

03-20-09 Super Strong Stomach Bugs

I was in a store recently and saw a little girl about four years old sitting in the shopping carriage. Her mother was leaning over and having a conversation with her. She was attempting to make some sort of deal with her daughter that would allow her to continue with her shopping. She would say to her daughter, "So, how's that? It's a deal, right?"

As they came around the corner and went by me, I could see the little girl was very pale and was leaning over an empty plastic bag. She kept saying in a tiny, sad, weak voice, "But I still feel the bug in me."

I exercised self control and did not say anything to the mother about what her daughter probably had and what they were both probably spreading to others as they shopped. I just felt sorry for the little girl who most likely had what so many people all across the country were suffering from: the norovirus.

Only a few years ago, this virus was called the Norwalk virus, named after an outbreak in Norwalk, Ohio. Then, there was a long list of related strains, also named after locations of outbreaks, such as Toronto. In time, they were lumped together as Norwalk-like and, finally, norovirus. It could be called the notorious virus, I suppose, as CDC estimates it is responsible for 23 million cases of acute gastroenteritis each year, making it the leading cause of the "stomach bug".

Within an average of 12 to 48 hours after hand contact with an infected surface or eating a food carrying the virus because it was touched by an infected food handler, the victim begins to suffer from nausea and vomiting, quite often followed by a second day of diarrhea and a third day of lethargy. It usually spreads like wildfire through even the cleanest of homes. Because the virus is protected by a shell of protein, it is very hardy, living on surfaces for up to a couple weeks! (Well, because it is a virus, maybe "living" is not accurate. It survives, though.) And it only takes a small number of the viral particles to transfer their genetic material into the lining of our intestine, thus establishing themselves until it runs its course. Unfortunately, it usually runs to someone else via the fecal-oral route. We are talking microscopic, invisible to the naked eye, viral characters who love to party. So, how do we protect ourselves if we can't see them?

Remember when we and our children had the chicken pox? We knew exactly when we could rejoin society because the "scabbing over" of the the pox was a visual indicator that we were no longer shedding the virus. It is more difficult with the norovirus because there is no such visual. If only there was. If only they caused green spots. We might see a friend from a distance and, upon seeing the green spots, say, "See you next week!" We could enter a restaurant and, upon seeing the waitress or bartender with the green spots, turn around and leave. These green spots would spare millions of people across the country from missing work and school. If scientists can't cure us from the virus or prevent us from getting it with a vaccine, maybe the virus can at least be

genetically modified to produce green spots on people. I've heard of things more far fetched, like corn with its own built in pesticides.

In the meantime, we deal with invisible bugs that are not bacteria and are not killed as easily as bacteria. It is so easy for hands to spread the tiny invisible minimum requirement onto food and then, for the once-innocent food, to carry it on down into the gut. This is why, in addition to wiping down all surfaces near the vomitus and diarrhea events and washing all the laundry in soap and hot water and frequently cleaning the door knobs, phones, toys and faucet handles, we must wash the hands, wash the hands and wash the hands.

It is especially important to wash the hands right before eating. If you are in a situation where washing is not available, then at least use sanitizing wipes on the hands and along the fingernails and in the edge of the fingernails. This action has nothing to do with obsessive compulsive behaviors. It is a rational science-based behavior rather than an irrational one.

That little girl knew that she still had the "bug" in her but she did not know what to do about it. It is admittedly difficult to kill this enemy but maybe we can learn how to recognize it. While it is difficult to fight the invisible, we can do battle with what we recognize by understanding the habits of that enemy. We don't have to kill that which we can deflect or render harmless. Hmmm.... This idea has some serious political applications as well.

Cathleen Drinan is the health agent for the Town of Halifax, MA. She hopes you will spread the word about why it is so important for food establishments to avoid bare hand contact with ready to eat foods. She can be reached at 781 293 6768 or cdrinan@town.halifax.ma.us