

Dangerous mix-ups between a cancer medicine and a thyroid medicine

Dangerous mix-ups have occurred in community pharmacies between two powerful medicines: **propylthiouracil** (pronounced pro-pull-thy-our-a-sill)—a medicine used to treat an overactive thyroid, and **Purinethol (mercaptapurine)**—a chemotherapy (cancer) medicine used to treat leukemia.

In one case, a child with leukemia received 50 mg tablets of **propylthiouracil** instead of 50 mg tablets of **Purinethol**. The child had taken **Purinethol** before for his cancer, so his parents told the pharmacist that the tablets looked different than expected. The pharmacist said the tablets looked different because they were purchased from a different company. He reassured the parents that the prescription was filled correctly.

The child took the wrong medicine for 6 months, because the same mistake happened with the next five refills. No immediate harm occurred, but long-term problems are possible since the child missed 6 months of chemotherapy.

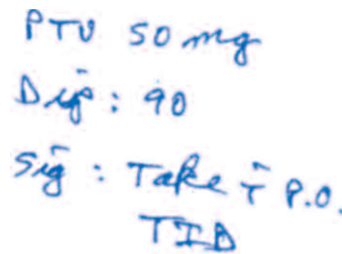
Harm is also likely to occur if prescriptions for the thyroid medicine (**propylthiouracil**) are filled with the cancer medicine (**Purinethol**). To cite one instance, a pregnant woman with thyroid disease

received a prescription written as “PTU” 50 mg daily. See a copy of the actual prescription below. Her doctor used the common but dangerous abbreviation of PTU for **propylthiouracil**.

The pharmacist thought the abbreviation stood for **Purinethol** and filled her prescription with this powerful cancer medicine. The woman did not bring the difference in appearance between this prescription and previous prescriptions to the attention of the pharmacist. After 5 weeks of taking the cancer medicine, she developed a fever, a painful tear in her rectum, and vaginal bleeding. She was admitted to the hospital with a serious infection. (Cancer medicines often lessen the ability to fight off infections.)

The woman, who was 16 weeks pregnant, lost the baby and required surgery to deliver the placenta. Her heart stopped beating during surgery, and despite multiple attempts to save her, she died. Her death remained a mystery until her family gave her pharmacy prescription records to the medical examiner.

See **Check it out!** for ways to help prevent mix-ups when you pick up prescriptions from the pharmacy. the medical examiner.



PTU 50 mg
Disp: 90
Sig: Take 1 p.o.
TID

Prescription for “PTU 50 mg Disp (dispense): 90 (tablets) Sig (directions): Take 1 p.o. (by mouth) TID (three times daily).” PTU was mistaken as an abbreviation for a cancer medicine, not the intended thyroid medicine.

Check it out!

Follow these suggestions to reduce the risk of receiving the wrong medicine from the pharmacy.

- ✓ Review your prescription with your doctor or nurse. Ask them to clarify abbreviations. Make sure you can read what is written. If possible, have the doctor write BOTH the brand and generic drug names.
- ✓ Review your prescription with your pharmacist. Tell him or her exactly why you need to take the medicine.
- ✓ Speak with a pharmacist when picking up your prescription, especially if it is new. Ask how you should take the medicine.
- ✓ Read the drug information sheet you receive with your prescription. If the name of the medicine on the sheet is different than expected or if it doesn't make sense, your prescription may be incorrect.
- ✓ If the prescription is a refill, open the bottle before leaving the pharmacy to make sure the medicine looks the same as before. If it looks different, ask the pharmacist to recheck the prescription.
- ✓ If the medicine seems to make you feel sick or worsen your condition, call your pharmacist and doctor and bring the medicine with you if you visit them.

Fall is coming, so roll up your sleeve and get a flu vaccine. This year, the vaccine is recommended for children 6 months to 18 years, adults 50 years and older or with chronic illnesses, pregnant women, and others at risk for getting the flu.

Prenatal vitamins and pregnancy

Vitamins and other nutrients are important for a healthy pregnancy. Women who are pregnant or trying to get pregnant often receive nutritional counseling and/or a prescription for prenatal vitamins. A prenatal vitamin will not make up for poor nutrition. But it can provide a woman with vitamins and minerals they may not be getting in food.

