Antibiotics Coming to an End

**Deadlier than AIDS: Why is This Travesty Allowed to Continue in the U.S.?**

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Following a [Lancet Infectious Diseases report](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2810%2970143-2/fulltext) of the spread of a new drug-resistant superbug spreading from south Asia, news agencies have reported "panic" over the germs' possible consequences.

[Writing in the Guardian](http://www.guardian.co.uk/society/2010/aug/12/the-end-of-antibiotics-health-infections), for example, editor and columnist Sarah Boseley said:

“The era of antibiotics is coming to a close. In just a couple of generations, what once appeared to be miracle medicines have been beaten into ineffectiveness by the bacteria they were designed to knock out.”

The effectiveness of antibiotics depends on how antibiotics are used — how well drug use is managed in clinical practice and outside of it. But some 70 percent of American antibiotics — tens of millions of pounds of drugs each year — is used in animal feed.

According to [Time Magazine](http://wellness.blogs.time.com/2010/08/16/the-end-of-antibiotics/):

“The European Union banned routine use of antibiotics in animal feed years ago because of evidence about its drug-resistance consequences for humans. Now the U.S. Food and Drug Administration is recommending the same for the U.S. as well, for the same reason. But for now the practice continues.”

### Sources:

http://articles.mercola.com/themes/mercola/images/bullet.gif  [Time Magazine August 16, 2010](http://wellness.blogs.time.com/2010/08/16/the-end-of-antibiotics/)

http://articles.mercola.com/themes/mercola/images/bullet.gif  [The Lancet Infectious Diseases September 2010: 10(9);597 – 602](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2810%2970143-2/fulltext)

http://articles.mercola.com/themes/mercola/images/bullet.gif  [The Guardian August 12, 2010](http://www.guardian.co.uk/society/2010/aug/12/the-end-of-antibiotics-health-infections)

Dr. Mercola’s comments:

Antibiotic-resistant diseases have grown exponentially in recent years -- a direct result of the vast overuse of antibiotics in both the medical system and conventional livestock farming.

Antibiotic-resistant infections now claim more lives each year than the "modern plague" of AIDS, and [cost the American health care system some $20 billion a year](http://www.prnewswire.com/news-releases/antibiotic-resistant-infections-cost-the-us-healthcare-system-in-excess-of-20-billion-annually-64727562.html)! According to a study published in October, 2007 in the [Journal of the American Medical Association](http://www.ncbi.nlm.nih.gov/pubmed/17940231?ordinalpos=9&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum), there were close to 100,000 cases of invasive MRSA infections in the United States in 2005, which lead to more than **18,600 deaths**. Meanwhile, [HIV/AIDS killed 17,000 people that same year](http://www.kff.org/hivaids/upload/3029-071.pdf)...

In essence, in the war of antibiotics versus bacteria, the bacteria are clearly winning -- and this is a frightening prospect. As much as I stress that antibiotic use needs to be minimized, this is one class of drugs that I would not want to fall off the radar.

When used properly, in the correct contexts and with responsibility, antibiotics can and do save lives that are threatened by bacterial infections. But they will only remain effective if urgent changes are made to curb the spread of antibiotic-resistant bacteria and disease … and this will only happen with a serious reduction in their use now.

## A Growing Number of Dangerous Bacteria are Impervious to Antibiotics

Why are some news agencies spreading “panic” that the end of antibiotics is here?

Because they literally are becoming increasingly ineffective with each passing day.

Here is a list of various bacteria that are [already resistant to many commonly prescribed antibiotics](http://www.cdc.gov/drugresistance/DiseasesConnectedAR.html):

* **Acinetobacter:** A bacteria found in soil and water that often causes infections in seriously ill hospital patients.
* **Anthrax:** Spread by infected animals or potentially bioterrorist weapons.
* **Gonorrhea:** A sexually transmitted disease.
* **Group B streptococcus:** A common bacteria in newborns, the elderly and adults with other illnesses.
* **Klebsiella pneumonia:** A bacteria that can lead to pneumonia, bloodstream infections, wound and surgical site infections and meningitis.
* [**Methicillin-resistant Staphylococcus aureus (MRSA)**](http://articles.mercola.com/sites/articles/archive/2009/08/22/How-to-Combat-the-Latest-Supergerms.aspx)**:** A superbug that can be so difficult to treat, it can easily progress from a superficial skin infection to a life-threatening infection in your bones, joints, bloodstream, heart valves, lungs, or surgical wounds.
* **Neisseria meningitides:** One of the leading causes of bacterial meningitis in children and young adults.
* **Shigella:** An infectious disease caused by Shigella bacteria.
* **Streptococcus pneumoniae:** A leading cause of pneumonia, bacteremia, sinusitis, and acute otitis media (AOM).
* **Tuberculosis (TB):** Both “multi-drug resistant” and “extensively drug-resistant” forms of TB are now being seen.
* **Typhoid fever:** A life-threatening illness caused by the Salmonella Typhi bacteria.
* **Vancomycin-resistant enterococci (VRE):** Infection with the enteroccocci bacteria that often occurs in hospitals and is resistant to vancomycin, an antibiotic.
* **Vancomycin-Intermediate/Resistant Staphylococcus aureus (VISA/VRSA):** Various strains of staph bacteria that are resistant to vancomycin.

