family members do to help prevent CLABSI?

In the Hospital:

- Ask your doctors and nurses if they are using the steps listed above to lower your risk of infection.
- Tell your nurse right away if the bandage is loose, soiled, or wet, or if the skin around the catheter is sore or red.
- Watch that your doctors and nurses wash their hands before and after giving you care.
- Make sure that your visitors do not touch the catheter or the tubing.

At Home:

- If you go home with your catheter make sure your doctors and nurses explain how to care for your catheter and who to contact if you have questions.
- To prevent infection your central line must be kept clean and dry at the exit site, where it comes out of your skin, and also at the end.

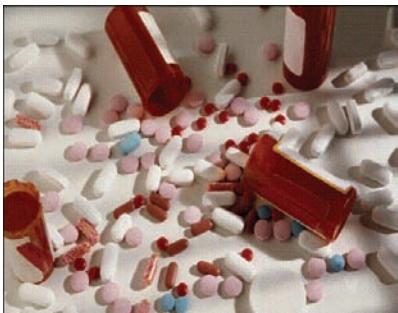
A transparent dressing will cover the exit site while the stitches are in place. If the wound appears clean and dry the dressing should be changed once a week. After the wound has healed, the stitches will be removed. While a dressing will no longer be needed at the time the wound has healed, the line must always remain looped and secured with tape.

For more information on prevention of central line infections, go to the 2010 March Supplementary *Pennsylvania Patient Safety Advisory* article "Beyond the Bundle: Reducing the Risk of Central Line-Associated Bloodstream Infections" at the Authority's Web site at www.patientsafetyauthority.org.

Produced by the Pennsylvania Patient Safety Authority

C. Diff Infections: What You Should Know When Taking Antibiotics

Clostridium Difficile [klo-STRID-ee-um dif-uh-SEEL] a.k.a C. Diff



C. diff is a bacterium in the Clostridia family that has been seen in several cases submitted to the Pennsylvania Patient Safety Authority as the major contributing factor for causing patient deaths. Most patients in the reports (86%) were 70 or older. Many patients were treated with antibiotics to guard against infection for an elective surgery. In several cases, the reports show patients developed the C. diff in the community after discharge. They failed to return to the healthcare system until the disease had progressed significantly. Unfortunately, the patients most likely did not know their symptoms were serious and did not associate them with the antibiotics taken after their recent surgery.

Symptoms of C. diff include: diarrhea, fever, loss of appetite, nausea and stomach pain.

Real-life Pennsylvania Case of C. Diff Infection

A 72-year-old patient came to the Emergency Department complaining that he nearly fainted. He had been discharged two weeks before, after being treated for pneumonia. He was taking an antibiotic upon discharge and finished the full course of the medication at home. The patient also complained of diarrhea, nausea and stomach pains over the previous week. The patient had, in fact, arrived in septic shock—a life threatening form of severe sepsis that is usually the result of bacteria in the bloodstream which often causes organ dysfunction. Tests done on the patient's bowel movements were positive for C. diff. Despite aggressive intervention, the patient died of C. diff sepsis within 16 hours of returning to the Emergency Department.

An 87-year-old patient was discharged to a rehabilitation facility after repair of a hip fracture and receipt of antibiotic therapy. Eighteen days later, the patient returned to the hospital in septic shock associated with C. diff. The patient died the day she returned to the hospital despite aggressive intervention.

What You Should Know and Do:

(Additional Source: Centers for Disease Control and Prevention)

- People in good health usually do not get C. difficile disease.
- The elderly or people using antibiotics for a prolonged period of time are more likely to contract C. diff.
- C. diff bacteria are found in feces, therefore thoroughly washing your hands with soap and warm water is advised to ensure your hands are clean. Disinfect surfaces with a diluted solution using household bleach to help prevent the spread of the disease.
- Closely monitor yourself or a loved one who is taking antibiotics at home.
- See your healthcare provider immediately if you think you have symptoms of C. difficile. The disease is generally treated for 10 days with antibiotics specifically effective against C. diff prescribed by your healthcare provider.
- If diarrhea occurs, avoid antidiarrheal medications until seeking the advice of your healthcare provider.

For more copies of these tips and other healthcare consumer information click on “News and Information” at www.patientsafetyauthority.org. For more information on C. Diff go to the June 2005 Advisory article at the same website.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority



MRSA and Other Healthcare-Associated Infections

More than 1,700 reports related to methicillin-resistant *Staphylococcus aureus* (MRSA), including 14 deaths, have been submitted to the Pennsylvania Patient Safety Authority since June 2004 through October 2007. MRSA (Mer-sa) is a type of bacteria that is resistant to certain antibiotics. People can get MRSA during a hospital stay or in their community. Despite healthcare facilities' efforts to reduce infections, like MRSA, they continue to cause harm to patients. It is important for people to protect themselves as much as possible from getting an infection of any kind. The following consumer tips can help you protect yourself and your loved ones from MRSA and other healthcare-associated infections.

What You Can Do To Protect Yourself in the Hospital:

- If you test positive for MRSA, you may be placed on isolation or in a room with another patient with MRSA.
- Remind healthcare workers to post signs for isolation outside your room, if placed on isolation.
- Remind healthcare workers to wear a gown and gloves when caring for you.
- Request written material about MRSA.
- Wash your hands using soap and water or hand gels.
- Wash your hands frequently, especially before eating or after toileting.
- Remind healthcare workers to wash their hands before or after caring for you.
- Ask family and visitors to wash their hands when visiting.
- Remind healthcare workers about cleaning equipment that appears dirty or that you use frequently.

