



The Current Swine Flu Epidemic 2009

April 24th, 2009

Don't Panic!!!

This is just a quick note, in keeping with previous correspondence about epidemics. I will send a fuller note as we get further into this flu story.

I hope all is well with you and that your spring has been going well. I am writing on this occasion to fill you in on the current influenza that has captured the news. As you know, I have been following these epidemics since 1991, and if you have been reading these notes since, I have been on target along the way as these epidemics have progressed, usually three weeks ahead of the government. A physician from Mexico just wrote me, reminding me that three to four years ago Amy and I were teaching in Mexico, where I said that we were going to have a scary flu epidemic in the next three or four years and here we are. So without a long detail of the past, let me get to where I think we are at the moment.

There is a new combination of flu, where human, pig, and bird influenza have exchanged material. I wrote about this future likelihood in 1991 and talked about how this is one of the “gatekeeper” events leading up to a potentially devastating pandemic. Essentially, there are several steps that all have to happen for a flu to become horrific and pandemic. Several of those steps had occurred already. One missing piece had to happen where a human and bird, or human and swine flu virus had to exchange antigens. (There is, by the way a big debate in virology as to the causes of pandemics, but I clearly favor this model of antigenic shifts as the primary causes.) And second, that that had to happen in a way that would not damage the virus so it would retain its ability to be transmitted, i.e.

from person to person in an efficient manner. I have gone into detail on this previously, describing the process of how we go from a mild flu to a more aggressive and deadly strain.

At this time, it appears as though we have just gone through another gate, making all of this more likely. It appears as though the strains have interchanged material. In other words, some person (who we will probably never know) had the flu (human) and at the same time interacted with a bird or a pig that also had a flu (non-human type) and at that time, the influenza types took the opportunity to exchange material to become a hybrid. This is bad in the long run, but not necessarily a disaster in the short run.

Another aspect of this issue involves transmission. How easy is it for the virus to pass from one person to another? This has not been ascertained yet, though from following this story very closely, what I would say is that it seems in the early transmissions to be easy enough to pass along, like other influenza strains. Given that, we should be aware that influenza is most stable and easy to transmit in colder, dry weather, which is fortunate as we come into the warm wet seasons now and this easy transmission will be somewhat stymied. That said, I do believe, we have to work with the likelihood that it is easy enough to transmit.

Lethality. An important aspect of this epidemic is trying to understand what percent of people are impacted and to what degree. If people die, what are the rates of death? If pneumonia is a prominent feature of the flu, what percent of those infected will develop pneumonia? These numbers are tracked carefully, and I think the answers will come out in the near future.

What I want to highlight here is one point that may be missed. Sometimes the virus loses its virility during transmission. In other words, with each successive transmission, the virus gets weaker and weaker, or less lethal. Sometimes, that is not what happens and the virus stays as virulent as ever through multiple transmissions. This is too soon to tell,

though I am fairly sure that the lethality of this particular strain is lessening over time.

The reason I am bringing up these points has to do with the incidence of reported individuals and what has happened to them. What we have thus far are a few young people in the USA who are mildly effected and have recovered. We also have over 70 dead, mostly middle aged, in Mexico City of 1,000 reported cases.

What we do not know

We do not know is if all the cases reported are having the same illness, in other words is it the same causative bug? It probably is, but this needs to be checked carefully. Which generation of bug was lethal? Has it become more virulent, or did it start virulent, and by the time it reached the US borders has it lost its virulence? Is there a co-morbid infection that makes the people who died succumb? What role does age have to do with morbidity? As I reflected 10 years ago, the majority of people who died in the 1918 pandemic were primarily strong middle aged people, not at all the people who usually tend to die from the flu. Of the 30,000 people who annually die from influenza, many are weak, old, immune-compromised or some combination thereof. What characterized the 1918 flu was the robust people who lost their lives. One of the points I make is this: what is unique about these pandemics is that it is the reaction, the fight, of the individual to the bug that kills them, not the weakened immune system. In some, the bug itself gets them. But in others it is the intensity of the pneumonia symptoms that gets them. They respond so strongly, that it overwhelms their systems. It appears as though that is exactly what has unfortunately happened to the individuals that died in Mexico. That is bad news as well.

Prediction Time

As you know, we have gone through this since the Anthrax, SARS, pet food scare, and various epidemics over the past decade, and it turned out that these predictions have been correct, which I hope will be the case here, for all our sakes. My main prediction, is that this is not the epidemic that we should be scared of. That is why I am saying not to panic. It does not feel right. The story is confused for several reasons. So let me go with what might be the worst case scenario, which I also do not believe is the case.