It is very important for a woman to tell the pharmacist if she is pregnant or trying to get pregnant when filling prescriptions. It may seem that a prescription for prenatal vitamins makes it obvious that you are pregnant or trying to get pregnant. But prescriptions for prenatal vitamins have been misread and filled with the wrong medicine.

■ A physician wrote a prescription for prenatal vitamins using the abbreviation “PNV.” The pharmacist assumed “PNV” was **Penicillin VK (penicillin V potassium)**, an antibiotic that is used to

treat infections. When the pregnant woman picked up the medicine and brought it home, her husband noticed the mistake.

■ A physician wrote for **PrimaCare One (prenatal vitamin)** for a pregnant woman. The handwritten prescription was not clear. The pharmacist misread the prescription as **prednisone**, a steroid used to reduce swelling from arthritis, allergies, and rashes. The pregnant woman picked up the prescription and did not notice that the drug name on the bottle was **prednisone**. She took the **prednisone**, which may cause birth defects such as a cleft palate.

If your pharmacist knows you are pregnant, misreading a prescription for prenatal vitamins as another medicine will be less likely—especially one that can cause birth defects. Reading the label on the prescription bottle and the medicine information sheet that comes with your prescription can also help you identify a mix-up.

60-second safety tip

■ **Phone-in foul-ups.** Doctors often call new prescriptions into your pharmacy so you do not have to pick up a handwritten prescription. Unfortunately, prescriptions that are communicated orally can be misheard, as in the following example. A doctor left a message on the pharmacy’s voice-mail system prescribing **Prozac (fluoxetine)** 10 mg daily for his patient. This medicine is used to treat depression. The pharmacist thought the doctor said **Prograf (tacrolimus)**. **Prograf** is used to prevent rejection of transplanted organs. Fortunately, when the man picked up the medicine, the pharmacist reviewed the prescription with him. The pharmacist stressed the importance of taking the **Prograf** exactly as prescribed to prevent rejection of his transplanted organ. The man told the pharmacist he never received an organ transplant, and the prescribed medicine was supposed to treat his depression. The pharmacist reviewed the prescription again, realized his mistake, and filled the prescription correctly. Talking to the pharmacist when picking up your prescription can help detect an error.

Contact Information

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In The News!



FDA alert: simvastatin and amiodarone.

Cholesterol-lowering medicines can cause a variety of muscle problems. These side-effects can range from mild soreness to a potentially deadly condition called rhabdomyolysis (pronounced rab-doe-my-o-ly-sis). Rhabdomyolysis is a breakdown of muscle fibers in the body. The damaged muscles release harmful by-products that clog the kidneys, causing kidney failure. In August 2008, the Food and Drug Administration (FDA) issued an alert to warn healthcare providers and the public that the risk of rhabdomyolysis is greater when patients take more than 20 mg daily of **simvastatin (Zocor)** along with another medicine, **amiodarone**. **Simvastatin** is a common cholesterol-lowering medicine, and **amiodarone** is a heart medicine used to control irregular beats. (Read the full alert at: www.fda.gov/Cder/drug/InfoSheets/HCP/simvastatin_amiodaroneHCP.htm.) Medicines that contain **simvastatin** can also lead to this problem, including **Vytorin (ezetimibe and simvastatin)** and **Simcor (extended-release niacin and simvastatin)**. Many cholesterol-lowering medicines taken with other drugs can also increase the risk of rhabdomyolysis:

- Medicines used to lower triglyceride levels, such as **Lopid (gemfibrozil)**
- Medicines used to treat fungal infections, such as **Diflucan (fluconazole)** and **Sporanox (itraconazole)**
- Certain antibiotics, such as **Biaxin (clarithromycin)** and **erythromycin**

If you or family members take **simvastatin** and other medicines listed, call your doctor if you develop symptoms of rhabdomyolysis such as pain, muscle cramps, tenderness, stiffness, and muscle spasms.

▶ Brand name medicines appear in green; generic medicines appear in red.