What You Can Do to Protect Yourself at Home:

(At home tips developed and provided with permission from the VA's National Center for Patient Safety)

Not all precautions taken in the hospital are necessary at home. If someone in your home has MRSA or if you are discharged home with MRSA, please follow these basic hygiene measures:

- Continue to use good hand washing throughout the day. Ask your visitors to do the same. Wash with soap and water for at least 15 seconds each time.
- Let anyone caring for you know that you are a MRSA carrier. This includes home health providers, nurses, therapists and rescue squads. Caregivers should be certain to wear gloves when attending to open wounds.
- Do not share towels, washcloths, razors, clothing or other personal items.
- No special cleaning is necessary. Laundry and dishes can be done as usual. Just be sure to use a cleaning agent or detergent with HOT water.

***REMEMBER that MRSA will not usually harm healthy people. However, they can be carriers and help spread the bacteria to other people.**

For more information on MRSA go to the December 2007 *Patient Safety Advisory* article "Identification and Effective Communication of Status May Reduce MRSA Infections," at www.patientsafetyauthority.org.

For more copies of these healthcare consumer tips, click on "News and Information" at the same website.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority

How You Can Help Prevent Medication Errors



Medication errors are one of the most common types of medical mistakes. Fortunately, in most cases , no patient are harmed by medication errors. In a recent Penn State survey, one-third of Pennsylvanians said they or a family member were personally involved in a situation where a preventable medication error occurred. However there are steps you can take to protect yourself from a medication error. The following tips are recommended by the Institute of Safety Medication Practices (ISMP), a partner with the Patient Safety Authority.

While You Are in the Hospital:

- Always keep an up-to-date drug list. This list should include any drugs including over-the-counter medicines, vitamins, nutritional supplements and herbal products. The list should also include any medicines that you are allergic to and describe what happens to you when you take that medicine.
- Do not let anyone give you medicines without checking your patient identification or barcode bracelet first.
- If a medication doesn't look like what you usually take, ask why **before** you take it.
- Make sure you know the name of any new medicine that is ordered for you and what it's being used for.
- When a new medicine is ordered for you, remind your doctor and nurse if you have any allergies to drugs.
- Make sure that when you are ready to leave the hospital that a doctor, pharmacist or nurse goes over each medication with you and/or a family member. When you get home remember to update and make any changes in your medication list.

While You Are at the Doctor's Office:

- If you have any allergies, remind your doctor about them before taking samples. Ask him/her to check the sample medicine against your medicines to make sure there are no bad interactions with that medicine.
- Ask the doctor to explain how to take new medicine, including mixing instructions, what side effects to look for, anything special to look for, and the reason for the medication
- Doctors can help you learn about your medicines by offering you education tools to provide information like the name of the drug, why it's prescribed and the most common side effects you might experience.

In Your Home:

- If you have trouble swallowing medicines, ask your doctor or pharmacist if the drug comes in a liquid. Never chew, crush, break or mix the tablet or capsule in fluid unless your doctor or pharmacist says it is all right to do so.
- Check all your medicines every six months for their expiration date and get rid of all drugs that are out of date.
- As a safety measure, ask to schedule a “brown bag check-up” by gathering all of your medications and over-the-counter products into a brown bag and show them to your doctor or pharmacist to look for any potential problems.

In the Pharmacy:

- When your doctor gives you a prescription for a new medicine, ask him/her to write the reason why you are taking the medicine on the prescription. It will help the pharmacist give you the right medicine.
- When you take or give liquid medicines, only use the measuring device, such as a dropper, that comes with the medicine. If the pharmacy did not give you a measuring device, ask for one.
- If you use more than one pharmacy to get your prescriptions, try to pick a primary pharmacy.
- Your primary pharmacy should keep an up-to-date medication record for you ,which should include a complete list of all the medicines, over-the-counter medicines, herbals, your current and past medications.

For more tips on how to prevent medication errors, go to www.ismp.org, click on “Consumers.” For more information on medication errors in Pennsylvania, go to the Patient Safety Authority’s website at www.patientsafetyauthority.org, click on the 2008 Annual Report, go to Page 19.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority



What You Need to Know About Insulin

Controlling blood sugars with insulin is essential in the management of high blood sugars, not only for people who have diabetes, but for non-diabetic people as well. For example, some patients will need insulin to lower their blood sugars when they are in the hospital. However, studies have shown that the use of insulin has been associated with more medication errors than any other type or class of drug.

A review of medication error events in Pennsylvania shows that the most common types of problems include receiving the wrong type of insulin and receiving the wrong dose of insulin. This includes receiving too much insulin, too little, or no insulin at all. In fact, more than 52% of the reported events led to situations in which a patient may have or actually did receive the wrong dose or no dose of insulin.

However, there are steps you can take to protect yourself from receiving the wrong type of insulin or wrong dose of insulin when you are at home or in the hospital.

At Home:

- If you were prescribed insulin for the first time, you need to know your insulin name because there are many different types of insulin. You also need to know the dose of the insulin and how often you have to take it.
- Make sure that you are taught how to store your insulin, how to inject yourself and how to recognize symptoms of low blood sugar and how to manage these symptoms.
- If your insulin type and/or dose of insulin has changed be sure to confirm the changes with your doctor (or nurse or pharmacist) before you begin administering the new dose or new insulin type.
- Keep a list of all other medications you are taking, including the insulin, for your own record. Other medications include all prescription, over-the-counter (OTC) and herbal medications.

While in the Hospital:

- It is important that you tell your doctor and your nurse what type and what dose of insulin you are taking when you are admitted to the hospital. Your usual insulin requirement may change during your hospital stay. So if you have been prescribed a different insulin or your usual dose has changed, ask your doctor about the reason for the change.
- Make sure your nurse or other caregivers check your wristband and ask your name before giving you insulin. Some patients get a medicine that was supposed to go to another patient.
- Tell your caregiver if you don't feel well after taking a medicine like insulin. Ask for help immediately if you think you are having a side effect or reaction.

For more information about insulin and studies available, go to the 2010 March *Pennsylvania Patient Safety Advisory* article, “Medication Errors with Dosing of Insulin: Problems Across the Continuum,” at www.patientsafetyauthority.org.

