

# Superbugs More Dangerous Than COVID-19

By [Jeff Brown](#) April 30, 2020 [Print](#)

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“This is an evolutionary fight...”

That’s what Ken Frazier – chairman and CEO of pharmaceutical giant Merck – said on live television back in March.

At the time, COVID-19 had already spread globally. The World Health Organization had just labeled the virus as a “pandemic.” There were more than 190,000 confirmed cases with 7,807 deaths.

So it may surprise us to know that Frazier wasn’t talking about COVID-19.

Frazier was referring to a far more serious global health crisis. It’s a crisis that kills an estimated 700,000 people every year. By 2050, that number could climb as high as 10 million.

Right now, the world is focused almost exclusively on COVID-19. But there is another pandemic bubbling beneath the surface.

## Evolutionary Fight

As I’ve been showing my readers, there are several reasons to be optimistic about COVID-19.

Just last week, I shared new research from the Stanford University School of Medicine that showed why the actual COVID-19 mortality rate is likely on par with seasonal flu and possibly much lower.

But while the world gets COVID-19 under control, other global health crises are developing.

Ken Frazier – quoted above – was speaking about something entirely different when he said, “This is an evolutionary fight.”

Here’s Frazier:

With these kinds of viral outbreaks, severe infections are often accompanied by bacterial infections, sometimes **super-bacterial infections**. You go back a decade to H1N1, nearly half of the 300,000 people who lost their lives died because of bacterial pneumonia. It’s important that we continue to develop new, powerful antibiotics to ensure that – with respect to this outbreak and future outbreaks – we have those things in our arsenal.

[...]

We want to make sure that we understand that this is an evolutionary fight between us and the bacteria.

When Frazier references “super-bacterial infections,” he’s referring to bacteria that are resistant to today’s antibiotics. In the medical industry, this is referred to as antimicrobial resistance. We may also know these bacterial infections as “superbugs.”

As I mentioned above, it's estimated that there are 700,000 deaths each year as a result of these super-bacterial infections. And that number is expected to hit 10 million by 2050.

And keep in mind, that estimate was presented *before* the world encountered COVID-19. This problem is far more deadly than COVID-19 will ever be. And because of this new coronavirus, the spread of superbugs is likely to speed up.

### **“Nightmare Scenario”**

One of the most common side effects for patients who contract COVID-19 is bacterial pneumonia. In one study published by *Lancet*, of 41 hospitalized COVID-19 patients, 10% developed secondary infections.

And physicians are prescribing more antibiotics than normal to stop these infections.

Dr. Priya Nori – who works at a Bronx-based hospital – recently said, “We tend not to hold back on antibiotics in [COVID-19] patients.”

As more antibiotics are prescribed, bacteria become more resistant. And the problem of superbugs grows larger.

To make matters worse, intensive care units are hotbeds for antimicrobial resistance. And in viral hot spots like New York City ICUs, it's suspected that the spread of COVID-19 is also making the problem of superbugs more prevalent.

Bo Shopsin, an infectious disease expert from New York University's Langone Health Center, put it this way: “It's quite clear that COVID is transmitting in hospitals. And if it is, [resistant bacteria] are too.”

Neil Clancy – an infectious disease physician from the University of Pittsburgh – put it even more simply: “In terms of a nightmare scenario, it's quite scary.”

### **Void of Discovery**

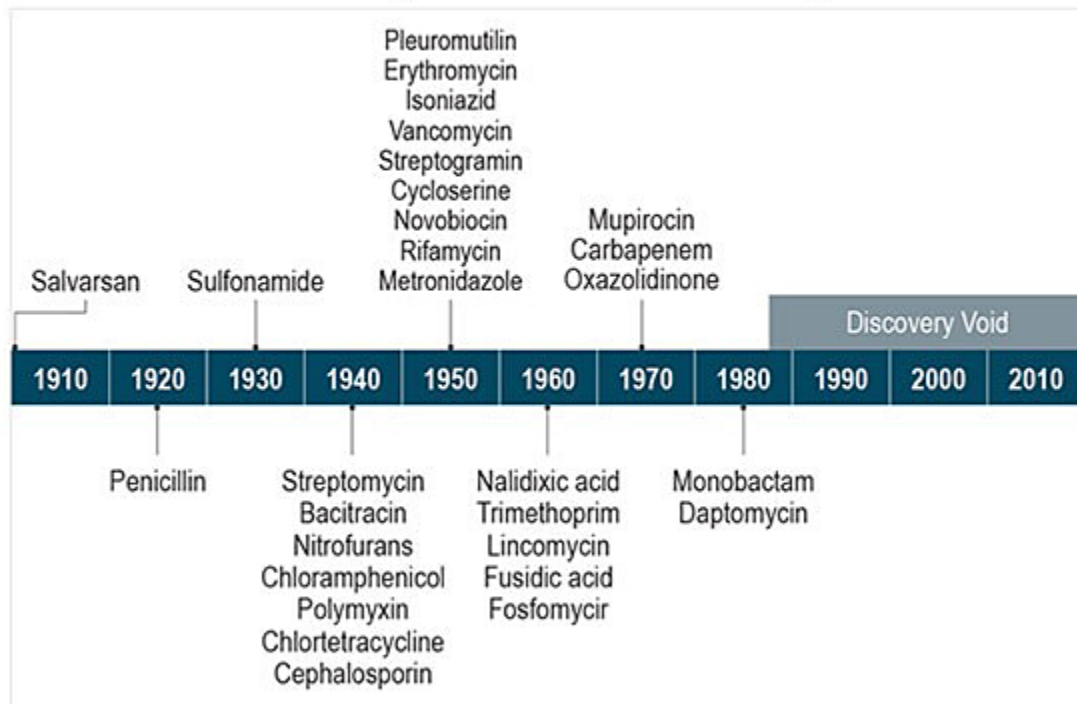
We may be wondering, how is this possible?

