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POISONS are all around us. They are solids, liquids, sprays, things you can eat, drink, or smell, invisible things. Poisons are things that can make you sick or even kill you. Many common items found around the house are poisonous such as:

- Medicines (egs. Too much cough syrup)
- Cleaning products
- Batteries
- Bug sprays
- Laundry products
- Vitamins with minerals (the iron can be poisonous in large amounts)
- Cigarettes
- Alcohol
- Gasoline
- Mouthwash
- Houseplants, yard plants
- Smoke from fires
- Exhaust fumes from cars

Poisons can be found anywhere, in almost every room of your home. Some poisons can be very enticing because they smell good. This can be dangerous for our consumers. Even bug sprays can be scented these days. Do you have consumers who might like to eat or drink something that would not be good for them? How about those pretty flowers everyone planted off the patio? Are those

poisonous? Some of them probably are. And they ARE pretty and they smell good. I wonder if they taste good....

We all know about the items like gasoline, cleaning products, and medicines that might need to be in a secure place depending on individual abilities and safety assessments. But, are you looking at the less obvious things? Look around the house and see how many things you can find that could be poisonous that are not being considered.

**POISON CONTROL SAFETY TIPS**

1. Store poisons in their original containers. **DO NOT USE** food containers to store household chemicals.
2. Don't leave poisonous products out...even for a minute, if there is an individual who could be hurt by them.
3. Always follow directions for household and chemical products. Never mix different chemicals together to create your own super-concoction. The poisonous gas you create could do some damage to everyone's lungs...or worse.
4. When spraying pesticides, wear protective clothing. These are absorbed very quickly through the skin. Protect yourself!
5. Dispose of old chemicals.
6. Call the **POISON CONTROL NUMBER** if exposure occurs

**1-800-222-1222**

7. For **inhaled poisons**, get to fresh air immediately, then call.
8. For **poison on the skin**, take off any clothing with poison on it, rinse the skin with running water for 15 minutes and call.
9. For **poison in the eyes**, rinse the eyes with running water for 15 minutes and call.
10. If the **person who was poisoned has passed out or stopped breathing**, call 911 immediately.

Carbon monoxide (CO) poisoning is more common during cold weather because of the fuel-burning appliances and equipment used to heat homes. CO poisoning causes hundreds of deaths each year. Furnaces, water heaters, stoves, fireplaces, kerosene heaters, portable generators and car engines all create CO vapors. It is colorless, odorless, and tasteless...which makes it even deadlier. Insure you ventilate any room in which kerosene or similar heaters are being used. Do not leave your car engine running in an enclosed space. Additionally, you should install a carbon monoxide alarm outside every sleeping area.

The American Association of Poison Control Centers can be found at <http://www.aapcc.org>



# E-prescribing

Electronic prescribing or e-prescribing, as it is called, is a way for the prescriber (physician, nurse practitioner, etc.) to send a prescription (Rx) directly to your pharmacy from their office or other point-of-care via the internet. This electronic Rx would be more legible, accurate, and the chance of errors would be greatly decreased utilizing this system. The Medicare Modernization Act (MMA) of 2003 was the first legislation to address e-prescribing and from there the concept has been transformed with the development of standards by CMS (Center for Medicare and Medicaid Services) in 2005. Pilot projects were completed in 2006 to test these standards in a real world application. In 2007, results of the pilot program led to further standards

related to e-prescribing with the finalized rule culminating in April 2008 with publication in the Federal Register. This final rule gives e-prescribers some tools to assist them by providing drug information, patient histories, and other notifications to cue the prescriber to certain potential concerns with a particular patient's prescription. These tools include:

- **Formulary and Benefit Information**—the prescriber will be able to access information about what drugs are covered by your prescription drug plan. With this information, the prescriber can choose a medication that is effective for you as well as one that will cost you the least amount of money.
- **Medication Histories**—this will give the prescriber information about other medications you are taking or have taken, including those prescribed by other physicians or nurse practitioners. This is essential information in determining potential drug interactions to reduce the number of adverse events.
- **Fill Status Notifications**—your prescriber can choose to receive an electronic notice from the pharmacy that tells them when you filled a med, when you picked it up or it was delivered to you, if you got partial fills, and other information that



would be useful to a practitioner to evaluate medication compliance.

E-prescribing has been professed to have multiple benefits to our current system including:

- Improved patient safety
  - Reduces phone calls and call-backs to pharmacies for clarification
  - Eliminates faxing orders
  - Makes refill requests more streamlined
  - Makes Prior Authorization processes quicker and easier
- Prescribers have more mobility as prescriptions can be sent from an internet-capable computer from basically any location
  - Improves formulary adherence—these are the medications that are listed as “preferred” on your Prescription Drug Plan and will cost you less than the non-preferred medications

Controlled substances are currently not permitted to be filled by e-prescribing methods.