Patient Safety Tips

Produced by the Patient Safety Authority



What You Should Know If You Are Receiving Dialysis

About 367,000 Americans underwent dialysis to treat their kidney failure in 2007. While the technology for hemodialysis is well established and the treatment is a routine part of healthcare delivery, risks are ever-present since hemodialysis patients undergo three treatments each week, take multiple medications and often have multiple comorbidities. From November 1, 2008, through October 31, 2009, Pennsylvania healthcare facilities submitted 526 reports involving hemodialysis administration to the Pennsylvania Patient Safety Authority. Medication errors were the most common type of hemodialysis event submitted representing 29% (150 reports) of all hemodialysis events. Other hemodialysis administration events involved failure to follow policy or protocol such as treatment set-up procedures (12.9%), needle disconnection and needle infiltration (6.1% for each category), and falls (5.9%). Events related to hemodialysis administration may lead to serious patient harm. One Serious Event reported to the Authority involved a needle disconnection during hemodialysis that resulted in significant blood loss. Know what you can do to help prevent an error from occurring while you are receiving dialysis treatment.

What You Can Do:

- Keep a list of all your medications and share it with your providers in the dialysis clinic and other care areas where you are treated.
- Make sure you know what medications you are taking and why. Stay alert for any medications that may be missed or given in error.
- Make sure you are involved in every aspect of your hemodialysis care so that you will know if something is not right and you can tell someone right away. For example, if the label on the dialyzing solution does not match your prescription or the dialyzer is not labeled with your name be sure to tell someone.
- Make sure your healthcare provider knows your name and birth date. There could be mix ups if there are two people receiving dialysis with similar names.
- Since dialysis treatment can make patients dizzy and more likely to fall, make sure you take every precaution. For example, make sure you tell staff if you are feeling dizzy or unstable after treatment. Request a blood pressure check if necessary.
- Consider a treatment facility that also has physical therapists or exercise physiologists available for strength training.
- Make sure you tell staff about any falls you may have experienced since your last treatment to determine whether any adjustments to the hemodialysis treatment or doctor notification is necessary.
- Look around at the dialysis center you attend and tell staff about any potential tripping hazards you notice.
- Make sure staff knows if you need a cane or other assistance to walk.
- Make sure to wear shoes when you are being weighed to avoid slipping and falling.
- Make sure you have a call bell easily accessible if you need assistance going to the bathroom.
- Know the importance of fluid and weight management in between treatments to avoid blood clots.
- Make sure your hemodialysis access has adequate flow. Avoid tight clothing or jewelry on the arm you receive treatment to prevent clotting and allow adequate flow.
- If you are a candidate, consider an arteriovenous fistula for your hemodialysis vascular access because it lasts longer than other access methods and is associated with fewer complications.

For more information on hemodialysis administration data, go to the 2010 September *Pennsylvania Patient Safety Advisory* article, "Hemodialysis Administration: Strategies to Ensure Safe Patient Care" at www.patientsafetyauthority.org.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority



Why A Thorough Medical History is Important If You Are Pregnant

The Pennsylvania Patient Safety Authority received over 316 reports of babies who experienced getting their shoulder stuck (known as shoulder dystocia) in the birth canal during delivery. In 124 (39%) reports, the babies' injuries from the shoulder dystocia included: broken bones, nerve damage and internal bleeding. There are several risk factors before and during the delivery that contribute to shoulder dystocia. These risk factors include: if the mother has diabetes, the baby's weight at birth is over 8.8 pounds, if the baby is known to have a serious birth defect, if the baby is delivered with forceps or a vacuum-type device, and a quick or delayed labor during the second stage of labor. The mother can help her healthcare providers by giving as much information about her medical history as possible before delivery. If it is determined from a mother's medical history and/or through other medical tests that there is a higher risk for shoulder dystocia during delivery, healthcare providers can prepare as much as possible before delivery to minimize potential injury to the mother and fetus.

For women who are pregnant, there are certain conditions or characteristics that may make you more at risk for having a shoulder dystocia complication during labor. One of the reports submitted to the Authority listed lack of communication with the patient and family as one of the contributory risk factors that led to the shoulder dystocia event. Open communication with your healthcare provider about your health issues may identify possible risk factors for shoulder dystocia and is one of the most important contributions patients and families can provide.

These risk factors include:

- Diabetes
- Obesity (extremely overweight)
- Over age 35
- Problems with your pelvic anatomy
- Small stature

To reduce your risk of shoulder dystocia complications make sure your healthcare provider also knows:

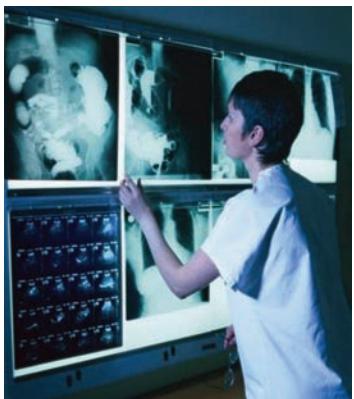
- How many pregnancies you have had and the birth weights of your other children;
- If forceps and/or a vacuum device were used in the other deliveries;
- If any of your other children experienced a broken bone during delivery (this may have been related to shoulder dystocia but not documented previously).

For more information about shoulder dystocia and the strategies for healthcare providers to prevent complications go to the *Pennsylvania Patient Safety Advisory* article, “Neonatal Complications: Recognition and Prompt Treatment of Shoulder Dystocia” at the Authority’s web site www.patientsafetyauthority.org.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority

Pregnancy and Diagnostic X-Rays: What You Should Know



The Pennsylvania Patient Safety Authority has received over 90 cases of pregnant patients receiving diagnostic x-rays unaware that they are pregnant. Studies show that some patients have terminated wanted pregnancies because of the fear that the procedure may have harmed the fetus after receiving a diagnostic x-ray. However, analysis and research show that both pregnant patients and physicians may over estimate the risk of an ionizing diagnostic radiation examination (x-ray) on the fetus. Many factors must be determined before a patient considers ending a wanted pregnancy after receiving a diagnostic x-ray unaware that she was pregnant. For example, factors such as how many x-ray procedures have been performed, with what dose and the risk associated with the type of x-ray are important to know prior to making any decision.