You can see from this list that antibiotic resistance is not isolated to a few obscure bacteria. It is a very real, and growing, problem.

## What is Spurring the Rise in Antibiotic-Resistant Superbugs?

It's easy to think that one more round of antibiotics won't hurt. In fact, many believe it's absolutely necessary for nearly all infections. But the knee-jerk decision to ask your doctor for antibiotics for every minor infection, cold or cough adds to the toll these drugs exact on public health, and it's a significant one.

Further, according to one meta-analysis, the health risk from over-use of antibiotics is also a very personal one, as opposed to simply raising the occurrence of antibiotic resistance in the general population over time.

Whenever you use an antibiotic, you're increasing your susceptibility to developing infections with resistance to that antibiotic -- and you can become [the carrier of this resistant bug](http://articles.mercola.com/sites/articles/archive/2010/06/10/overuse-of-antibiotics-spurs-vicious-cycle.aspx), and spread it to others.

Naturally, this issue needs to be addressed on a large scale by doctors and hospitals addressing their prescribing practices, but I urge you to also take personal responsibility and evaluate your own use of antibiotics, and avoid taking them -- or giving them to your children -- unless absolutely necessary.

## An Even Bigger Threat may be in Your Diet

Even if you haven’t taken an antibiotic in 20 years, you could stillbe exposed to these drugs.

How?

In the foods you eat.

Agricultural antibiotic uses account for about 70 percent of all antibiotic use in the United States, so it's a MAJOR source of human antibiotic consumption.

Animals receiving antibiotics in their feed gain 4 percent to 5 percent more body weight than animals that do not receive antibiotics, but the price is high for you, the end consumer, because this practice also creates the perfect conditions for antibiotic resistance to flourish.

In fact, both MRSA and ESBL (enzymes produced by certain types of bacteria that render the bacteria resistant to antibiotics) are being traced back to animals raised for food production, [especially pigs](http://articles.mercola.com/sites/articles/archive/2008/04/03/antibiotic-resistant-disease-killing-humans-and-swine.aspx).

Another heavily tainted meat product you should stay away from is conventionally raised chicken.

Mounting evidence suggests the poultry industry's use of antibiotics induces antibiotic resistance among food-borne bacteria that prey on humans. One such antibiotic-resistant strain is Campylobacter, a pathogen common to chicken products.

Conventional factory farm raised chicken products are actually up to [460 times more likely to carry antibiotic-resistant strains](http://articles.mercola.com/sites/articles/archive/2005/06/16/organic-chicken.aspx) than organic, chicken products, which are antibiotic-free.

So, please, understand that any time I discuss meat consumption, it is with the explicit understanding that I only recommend humanely raised, organically farmed livestock that have roamed free, feeding on their natural food source, without any use of the antibiotics and other growth-promoting drugs typically used in conventional farming.

Most often you will be able to find this type of healthier meat from a [local farmer, farmer’s market, or CSA program](http://www.mercola.com/article/agriculture.aspx).

But, the ramifications of using antibiotics in agriculture don’t end with your meat choices.

Antibiotics also filter down through the food chain in unsuspected ways. Studies have shown, for instance, that food crops like lettuce and potatoes will accumulate antibiotics from soil covered with antibiotic-containing manure.

This also has implications for those of you who are trying to avoid antibiotics by buying organic, as organic farmers are allowed to use manure from factory farms, which will invariably contain antibiotics. Your best bet is to talk to your local organic farmer and find out where he gets his manure from. Ideally, he would use manure from organically-raised livestock.

## Can YOU Help Stop Antibiotic Resistance?

You can help yourself and your community by only purchasing antibiotic-free meats and other foods, and using antibiotics only when absolutely necessary. This is an important step that I urge everyone to take, even though ultimately the problem of antibiotic-resistance needs to be stemmed on a nationwide level.

Denmark, for example, [stopped the widespread use of antibiotics](http://articles.mercola.com/sites/articles/archive/2010/03/13/denmark-uses-antibioticfree-animals.aspx) in their pork industry 12 years ago. After they implemented the ban on antibiotics, a Danish study confirmed that it had drastically reduced antibiotic-resistant bacteria in animals and food.

The European Union also banned the routine use of antibiotics in animal feed over concerns of antibiotic-resistant bacteria. In the United States, however, the U.S. Food and Drug Administration (FDA) only got around to making this recommendation a couple of months ago.

The FDA has just recommended that [livestock farmers no longer use antibiotics routinely](http://www.reuters.com/article/idUSTRE65R3E420100628) for growth promotion and limit their use to disease prevention only. This would be a very positive first step … but before a final guideline is made, the FDA is awaiting comments from livestock producers, drug makers and others in the industry.

You can expect there will be a lot of kicking and screaming in vehement opposition. After all, antibiotics for livestock use are big business; remember, it constitutes about 70 percent of ALL antibiotic use in the US!

They couldn’t replace that market with human consumers even if they tried, so while I remain optimistic that one day the U.S. will ban this extremely dangerous overuse of antibiotics in agriculture, I expect it will be a long and bumpy road in the process.

For this reason, it’s up to each and every one of us to do our part to be a force for change. You take a stand against antibiotic overuse every time you avoid using an antibiotic for a minor infection, and every time you opt to buy antibiotic-free, organically raised meat.