

Have you ever wondered what you should do with those old medications? We all seem to have them. Maybe we didn't finish it or it didn't agree with your stomach. Maybe it just wasn't working and your doctor prescribed something else. What to do with those leftover medicines is a question we are asked at the Board of Health every once in a while. The interesting thing about those calls is that they usually knew the right answer and they just wanted to make sure. For the time being, the answer is to dispose of pharmaceuticals in the trash because it goes off to a lined and approved landfill. At least a landfill is designed to hold in place and contain what we do not want getting into our groundwater. We have enough hormones, chemicals, and medicines entering our groundwater as wastewater from our bodies; we don't need to add to it by dumping medicines into the toilet.

That was the old way, though, and it can be difficult to undo habits. People had good intentions by dumping medicines down the toilet: be rid of them in such a way that they can't do any harm, such as poison a child. So much has changed in one generation, though. In my childhood, the little cabinet behind the mirror in the bathroom might have held a bottle of aspirin, some witch hazel, rubbing alcohol and hydrogen peroxide, along with the cotton balls and dental floss. Nowadays your average bathroom is a veritable pharmacy. Along with prescription medicines being common in most households, we face almost unlimited choices when we go to the supermarket, discount store or pharmacy. Our toothpaste contains whiteners, skin creams may have hormones and there's a pill for every ailment or complaint. It all adds up to a huge amount of chemistry that should not be in our groundwater, for groundwater becomes our drinking water.

Someday, septic systems will have to be designed in such a way that personal-care products and pharmaceuticals can be neutralized, denatured or filtered out. Bioremediation is a field of study holding so much promise for just that kind of situation. In this field, bacteria is a good word. Different bacteria with different habits and different diets are being discovered all the time. One loves to gobble up oil; another thrives on pollution. It's being used on oil spills and in some innovative/alternative septic systems. But this is not the norm, at least not yet. And until that day comes that we know with certainty, what our septic system can handle and treat, completely and safely, it is our responsibility to keep chemicals out of it.

Dumping the leftover medicines into the trash headed for the landfill is not a perfect solution either. Someday the landfills will be full or we will have run out of room for landfills. Or that lining and that cap we thought would last forever, begin to leak and leach. For right now, though, it's the best we can do. Sending the unwanted pharmaceuticals off to the lined landfill is better than burning it at an incinerator, a practice that still continues in places. I'm curious enough about that that I'll just have to make some phone calls. The big truck comes by and takes

the stuff away and we don't even know where it goes. It's very exciting for young children to watch. Maybe we should learn the rest of story so that will be prepared to answer them when they ask us, "Where does the rubbish go?" Or perhaps your town has a transfer station instead of roadside rubbish pickup. In that case, you don't get to witness that large dumpster being emptied. It's just magically ready for more when you visit the following week.

Maybe we can set up exchange programs with the local pharmacies and the pharmacies with pharmaceutical companies. We can bring old oil to the gas station; why not bring old medicines to where we purchased them? I'll ask them. It doesn't hurt to ask.

Cathleen Drinan is the health agent for Halifax, MA. You can call her at 781-293-6768 or cdrinan@town.halifax.ma.us