Real Life Pennsylvania Cases

A patient was asked if she could be pregnant and the date of her last menstrual period. The patient responded that she receives contraception injections and does not get periods. The patient signed a release indicating she was not pregnant. An x-ray of the abdomen was performed, which revealed a fetus.

Over a seven-week period of time, a 19-year-old patient received the following studies: abdomen x-ray, CT scan of the abdomen and pelvis with and without contrast, retrograde x-ray, chest x-ray and cystogram. For each visit, the patient was asked if she was or could be pregnant, and she denied pregnancy each time. At the end of the seven weeks, an ultrasound showed a viable intrauterine pregnancy of seven weeks and one day.

A patient arrived in the emergency room with a chief complaint of back pain. She was asked if she was pregnant, and she stated no. X-ray films were read, revealing a fetus of over 31 weeks. The patient was notified of the pregnancy, at which time she stated her last menstrual period was seven months ago.

What You Should Know and Do:

- Radiation is energy that comes from different sources, including heat and light from the sun, microwaves or x-rays.
- A certain type of radiation, called ionizing radiation, may be strong enough to cause damage to human cells.
- Patients are exposed to different amounts of ionizing radiation during certain kinds of tests, including x-rays, computed tomography (CT) scans and fluoroscopy tests.
- Women who are pregnant or suspect they may be pregnant are advised to discuss with their physician the possible risks of radiation exposure to themselves and their fetus prior to having any type of x-ray, CT scan or fluoroscopy test.
- The risk of damage caused by x-rays, CT scans and fluoroscopy tests is low.
- Women who are pregnant may be exposed to ionizing radiation from these tests before they know they are pregnant.
- The risk to a fetus from most kinds of tests involving ionizing radiation is low.
- Ionizing radiation from certain kinds of tests add up over a patient's lifetime. It is important to tell your doctor about tests you have had in the past.

For more copies of these tips and other healthcare consumer information click on "News and Information" at www.patientsafetyauthority.org. For more information on the risks of pregnancy and diagnostic x-rays go to the March 2008 Advisory article "Diagnostic Ionizing Radiation and Pregnancy: Is There a Concern?" at the same website.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority



Knowing Your Medical History Can Prevent Unnecessary Surgery

Patients who do not know their full medical history are at greater risk to receive unnecessary surgery or medical care. Reports submitted to the Pennsylvania Patient Safety Authority show that most at risk are patients who are elderly and may suffer from some form of dementia. In some cases, the patient's loved one was responsible for knowing their medical history and was unable to provide the necessary information.

Three Real-Life Pennsylvania Cases within Two Weeks

The Pennsylvania Patient Safety Authority received three reports of attempted gall bladder removal in patients who had previously had their gallbladders removed within a two-week period. In each case, the patient was misdiagnosed with having gallstones after showing symptoms of the disease and testing positive after having an ultrasound. All three patients received the gallbladder surgery only for surgeons to discover there was no longer a gallbladder in each of the patients.

These cases share several characteristics that suggest potential risk factors for this type of problem:

- All three patients were of **advanced age**, with the youngest being over age 80.
- All three patients were **poor historians** and could not inform their doctors definitively that they had previously had their gallbladder removed. In one report, the patient suffered from Alzheimers-related dementia, and the other two reports indicate that family members were involved in providing the patient history.
- In each case, either the patient or a family member expressed **uncertainty** about a prior gallbladder surgery.
- All three reports cite an **ultrasonogram** that read positive for gallstones.
- In one case, the patient had a history of **unrelated prior abdominal surgery** that could have explained a visible surgical **scar** without necessarily alerting the surgeon to a likely prior gallbladder surgery.

The Authority received two additional reports of patients with prior gall bladder removal whose ultrasounds were read positive for gallstones. But these patients helped prevent the unnecessary surgery by speaking up and correcting the misdiagnosis. The patients in these cases were much younger than those in the cases described above and were not poor historians. These reports are accompanied by many others that show medical errors could have been prevented if the patient or family member were able to give a complete medical history.

What You Can Do:

- Know your medical history and ensure family members know your complete medical history.
- Write your medical history down, if necessary, and let family members know where to find the information.

For copies of these and more healthcare safety tips click on "News and Information" at www.patientsafetyauthority.org. For more information on this article, click on the December 2004 *Advisory* article.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority

What You Need to Know About Living Wills and DNR (Do-Not-Resuscitate) Orders



A living will is a document which is meant to tell healthcare providers what kind of medical care you do or do not want to receive if you are unable to express your wishes. A DNR order is a medical order written by your doctor indicating you do not wish to undergo cardiopulmonary resuscitation or “CPR” if your heart stops beating or you stop breathing. Living wills and DNR orders are meant to let healthcare providers know your values and wishes about medical care. However, between June 2004 and September 2008, over 200 reports submitted to the Pennsylvania Patient Safety Authority show that in part healthcare providers, as well as patients and families, may not understand the meanings of living wills and DNR orders. The data shows there are potential patient safety risks related to misinterpretation of living wills and DNR orders that include patients potentially receiving unwanted care and potentially not receiving care according to their wishes in a living will.

What You Need to Know About Pennsylvania Law and Living Wills:

Under Pennsylvania law, you may state your wishes about medical care through written instructions in an “advance healthcare directive” in the event that you become unable to make your own decisions. An “advance healthcare directive” can include a number of different documents intended to let your healthcare providers know your preferences about the medical care you wish to receive if you can no longer make your wishes known. Some advance healthcare directives are intended to appoint a person to make decisions on your behalf when you are unable to do so; some authorize another person to admit you to a nursing or other type of healthcare facility under certain circumstances; and some give specific instructions about what kind of medical care and under what circumstances that medical care is to be provided or withheld.