Legislators have been drafting bills to give benefits to physicians choosing to use e-prescribing methods, by providing financial support to purchase computers and software. It appears that the push is on to encourage physicians to begin using e-prescribing methods as they move into the future. There is discussion at the legislative level that Medicare reimbursement to physicians in the future may have a tiered structure depending on whether or not they use e-prescribing systems.

The day is coming when the prescription pad will be a thing of the past. E-prescribing is still a concept that needs some tweaking before it is embraced as the preferred system for obtaining medications. Many advantages can be identified on the side of e-prescribing and it will be difficult for many practitioners to say goodbye to their pens and pads. But it is the wave of the future.....e-prescribing.

## Nature vs. Nurture

Johns Hopkins researchers are beginning to get some clues to why people become more prone to disease in their later years. In research focused on the genetic makeup of people living in Iceland and in Utah, researchers have uncovered some interesting phenomena. They have known for some time that we all have genes that are active and others that are silent. This current research looked at the chemical changes that happened around these genes and evaluated how they differed. This phenomena, called "methylation", looks at how and when groups of carbon and hydrogen (methyl groups) attach to a person's DNA and WHERE they attach. The degree of methylation is a part of a person's own makeup and, they discovered, it also runs in families. This tells us that if one person in a family had increased methylation, other members of the family probably would as well. So....what does this mean to you and me?

The expression of genes causes disease to become active in your body. Some diseases occur early in life, like cystic fibrosis. This happens due to abnormal genes passed on from parent to child. Disease that does not show up until later in life is believed to be the interaction of genes and environmental factors. If you have an unhealthy lifestyle, are a smoker, eat low nutritional foods, don't exercise, etc...you are increasing the chances of increased methylation along your genome...and the subsequent 'turning on' of certain gene characteristics which may cause disease.

Genetics vs. Environment. It is becoming more and more likely that it is the interaction of the environment on genetics that culminates in diseases like heart disease, Diabetes, and others. Identifying this chemical change that occurs surrounding certain genes will lead to research on how to 'turn off' the increase in the methylation process, therefore shutting down the chain of events that causes these diseases.



## HEAT PACK OR COLD PACK?

It's important to use heat and cold correctly to properly heal an injured area of the body. Never leave a pack on the skin longer than recommended or you can cause frostbite or burns to the skin. A **COLD PACK** decreases the blood flow to the injured area which will decrease bleeding, pain, and muscle spasms. It also reduces swelling and reduces recovery time. A clever way to remember what to do with a **COLD PACK** is to remember the word "RICE"—an acronym that stands for "REST, ICE, COMPRESSION, and ELEVATION." Use this method for the first few days after an injury by applying the cold pack on top of a damp cloth that is next to the skin. Do this 2-4 times a day for 10 minutes each time, or as recommended by your doctor. A **HEAT PACK** will increase blood flow to an injured area and is generally used AFTER the swelling phase has passed. It will promote healing by increasing blood flow to assist various white blood cells to come into the injured area to 'clean up' any debris that the injury has caused in the tissue. It will also begin to re-oxygenate damaged tissue so it can mend itself. Putting a **HEAT PACK** or pad on the skin for 15 minutes 2-4 times a day is suggested. Be careful of those with sensitive skin such as diabetics, who may burn easily and may not feel pain due to neuropathy (nerve damage). More is not always better. Cold packs and heat packs should be a part of every household's first aid kit.

## Dealing With Aphasia

Aphasia is a communication disorder that affects an individual's ability to process language and does not necessarily have an effect on the individual's intelligence. Aphasia makes it difficult for a person to speak and understand others and sometimes causes difficulty in reading and writing also. It affects 1 in every 250 people and is more commonly seen in those diagnosed with Parkinson Disease, cerebral palsy, muscular dystrophy, and in those who have had a stroke. It can also result from a traumatic brain injury, brain tumor or other brain problem.

Individuals who have aphasia often will also have weakness or paralysis of their right arm and right leg. This is because there was some damage to the left side of their brain which controls movement to the right side of the body.

Sometimes, people who have had a brain injury such as a stroke, may have aphasia for a short time and then it will fade until symptoms are almost gone or completely gone. If aphasia symptoms last longer than 3 months, complete recovery is not common, but can still occur.