I'm certain that everybody reading this today has taken antibiotics at one time in their lives. And for much of recent history, these antibiotics have worked well enough.

Since the discovery of penicillin in 1928, the world saw an explosion of scientific discoveries in antibiotics. One after the other, scientists discovered new forms of antibacterial drugs to fight off bacterial infections... until 1987.

Then, there was a void where no new advancements were made... one that's lasted more than 30 years.

## The Void of Discovery for Antibacterial Drugs



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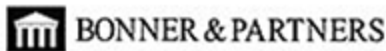
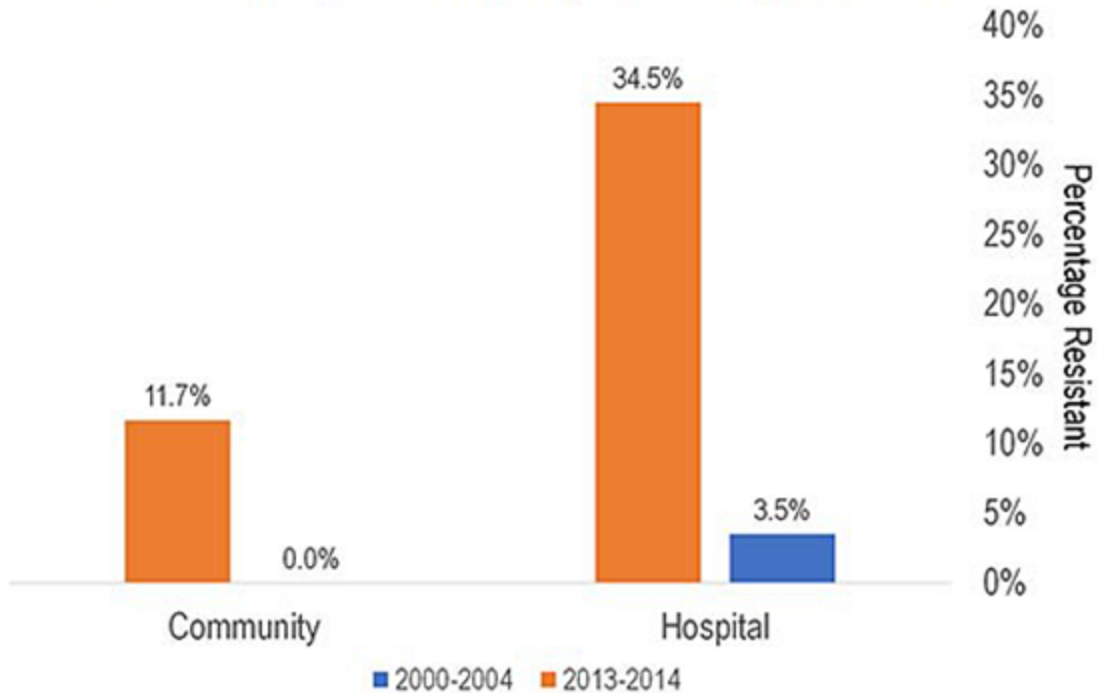
Source: World Health Organization

And we can see the consequences for ourselves...

Today, a class of antibiotics called quinolones (more specifically fluoroquinolones) is one of the most widely used antibiotics worldwide.

Over the last 15 years, bacteria have become resistant to quinolones. Quinolone antibiotics just don't work as well as they used to.

## ***E. Coli* Resistance to Fluoroquinolone in the U.S.**



Source: Quintiles/IMS Market Assessment

In the 2000–2004 timeframe, bacterial resistance to treatment using quinolones was only 3.5%. That basically means that 96.5% of patients were able to recover using quinolone treatment.

But in the 2013–2014 timeframe, resistance levels jumped to 34.5%. Only 65.5% of patients were able to recover using quinolones. In short, the bacteria have been developing a resistance to quinolones... And the trend continues today.

Throughout all my research in high technology, I've never seen this kind of "void of discovery" before. I can't think of any other example of technology that has shown virtually no significant progress over the last 30 years.

This is a story I've been wanting to share with my readers for some time. And with COVID-19 highlighting the need for new antibacterial therapies, I believe now is the right time.

Regards,

Jeff Brown

Editor, *Exponential Tech Investor*