A living will is a type of advance healthcare directive you can use to indicate your wishes about medical care in the event that you become unable to make your own decisions. In Pennsylvania, a living will **comes into effect only if you are incompetent and you have an end-stage medical condition or you are permanently unconscious**. The law allows your doctor to decide if you are incompetent, which means you can no longer make decisions for yourself. You can change your mind about your living will at any time.

What You Need to Know About Living Wills and DNR Orders

DNR (Do-Not-Resuscitate) Order - A DNR order is a medical order that directs healthcare providers not to administer CPR if you have a heart attack or stop breathing. A DNR order only comes into effect if you suffer a heart attack or stop breathing. A DNR order does not mean other medical treatments or life-sustaining interventions will not be done. Know that with every hospital or nursing home visit you must restate your wishes in regard to any DNR order. DNR orders do not carry over from visit to visit.

You may have a living will or a DNR order or both. It is important to understand when each of them may become effective. If you have a living will you should know that even if your living will indicates that you do not want CPR, you may still receive CPR if you experience a heart attack or stop breathing if your living will has not come into effect or your doctor has not entered a DNR order into your medical record.

Miscommunication Issues Regarding DNR Orders

Another issue regarding DNR orders reported to the Authority is the potential for a breakdown in communication between healthcare providers and between healthcare providers, patients and families. Seventy-one reports submitted through PA-PSRS from June 2004 to September 2008 show some form of communication breakdown related to living wills and DNR orders. Of the issues reported, the majority of reports involve the lack of understanding of the meaning of the documents by families, lack of communication of the presence of a DNR order between healthcare providers, misidentification of patients and the failure to identify patients with DNR orders.

Key Points

- It is important for you understand what you are requesting when writing a living will or requesting a DNR order. Don't hesitate to discuss the matter at length with your healthcare provider to ensure you both understand what your wishes are in regard to a living will or a DNR order. Living wills are directed by law, however DNR orders vary from facility to facility as to what care is given.
- It is important for you to tell your family and healthcare providers about your wishes regarding life-saving medical treatment that you wish to have should you become unable to make decisions for yourself. A lawyer may or may not be present when you write your living will.
- DNR order requests need to be communicated every time you stay in a hospital or nursing home. The DNR order does not carry over from visit to visit.
- In Pennsylvania, a living will comes into effect only if you are incompetent *and* you have an end-stage medical condition or you are permanently unconscious.
- A DNR order is a medical order that directs healthcare providers not to administer CPR in the event of a heart attack or you stop breathing. However, DNR does not mean "do not treat."

For more information on living wills and DNR orders talk to your healthcare provider. For real-life cases and more information about the Pennsylvania Patient Safety Advisory article "Understanding Living Will and DNR Orders" go to the December 2008 Patient Safety Advisory at www.patientsafetyauthority.org.

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority

How to Reduce Your Risk of Falling

Each year thousands of men and women are disabled, sometimes permanently, due to a fall. A fall to an older person can mean lifelong consequences and a loss of independence. With age, many people become more susceptible to falls because of health conditions that cause them to lose their sense of balance. Sometimes, as shown in Patient Safety Authority data, certain medications can cause a person to become dizzy or light-headed.

Overall, falls ranked as the third highest number (17%) of events reported in healthcare facilities to the Pennsylvania Patient Safety Authority in 2006. Four percent were considered Serious Events, or events that caused harm to the patient. Older patients (age 65 and over) accounted for 62% of the total falls. These numbers are not surprising since older patients represent a larger representation in the healthcare system in general. However, there are steps that can be taken by the healthcare facility and the patient to reduce falls as much as possible. While Pennsylvania healthcare facilities have received their information on reducing falls through *Patient Safety Advisories*, here are some steps you can take in the hospital and at home to prevent falls. (*Additional Source: National Institute on Aging*)



In the Hospital:

- Keep personal items such as medications, drinks, books and the TV remote near you so that you do not have to get out of bed to reach them.
- Wear shoes/slippers with non-slip soles.
- Use all bars and handles made available to you for balance.
- Do not try to go to the bathroom without help if you are feeling dizzy.
- Do not try to go to the bathroom after taking certain medications such as sleeping pills. If you must go to the bathroom, ask for help.
- Be careful when using a wheelchair. Wheelchairs falling and tipping cause more deaths in persons over 65 years of age. Falls are more likely to occur when using a wheelchair if footrests, wheel locks or other parts do not work well or are loose.

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At Home:

- Have your eyesight and hearing checked often. Wear a properly fitted hearing aid and eyeglasses if told to do so by your doctor.
- Tell your doctor if you have recently fallen or have fallen a lot in the past.
- Tell your doctor and pharmacist about all the medications you take, including medicines you buy at the store, especially those used for pain or sleep.
- Talk to your doctor or pharmacist if the drugs you take make you tired, dizzy or faint.
- Limit the amount of alcohol you drink, the smallest amount can affect your balance.
- Don't get up too quickly after eating, lying down or resting. Low blood pressure may cause dizziness at these times.
- Keep your room temperature comfortable. Being too hot or too cold can make you dizzy.
- Use a walking stick or cane if your walking is sometimes unsteady or you sometimes feel dizzy.
- Wear shoes that fully support your feet and have rubber-soles and low heels.
- Don't wear smooth-soled slippers or just socks on stairs or waxed floors where you could easily slip.
- Keep up a regular program of exercise. This will help you become stronger. Check with your doctor to plan an exercise program that's right for you.
- Don't take chances. Do not walk on a freshly washed floor or stand on a chair or table to reach something. Use a "reach stick" (available at most medical supply stores) instead of bending to pick something up from the floor or to reach an item up high.
- Keep your walkways clear and keep living areas well lit.
- Use non-slip mats in the bathtub and shower floors.
- Make sure loose rugs in your living areas are taped down.

