COVID-19

This is a post from a respected Infectious disease doctor that gives a nice simple explanation of why COVID-19 is so contagious. Please take note as to why social distancing is so important as we have time to develop medical protocols.

Feeling confused as to why Coronavirus is a bigger deal than Seasonal flu?  Here it is in a nutshell. I hope this helps. Feel free to share this to others who don’t understand.

It has to do with RNA sequencing ... i.e. genetics.

Seasonal flu is an “all human virus”.  The DNA/RNA chains that make up the virus are recognized by the human immune system.  This means your body has some immunity to it before it comes around each year. You get immunity two ways: through exposure to a virus, or by getting a flu shot.

Novel viruses come from animals. The WHO tracks novel viruses in animals (sometimes for years ... watching for mutations). Usually these viruses only transfer from animal to animal (pigs in the case of H1N1) (birds in the case of the Spanish flu). But once one of these animal viruses mutates and starts to transfer from animals to humans ... then it’s a problem. Why? Because we have no natural or acquired immunity. The RNA sequencing of genes inside the virus isn’t human, and the human immune system doesn’t recognize it so we can’t fight it off.

Now .... sometimes the mutation only allows transfer from animal to human; for years the only transmission is from an infected animal to a human before it finally mutates so it can now transfer human to human. Once that happens, we have a new contagion phase.  And depending on the fashion of this new mutation, that’s what decides how contagious, or how deadly, it’s going to be.

H1N1 was deadly, but it did not mutate in a way that was as deadly as the Spanish flu. The RNA was slower to mutate, and it attacked its host differently, too.

**Fast forward.**

**Now, here comes this Coronavirus** ... it existed in animals only, for nobody knows how long ... but one day at an animal market, in Wuhan China, in December 2019, it mutated and made the jump from animal to people.  At first only animals could give it to a person ... but here is the scary part ... in just TWO WEEKS it mutated again and gained the ability to jump from human to human. Scientists call this quick ability, “slippery”.

This Coronavirus, not being in any form a “human” virus (whereas we would all have some natural or acquired immunity) took off like a rocket.  And this was because humans have no known immunity and doctors have no known medicines for it.

And it just so happens that this particular mutated animal virus changed itself in such a way the way that it causes great damage to human lungs.

That’s why Coronavirus is different from seasonal flu, or H1N1 or any other type of influenza. Coronavirus is slippery and it’s a lung eater, and it’s already mutated AGAIN so that we now have two strains to deal with, strain S and strain L ... which makes it twice as hard to develop a vaccine.

We really have no tools in our shed with this.  History has shown that fast and immediate closings of public places has helped in the past pandemics.  Philadelphia and Baltimore were reluctant to close events in 1918 and they were the hardest hit in the US during the Spanish Flu.

Factoid:  Henry VIII stayed in his room and allowed no one near him, till the Black Plague passed ... (honestly, I understand him so much better now). Just like us, he had no tools in his shed, except social isolation...

And let me end by saying ... right now it’s hitting older folks harder ... but this genome is so slippery ... if it mutates again (and it will) who is to say what it will do next.

Be smart folks ...