

**E**very now and then, I come across something I really want to share with other people. This is one of those times. So I'm asking for your indulgence as I share this story.

Recently, I was reading a well-respected national newspaper when I came across an interesting article below the fold on page 34 — not exactly the most-read position in a daily newspaper. The article focused on the drug Tamiflu.

If you've contracted the flu in recent years, you know this is the popular flu-fighting drug that helps suppress the virus and reduces its symptoms because you were likely written a prescription for it.

The active ingredient in Tamiflu is oseltamivir carboxylate (OC). According to the article, recent studies have found that after people take Tamiflu, they excrete a large portion of OC through their urine, which ends up at the local sewage treatment plant. Makes sense to me.

However, the problem is the sewage plants aren't filtering the OC out of the discharged water. While these plants are designed to remove germs and solids from household wastewater, the active ingredients from many medical drugs aren't removed. OC is one of those that goes completely unfiltered.

It gets worse. Sewage plants typically discharge warm water that, during colder months — flu-season months — is particularly attractive to water fowl and birds. The OC in the water represents a serious threat for both birds and people. Birds act as natural carriers of many flu-causing viruses, most notably, the avian flu.

Another research study measured the actual levels of OC in sewage plant discharge water to conclude if they were high enough to present a medical concern. The study's author, Gopal Ghosh, determined that drug levels found in the water are "high enough to lead to antiviral resistance."

You see, if a bird ingests water polluted with OC, that bird will be able to fight off the types of flu that Tamiflu treats. But the consequences are that new viruses may start to de-

## Stories Like This Make Me Sick

BY CHRISTOPHER S. GRAY SR.



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velop in the bird because viruses are constantly evolving and changing in order to survive. So once a drug-resistant virus grows in the bird, the bird can simply pass it on to other animals. Now, this new and stronger virus can move on and start infecting people. This is potentially troubling, since Tamiflu will not help fight against this stronger virus.

So to summarize the article, we're creating newer and stronger viruses that possess the potential to be completely untreatable simply by going to the bathroom and flushing our toilets.

I told you this story so I could ask you this question: What if this article wasn't about Tamiflu but was about any normal chemical applied to a golf course?

If someone even speculated that using chlorothalonil or propiconazole somehow affected the natural fungus-fighting capabilities of our golfers and threatened to lead to rampant and unchecked cases of athlete's foot across the globe, with no known treatments, there would be Senate subcommittees held on the subject with immediate bans put on these potentially harmful chemicals.

It's all a matter of perspective. The health care industry often gets a pass on issues where it's evident potentially hazardous effects on humans are likely. The golf course industry, however, doesn't receive such a benefit.

I don't know to what extent our industry would be demonized for a similar discovery like the Tamiflu contamination. But I do know I wouldn't have had to wait until below the fold on page 34 to read about it.

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