If you have problems with balance or dizziness, you may want to look into a medical monitoring system. This service works through your telephone line and provides a pager button to wear at all times in the home. Should you fall or need emergency medical assistance for any reason, a push of the button will alert the service. The service, in turn, will ask the emergency medical technicians in your community to help. There is a fee for such a monitoring service.

For copies of these tips and more healthcare consumer information, go to the Authority's website at www.patientsafetyauthority.org, click on "News and Information." For more information on the risk of falls, click on the *Advisories* for March and September 2004, September and December 2005 or any of the Authority's annual reports.

Patient Safety Tips



What You Can Do to Prevent Wrong-Site Surgery

Patients can take a more active role in their healthcare to prevent medical errors—in particular, errors that may occur during surgery, such as a wrong-site surgery. Data received by the Pennsylvania Patient Safety Authority shows that a near miss or actual wrong-site surgery occurs every other day in Pennsylvania. However, wrong-site surgeries are 100 percent preventable. In many cases, patients or their family members prevented the error by speaking up. Know what steps you can take to prevent a wrong-site surgery from happening to you or a loved one.

Real-life Pennsylvania Case

The following is a case of two wrong-site procedures done on one patient because the patient was placed in the wrong position.

The patient consented to having his RIGHT Achilles tendon repaired along with a joint on his LEFT hand. The patient was identified, the time out was done, and the surgical sites were marked correctly with the patient lying on his back. The patient was turned to lie on his stomach, which hid the markings from the surgeon's sight. The procedure was then performed in reverse with the repairs done to the LEFT Achilles tendon and a joint in the RIGHT hand.

What You Can Do to Prevent Wrong-Site Surgery and Prepare for Surgery:

(Additional Source: Agency for Healthcare Research and Quality)

- Don't be upset if each doctor or nurse asks the same questions about your identity, procedure, and the side or site of the operation. They are supposed to individually check with the patient rather than accept what someone else has written or said.
- Make sure that you know which physician is in charge of your care.
- In addition to your name, give healthcare professionals another identifier, such as your birth date, to confirm who you are.
- If you are having surgery, make sure that you, your doctor, and your surgeon all agree and are clear on exactly what will be done.
- Speak up if you have questions or concerns.
- If something does not seem right or if you do not understand something, say so. Ask for an explanation.
- Ask the doctor or nurse to mark the place that is to be operated upon.
- Make sure you have someone with you that you trust to be your advocate. This person can ask questions you may not think of and remember important information you may forget.
- Make sure all health professionals involved in your care know your medical history.
- Educate yourself about your procedure and don't be afraid to get a second opinion.

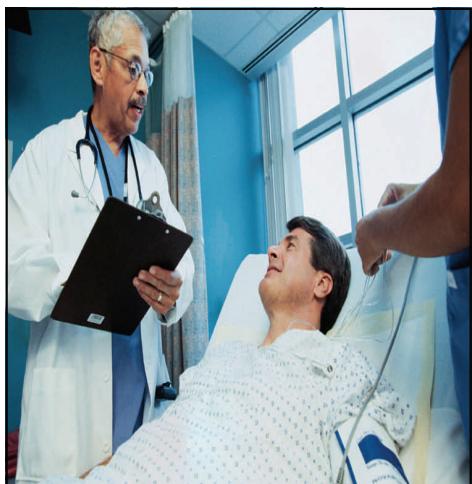
For copies of these and more healthcare safety tips click on "News and Information" at www.patientsafetyauthority.org. For more information on this article, click on the 2007 June *Patient Safety Advisory* article "Doing the 'Right' Things to Correct Wrong-Site Surgery."



Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority

What You Need to Know Before Surgery in an Ambulatory Surgical Facility



Patient Screening and Assessment in Ambulatory Surgical Facilities

Reports submitted to the Pennsylvania Patient Safety Authority from June 2004 to December 2008 show that patients who are not screened and assessed properly prior to surgery in an ambulatory surgical facility are at an increased risk of complications often requiring hospitalization. Of the 467 reports identified, 203 (43%) resulted in harm to a patient, most often involving a complication that required transfer to a hospital. Half of the total reports involved older patients (age 65 and over) and five percent (23 reports) involved a child. In 85 reports (18%) the patient had an undisclosed medical condition, such as sleep apnea, that may have put the patient at increased risk during the procedure.

Be Aware of Certain Medical Conditions

The most frequently missed medical conditions include heart and respiratory conditions such as obstructive sleep apnea (OSA). OSA is undiagnosed in an estimated 80 percent of affected patients with cases expected to rise five to 10 times in the next decade. For more sleep apnea consumer tips go to the Authority's website. Other medical conditions that may place a patient at increased risk of complications when undergoing a procedure in an ambulatory surgical facility include:

- Cardiovascular disease
- Obesity
- End-stage renal disease
- Peripheral vascular disease
- Positive HIV status
- The requirement to have to go under certain types of anesthesia
- OR procedures lasting greater than an hour
- Malignancies (Cancer)

If you have, or think you may have, any of these medical conditions be sure to let your healthcare provider know before undergoing any surgery.