Aphasia does not affect the individual's intelligence but because he or she may have problems remembering words or may take a long time to express an idea, it is sometimes assumed that they are intellectually disabled or mentally ill.

Some common types of aphasia are:

- Global aphasia—the most severe type of aphasia. Persons with this type cannot produce many recognizable words and they do not understand much of what they hear. It is sometimes seen immediately after a stroke and can improve greatly if the brain damage was not too extensive.
- Broca's aphasia—this type of aphasia is known for its limited speech pattern, less than 4 words at a time with the formation of sounds being slightly different than usual. It is a halting speech pattern that requires much effort.
- Wernicke's aphasia—in this type of aphasia there is not much difficulty in producing speech, but understanding of what others are saying is limited.
- Anomic aphasia—these individuals have a persistent inability to remember key words they need to formulate sentences and ideas. Their speech will be complex due to the creation of additional words and concepts to explain the forgotten words. They kind of "go around the barn to get to the house".

No medication exists to cure aphasia. In some instances, surgery has been successful when a brain tumor is present. Speech therapy is an option to help the individual maximize their remaining skills.



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## THE POST SCRIPT

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**All articles to be considered for submission to this newsletter should go to Georgia Swank at the above email address. We welcome your comments and ideas!**

# INFECTION CONTROL TIPS

We will soon be moving into cold and flu season and all of us who work with individuals living in groups should be aware of some simple and yet, effective measures for preventing the spread of infection. These tips will keep your consumers healthier!

1. Throw away toothbrushes 2-3 days after starting an antibiotic for an infection such as the flu or a cold. If a person keeps using the toothbrush, he or she risks the chance of re-infection and getting sick all over again...sometimes worse. Replace this toothbrush with a brand new one.
2. Another option is to wash the toothbrush in the dishwasher. The high temperature should be very effective in killing most germs.
3. Discourage the use of cloth or reusable handkerchiefs to blow or wipe the nose. This allows germs to spread every time a person touches the cloth and anything else.
4. Supply disposable tissues in an easy-to-reach location for anyone who has the sniffles, sneezes, or coughs. A trash can with disposable liner should be used. Any system that will prevent handling or re-handling of tissues will prevent infection.
5. Wash hands and assist your consumers to wash their hands several times a day.
6. Use disinfectant daily to clean 'high-touch' areas such as doorknobs, telephones, counters, toilet flush handles, faucets, etc.

## What do GERD & Broken Bones have in Common?

For the past 2-3 years there has been ongoing evidence that the group of medications known as PPIs (proton pump inhibitors) have some side effects that may require some attention in some individuals. PPIs include such medications as Prevacid, Prilosec, Protonix, Nexium, and Aciphex and many of our consumers are on these medications for GERD (gastroesophageal reflux disease, often just called 'reflux') or heartburn symptoms. PPIs are also used in combination with antibiotics in the treatment of *Helicobacter pylori* (*H. pylori*) infections which cause ulcers, but this is generally a short term use.

Various small studies since 2006 have proposed a link between PPI use and increased risk of hip fracture, low bone mineral density, and potential risk of additional fractures. Additionally, research has identified that some individuals treated for acid reflux with a PPI can still have reflux due to the medication actually increasing bile. The treatment team may think that they helping the individual when, in fact, they are

making the bothersome and potentially dangerous symptoms...worse. Do not assume that a medication will always do what it is supposed to in any given individual. Everyone has a unique set of genetics and environmental factors that interface with the medications that they take. While every medication may be the 'drug of choice' for someone...it can be a bad choice for some others due to side effects or interactions. Always pay close attention to anyone started on a new medication, even a medication that seems rather harmless...like a drug for reflux.

In a recent observational study of 15,792 patients published in the Canadian Medical Association Journal (CMAJ), findings related that people who used Proton Pump Inhibitors for 7 or more years are at increased risk for osteoporosis-related bone fractures. PPIs have proven to be an effective treatment for many individuals with GERD. The component of this that we may not be to-

tally aware of, is that, once someone is on a PPI for GERD and it is effective for them, this will probably become a medication that they will take forever until something new comes along. Therein lies the potential problem because it is with the long-term use that the major issues can develop.

Many of our consumers are already taking a variety of other medications that can have a negative effect on bone density...such as anticonvulsants for seizures. And many of these same individuals take a PPI for GERD. Both of these medication classes have been shown to cause osteoporosis with long term use AND they are medications for diagnoses that would likely require lifelong treatment. Careful consideration of the use of these medications, fall risk assessments, and bone density testing should be a part of the plan for individuals on these medications especially if they are on other meds that can cause osteoporosis, such as anticonvulsants.