

# The Phantom Menace – The Superbug

It sounds like the latest Star Wars movie or a villain from Marvel Comics, but this “phantom menace” is not fiction. It’s a deadly superbug with a twist. Classified as a Carbapenem-resistant Enterobacteriaceae, or CRE, this class of bacteria is not only antibiotic resistant to last-resort antibiotics, it has the ability to pass on its antibiotic resistance to other bacteria in the body. Like other superbugs, the phantom menace is associated with healthcare centers (like hospitals, nursing homes, and long-term care facilities) and results in a high mortality rate of 50% or more.

From 2010 through 2015, the CDC has confirmed 43 phantom menace cases in the U.S. from 19 states. The CDC reports that the majority of patients were exposed and infected outside of the United States. While 43 is a very small number, the CDC is concerned because they believe this is just the tip of the iceberg. These types of superbugs are believed to be on the rise and under diagnosed.

The phantom menace bacteria pass on antibiotic resistance through a plasmid, a small DNA molecule with the ability to replicate independently. It includes an enzyme that breaks down antibiotics. It is this plasmid that can transfer antibiotic resistance to other bacteria in our bodies. Basically, the non-superbug bacteria become infected with a resistant gene from the superbug bacteria and then continue spreading the resistant gene creating new strains of superbugs.

The worst-case scenario is not far fetched. The Washing Post quotes Lance Price, director of the Antibiotic Resistance Action Center at George Washington University’s Milken Institute of Public Health, as saying, “History shows that

these mobile resistance genes can spread around the world quickly, silently riding in people, animals and food.”

The superbug gene, MCR-1, is becoming more common in China and has recently shown up in Denmark, fueling the concern that it will spread worldwide. Researchers in China tested marketplace meats and slaughterhouse pigs looking for the gene. It was found in 20% of the pigs and 15% of the meat.

Once again this very real threat is man-made. Researchers have concluded that drugs given the pigs in China provided the breeding grounds for the bacteria. If we continue the inhumane and dangerous practice of factory farming, feeding animals both prophylactic and indicated antibiotics, we will continue to breed new threats to worldwide health.

If we as individuals continue to use antibiotics when they are not needed along with antibiotic soaps, hand wipes, and cleaning solutions, we are part of the problem. We are aiding bacteria in their natural progression toward antibiotic resistance.

### **Recommended Reading:**

- *Make Your Immune System Bulletproof with These Natural Remedies*
- *Detox Cheap and Easy Without Fasting – Recipes Included*
- *How to Cure Lyme Disease, and Virtually Any Other Bacterial Infection, Naturally*

### **Sources:**

- *Superbug known as ‘phantom menace’ on the rise in U.S. – The Washington Post*
- *Notes from the Field: Carbapenem-resistant Enterobacteriaceae Producing OXA-48-like Carbapenemases – United States, 2010–2015 – CDC*
- *A ‘superbug’ emerges in China to remind us that antibiotics won’t last forever – The Washington Post*