What Else You Should Know Prior to Surgery in an Ambulatory Surgical Facility:

- Make sure you provide your primary care physician and/or your surgeon with as much information on your medical history and current medical condition that you can.
- Make sure you provide your primary care physician and/or your surgeon with an up-to-date list of medications you are currently taking, including any over-the-counter medication or herbal supplements.
- If you have a primary care physician, make sure he or she provides as much detailed information about your medical history as possible to the surgeon performing your planned procedure. The staff where your surgery is being performed should also know your detailed medical history.
- The ASF should receive your medical information from your primary care and/or surgeon about your medical history and your planned surgical procedure. Make sure that the ASF has received your medical information prior to surgery.
- You can expect a nurse from the ASF where your surgery is scheduled to call you and conduct a screening before your procedure. You may also be asked to come to the ASF for a face to face screening before your surgery. The nurse will ask you questions about your personal and family medical history as well as your current medical condition. Make sure you provide as much up-to-date information as possible.
- When you arrive on the day of your surgery, a nurse at the ASF will review and verify the information received from you and your primary care physician and/or surgeon about your medical history and medications.

For more information on patient screenings and assessments in ASF's go to the 2009 March *Pennsylvania Patient Safety Advisory* article "Patient Screening and Assessment in Ambulatory Surgical Facilities" at www.patientsafetyauthority.org.

Patient Safety Tips



Do you have Obstructive Sleep Apnea?

Obstructive sleep apnea (OSA) is a common sleep disorder that causes recurrent episodes of complete and partial airway collapse during sleep, resulting in the failure to breathe properly. Approximately 80-90% of OSA patients are undiagnosed. The Pennsylvania Patient Safety Authority has received over 250 reports that show obstructive sleep apnea as a contributing factor in causing those events. About 20% of those events are considered Serious Events or events that caused harm to the patient. Three deaths were also reported with obstructive sleep apnea cited as a contributing factor. The reports included medical and surgical patients in both ambulatory surgical centers and hospitals. Answer the following questions to determine if you should see a physician for obstructive sleep apnea.

Obstructive Sleep Apnea Screening Tool

This questionnaire is a sample tool to screen for obstructive sleep apnea. It is not a substitute for a sleep disorder evaluation by a qualified physician. However, it may help you determine whether or not you should consult your physician for further evaluation. If you answer "Yes" to any of these questions, please see your doctor.

	Yes	No
1. Do you snore loudly (e.g. can you be heard through a closed door)?	—	—
2. Does your bedroom partner complain about your snoring?	—	—
3. Does your snoring wake you up at night?	—	—
4. Do you or your bedroom partner notice that you make gasping or choking noises during sleep?	—	—
5. Has your bedroom partner ever noticed that you have stopped breathing during sleep for 10-30 seconds?	—	—
6. Do you have a dry mouth, sore throat, or headache in the morning?	—	—
7. Do you often fall asleep during the daytime when you want to stay awake?	—	—
8. Are you often tired during the day?	—	—

For copies of this questionnaire click on "News and Information" at www.patientsafetyauthority.org. For more information on this article, click on the 2007 September *Patient Safety Advisory* article "Obstructive Sleep Apnea May Block the Path to a Positive Post Operative Outcome."

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority



Why You Should Get the Pneumonia Vaccine

Flu and pneumonia are significant causes of death from vaccine-preventable diseases, with 90 percent of these deaths occurring in adults age 65 or older, including those residing in long-term care facilities. For those who have an underlying health condition (e.g., diabetes, heart disease), vaccines can help protect from making your underlying condition worse. On average, only 42 percent to 66 percent of long-term residents received vaccinations. Pennsylvania nursing homes ranked 26th for residents given the pneumonia shot. Pennsylvania is about three percent below the national average in giving the pneumonia shot to its nursing home residents. Learn more about the pneumonia vaccine below.

KEY FACTS ABOUT PNEUMONIA

(from the Centers for Disease Control and Prevention)

What is Pneumococcal Disease (Pneumonia)?

Pneumococcal disease is an infection caused by a type of bacteria called *Streptococcus pneumoniae* (pneumococcus). When these bacteria get into the lungs, they can cause pneumonia. They can also get into the bloodstream (bacteremia) and/or tissue and fluids surrounding the brain and spinal cord (meningitis). Pneumococcal infection kills thousands of people in the United States each year, most of them 65 years of age or older.

What Are the Symptoms of Pneumococcal Disease?

The symptoms of pneumococcal pneumonia include high fever, cough, shortness of breath and chest pain. The symptoms of pneumococcal meningitis include stiff neck, fever, mental confusion and disorientation, and visual sensitivity to light. The symptoms of pneumococcal bacteremia may be the same as some of the symptoms of pneumonia and meningitis, along with joint pain and chills.

Why is Prevention of Pneumococcal Disease Important during Influenza Season?

Influenza infections can make people more likely to develop bacterial pneumonia. Pneumococcus is the most common cause of bacterial pneumonia. Pneumococcal infections are a serious complication of seasonal and 2009 H1N1 influenza infections and can cause death.

How Can High-Risk Individuals Protect Themselves from Pneumococcal Disease?

There is a vaccine to protect high-risk individuals 2 through 64 years of age against serious pneumococcal disease. The vaccine, pneumococcal polysaccharide vaccine (PPSV), is safe and effective. Most people need a single dose of the pneumococcal vaccine in a lifetime. All children less than 5 years of age should receive a different vaccine called pneumococcal conjugate vaccine (PCV7); high risk children 2 to 4 years of age need both pneumococcal vaccines.

Who Should Get Pneumococcal Polysaccharide Vaccine (PPSV)?

Approximately 70 million people who should be receiving PPSV are not yet vaccinated (National Health Survey, 2007).

PPSV is recommended for:

- People who are 65 years of age or older
- People 2 years of age and older who have a chronic illness such as: cardiovascular or lung disease, sickle cell disease, diabetes, alcoholism, chronic liver disease, cerebrospinal fluid (CSF) leak, a cochlear implant.
- People 2 years of age or older with a weakened immune system due to illnesses such as: HIV infection, AIDS, chronic renal failure, nephritic syndrome, organ or bone marrow transplantation, Hodgkin's disease, leukemia, lymphoma, multiple myeloma, generalized malignancy.
- Those receiving immunosuppressive therapy (e.g., steroids).
- Those who have had their spleen removed or whose spleen is dysfunctional due to an illness such as sickle cell disease.
- Residents of nursing homes or long-term care facilities.
- People 19 through 64 years of age who smoke cigarettes or have asthma.