If we assume that the people in Mexico have exactly the same bug as the people in the USA, which is probably the case, then it may be that the worst case scenario is that there is a genetic sub-population of people in Mexico that have a unique susceptibility to react intensely to this form of the bug. These people may be very much threatened, but if it is the same bug as in the USA, it is currently treatable with antivirals. In this scenario, there are many people in a local area that get sick, and some may die, but for everyone else the genetic susceptibility does not exist in the same way and therefore leads instead only to a mild influenza. This is a bad scenario, but it is controllable, and can be dealt with. In this scenario it is the same disease but with different outcomes in different areas, but is only a problem in a small area or in a handful of small areas.

A second scenario is that it is bad at an epicenter in Mexico, but it is getting milder with each passing transmission, and therefore should again not be a problem in the bigger picture.

A third scenario, which not as likely, is that this is not new in the strictest sense of the word. In the past month I have been seeing sick children and adults, that are at death's door, due to influenza. No one suspected a worse form of influenza, just a bad reaction to the usual influenza. It is possible that this version has been around for a few weeks or months and that it is only a sub-group that had this response. It is only because we are testing an increasing number of people that we are finding this

occurrence. So in this scenario, what we should be finding is an ever increasing number of sites, but with the flu being no different in severity than in the past few months.

There is a possibility that a combination of unique environmental issues such as the pollution of Mexico City is what led to the deaths. I do not believe this to be the case, as the people who died, their ages, speak to something else. But it is possible that another factor along with the influenza led to the severity. I do not believe this but I am throwing this out as a possibility that you will hear. The only way that this option is possible in my mind is if the other environmental issue was another virus or bacteria that actually did the damage, as a superinfection.

OK. Here is my worst case scenario. I do not think this is the case because of the timing, but this is the one that would cause considerable concern. The flu begins with a typical flu, intermixes with the other bird/swine and now is this hybrid. Given that, it remains as a weak version of it, but for some reason, it shifts in Mexico City into a virulent form, which is lethal. In this scenario it is getting more lethal, and in this scenario you will hear of more deaths and at an exponential rate. I do not see this.

Here is the point that should be focused on which may be confusing, but if you think about it, it will make sense. If the different species' strains of flu exist in the same person they may exchange information. This has happened. Now, for the important part. The part that gets exchanged has to be a 'stable lethal' part for it to be a big problem. Otherwise it remains a smaller problem. This is the reason that I think we are dodging the bullet. While I agree that the flu strains have exchanged material, it appears that the part that has been exchanged is not the stable scary part. It may present some problems but not that badly for most people at this time. As a result I think we are going to be OK on this one, no matter what you hear in the near future. We are going to be OK.

The Future

The bigger problem for me is the long term picture, which you are definitely not going to hear about in the press. One of the gates that needed to be avoided, that I have been dreading is the exchange of different species' flu information. It has been debated about for years as incredibly unlikely (not for me!) but, as life would have it, it has just happened. If it leaves and that is the end of the story, then we are going to be OK. However, if it stays and becomes part of the 'normal', typical flu that we have year-in and year-out, it may make it that much easier to get flu from these other species every year. In other words the gateway just got bigger. This would not bode so well for the future. Should that 'bad' part of the swine flu find its way back into the swine flu, it might hop, skip and jump that much easier to the human flu. And then I too would be frightened. That is not where I believe we are now.

Bottom line take home: DON'T PANIC, FOR THIS ONE EPIDEMIC AT LEAST

This is going to hit the news hard for a while.

Vaccinations and the need to vaccinate is going to get a very big push. This is in part because over the next few days you are going to hear about more and more sites that have found this flu. That is what flu does, it spreads. What will probably be missed is the fact that most people are having an upper respiratory tract infection and that is all. If people are mistaking the flu for THE BAD FLU, it will lead to many odd treatments. For example, even though the vaccination that was prepared for this flu will not protect against this new version. The alternative medicine world, including homeopaths, will come up with odd treatments.

Death rate in Mexico is at the moment suggested to be 8%, (with the bad 1918 flu that killed tens of millions at only 2-3%). This number is going to drop SIGNIFICANTLY. To me it looks like the lethality is declining.

The truth will be found, but has to follow clear thinking. We have to isolate what killed those individuals and see what made it so lethal there. I believe that this will lead to increased testing. The increased testing will show more and more sites than in the 3 current sites in the USA.

People are going to freak out, but as the death rate drops, the panic will subside and people will forget the number one, most important issue. A pandemic will ensue at some point, and it might be bad, and homeopathy has a very important part to play there. For homeopathy to help, certain studies have to take place, and certain homeopathic public health measures need to take place. Neither is happening at this moment.

More on the specifics, as the information arises and is gathered and analyzed.

Sincerely,

Paul