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Drug-resistant Bacteria Or Viral Pandemic Outbreak Is Near We have heard that for years, but now it appears inevitable

Glycoscience Lesson #6

by JC Spencer

A nightmare outbreak of CRE, a very rare strain of a drug-resistant bacteria has been reported near Chicago. Investigators still haven't been able to determine what caused the spread. The outbreak occurred in people who recently underwent surgery. Another report (March 2014) is that flesh-eating bacteria took a fisherman's life on Lake Conroe just up the road from us.

Hospitals appear to be the most deadly of all places to get an untreatable bug. We are told that if a hospital patient is infected with certain bacteria there is a 50/50 possibility that it will be fatal.

The CDC (Centers for Disease Control) states, "Healthy people usually do not get CRE infections". Your immune system is your first and last line of defense.

The CDC says that CRE stands for "Carbapenem-Resistant Enterobacteriaceae", a family of germs that are difficult to treat because they have high levels of resistance to antibiotics. In healthcare settings, CRE infections most commonly occur among patients who are receiving treatment for other conditions. Patients whose care requires devices like ventilators (breathing machines), urinary (bladder) catheters, or intravenous (vein) catheters, and patients who are taking long courses of certain antibiotics are most at risk for CRE infections.

The rise of CRE carrying new antibiotic resistance genes has created a generation of organisms nearly resistant to all available therapy. The NIH (National Institutes of Health) state on the www.PubMed.gov website that CRE is an emerging problem in children and has reached critical levels. CRE infections are known to be associated with significant morbidity and mortality, and these pathogens have now made their way to the most vulnerable populations, including children.

Forty-four infections were confirmed in Northeastern Illinois with thirty-eight coming from the same hospital in Park Ridge.

Meanwhile, deadly viruses are developing. Researchers in China have deliberately created new strains of

influenza virus in a veterinary laboratory by mixing bird-flu virus with human influenza. Experts warn of the danger that if these new viral strains escape from the laboratory, they could cause a global pandemic killing millions of people.

Professor Chen and her team deliberately mixed the H5N1 bird-flu virus (making it hybrid) which can be highly lethal. When flu viruses merge they swap genetic material. She and her colleagues were trying to emulate what happens in nature when animals such as pigs are co-infected with two different strains of virus, Professor Chen explained.

No one knows the true danger of this lethal virus but it is possible that it could cause a pandemic killing hundreds of thousands or even hundreds of millions of humans unintentionally. God forbid what it could do intentionally.

The best equipped immune system is put in place by improved glycosylation of the cells. When the cells are fully glycosylated, it is difficult, if not impossible, for the virus to locate a docking site. While the virus is still looking for a place to land, the immune system instructs the macrophage to gobble-up the virus and haul it out as trash.

Glycoscience is teaching us just how important are Smart Sugars, and how to measure the quantity and quality of these sugars on the surface of human cells.

Source and References:

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China virus: <http://www.endowmentmed.org/content/view/1297/1/>

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