During the 2009-10 influenza season, vaccinating people 2 through 64 years of age who have the above risk conditions is most important because people in this group may be more likely to develop secondary bacterial pneumonia after an influenza infection. Healthy persons less than 65 years of age are not recommended to receive PPSV.

Can Adults get Pneumococcal (PPSV) and Influenza Vaccines at the Same Time?

Yes, pneumococcal vaccine may be given at the same time as influenza vaccine. Pneumococcal vaccine can be given at any time during the year. Because the adult groups for whom pneumococcal and seasonal influenza vaccines are recommended are similar, the need for pneumococcal vaccination should also be evaluated at the time of 2009 H1N1 influenza vaccination. Persons who cannot remember if they've ever had pneumococcal vaccine should still be vaccinated.

During the 2009-2010 influenza season, work with your healthcare provider to determine when you can get your pneumococcal, seasonal influenza and 2009 H1N1 influenza vaccines.

Is Pneumococcal Vaccine (PPSV) Safe?

The pneumococcal vaccine is considered safe. Some people experience mild side effects, but these are usually minor and last only a short time. When side effects do occur, the most common include swelling and soreness at the infection site. A few people experience fever and muscle pain. Anyone who has a severe allergy to any part of the vaccine (e.g., eggs) should not get that vaccine. As with any medicine, there are very small risks that serious problems could occur after getting the vaccine. However, the potential risks associated with pneumococcal disease are much greater than the potential risks associated with pneumococcal vaccine. You cannot get pneumococcal disease from the vaccine. Ask your healthcare provider if you should delay receiving pneumococcal vaccine if you have an illness with fever or other active infection.

For more information about how you can get the pneumonia vaccine contact your healthcare provider. For more information about the pneumonia vaccine, go to the CDC web site at www.cdc.gov or call 800-CDC-INFO (800-232-4636). For more consumer tips on the flu vaccine or other health issues go to the Authority's web site at www.patientsafetyauthority.org, click on "News and Information, then Patients and Consumers."

Patient Safety Tips

Produced by the Pennsylvania Patient Safety Authority



Why You Should Get the Flu Vaccine

Flu and pneumonia are significant causes of death from vaccine-preventable diseases, with 90 percent of these deaths occurring in adults age 65 or older, including those residing in long-term care facilities. For those who have an underlying health condition (e.g., diabetes, heart disease), vaccines can help protect from making your underlying condition worse. On average, only 42 percent to 66 percent of long-term residents received vaccinations.

Pennsylvania nursing homes ranked 38th for residents given the flu shot. Pennsylvania is about three percent below the national average in giving the flu shot to its nursing home residents. Learn more about the flu vaccine below.

KEY FACTS ABOUT SEASONAL FLU (from the Centers for Disease Control and Prevention)

Influenza is a serious and contagious disease.

Each year in the United States, on average, seasonal flu complications account for the hospitalization of more than 200,000 people and 36,000 deaths. This year there is a new influenza virus called 2009 H1N1. The Centers for Disease Control and Prevention expects both the seasonal and the H1N1 virus to cause illness, hospital stays, and deaths and is preparing for an early and possibly severe flu season. Flu like symptoms include: fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, fatigue and possibly vomiting or diarrhea.

The CDC urges you to take 3 actions to protect against the flu:

Take time to get a flu vaccine.

CDC recommends a yearly seasonal flu vaccine as the first and most important step in protecting against seasonal influenza. Vaccination is especially important for people at high risk of serious flu complications, including young children, pregnant women, people with chronic health conditions like asthma, diabetes or heart and lung disease and people 65 years and older.

Seasonal flu vaccine also is important for health care workers, and other people who live with or care for high risk people to keep from making them sick. A seasonal vaccine will not protect you against 2009 H1N1. Ask your doctor if you should get a 2009 H1N1 vaccine. People at greatest risk for 2009 H1N1 infection include children, pregnant women, and people with chronic health conditions like asthma, diabetes or heart and lung disease. For more information on H1N1 Novel Influenza virus visit the Pennsylvania Department of Health web site at www.h1n1inpa.com.

Take everyday preventive actions.

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Try to avoid close contact with sick people and, while sick, limit contact with others as much as possible to keep from infecting them.
- If you are sick with flu-like illness, stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities.
- Follow public health advice regarding school closures, avoiding crowds and other measures to keep our distance from each other to lessen the spread of flu.

Take flu antiviral drugs if your doctor recommends them.

Antiviral drugs can make illness from seasonal or 2009 H1N1 flu milder and shorten the time you are sick and may also prevent serious flu complications.

Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu by keeping flu viruses from reproducing in your body. Antiviral drugs are not sold over-the-counter and are different from antibiotics.

The priority use for antiviral drugs this season is to treat people who are very sick (hospitalized) or people who are sick with flu-like symptoms and who are at increased risk of serious flu complications, such as pregnant women, very young children, people 65 and older and anyone with certain chronic health conditions. (Most people have been able to recover at home from 2009 H1N1 without needing medical care and the same is true of seasonal flu.)

For treatment, antiviral drugs work best if started within the first two days of symptoms.

For more information, visit : www.cdc.gov/h1n1flu/ or www.flu.gov or call 800-CDC-INFO.

Consumers can go to the Pennsylvania Department of Health's web site at www.health.state.pa.us for locations to receive the flu shot by zip code, click on "Focus on Flu."

For more information about the studies done on vaccinations, go to the 2009 December *Pennsylvania Patient Safety Advisory* article “Increasing Influenza and Pneumonia Vaccination Rates in Long-Term Care” at the Authority’s web site www.patientsafetyauthority.org. More consumer information about the Pneumonia vaccination is also available at the Authority’s web site.



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