

Flight Attendants,

Greetings, I just wanted to let you know that I am your new APFA physician consultant and headed to Singapore to attend an IATA Medical conference, where we will work to educate ourselves, and ultimately minimize risk to you and our flying passengers. I do want to let you know that I care very much about you and your families, and want you to be well prepared to go through this Coronavirus outbreak. There will be a beginning, middle and end. I do believe we should be concerned, but not overly concerned. We accept risk each and every time we go flying, and we mitigate risk with education and training. In the case of COVID-19, the best protection is knowledge!

Aircrew are amazing in the work that they do each and every day. Unfortunately, there is risk in everything we do and exposure to passengers carrying disease is one of those risks. The good news is there are ways to minimize risk / exposure to all diseases (see below WHO recommendations for Aircrew). For comparison, MERS had a 33% death rate and SARS a 14% death rate, Avian Influenza around 60%. The common flu has approximately 0.2% death. So far this year, 54 children have died from the Flu in the United States and the CDC estimates there have been at least 15 million flu illnesses and more than 8,000 deaths in the US - so far this flu season. For comparison, every year it is estimated that, taking a mid-range estimate 400,000 people die (over 1000 per day) in the world due to complications from seasonal influenza (flu) viruses.

At this time, there is no evidence that the COVID-19 is spread through environmental exposures, such as coming into contact with contaminated surfaces, so standard aircraft cleaning procedures already in place should be sufficient.

Coronavirus information can be inconsistent, overwhelming and conflicting in some cases but I do have some thoughts and recommendations based on what I currently believe to be true:

- CDC, IATA, and WHO websites are the most authoritative sources of information.
- Parents of little ones: It appears CoVid-19 is not all that virulent to children. They generally get mild infections and can certainly pass things along, but they are not getting all that sick. 80% of those infected have mild cases, some do not even know they have the virus.
- Older folks and those with chronic diseases: potential for harm or death is much greater (15% case fatality rate by some estimates). If CoVid-19 is active in your area and your kids have colds or other minor respiratory illnesses, keep them away from older folks and those with chronic diseases. The kiddos could have CoVid-19 with mild illness but pass it on and really harm someone.
- Advice to individuals from WHO is simple and practical, and essentially unchanged:

Hand hygiene – frequent handwashing or sanitizing, avoid touching your face  
Clean surfaces regularly with disinfectant  
Educate yourself – know the COVID-19 symptoms -fever and dry cough initially  
Don't travel if sick-fever or cough, if sick, tell the crew immediately  
Cough/sneeze into sleeve or tissue, to be carefully disposed, then wash hands  
If > 60 or underlying disease, you're at higher risk  
Take extra precautions including avoiding crowded areas  
If you feel unwell, stay home and call doctor  
If short of breath, call a doctor  
Being anxious about COVID-19 is normal, If in doubt, seek medical advice

- $R_0$  is an epidemiologic term to quantify the infectiousness of a pathogen.  $R_0 = 1$  means that one infected person will likely infect one other person and the numbers will be relatively static.  $R_0 = 3$  means the person will infect 3 others and the numbers will grow.  $R_0 = 0.5$  means the epidemic will eventually burn itself out over time. **CoVid-19's  $R_0$  is about 2-2.5.** It is important to remember that  $R_0$  is not set in stone. It can decrease significantly when people adapt healthy behaviors (handwashing, social distancing, self-quarantine, disinfecting surfaces, etc.). For example, in 2003, the  $R_0$  for SARS virus went from 3.0 down to 0.04 in a few months because of public health efforts. (BTW, the  $R_0$  for measles is about 18-20).

- CoVid-19 and influenza look nearly identical clinically and influenza is much more common than CoVid-19. Why is this important? If you don't get influenza then you will not have that illness to confuse with CoVid-19. I'm sure there are 1000's of people sapping up healthcare resources, thinking they might have CoVid-19 when, in fact, they have influenza. Do your best to remove that variable. **Get your influenza vaccine!** CDC estimates the vaccine this year is about 45-55% effective. Not getting the vaccine is 0% effective. And if you get co-infected with Influenza and CoVid-19 at the same time? Doesn't sound good at all.

- **Make a plan for social distancing** when local CoVid-19 cases spike, and there is a good chance that the disease will spread amongst at least some of our communities. Make sure you have supplies at home for about 2-3 weeks (prescription meds, OTC symptomatic meds, hygiene items, pet food, people food, etc.). Plan for childcare should schools and daycares close. And please do NOT count on Amazon delivery, Uber-eats, or your local delivery service to provide for your needs. These systems will may not be available at all.

- **Masks and other protective equipment: Probably over-rated.** Surgical masks do not work aside from reducing the risk of you auto-inoculating yourself with your hand to mouth/nose. N-95 masks, if fitted properly (no gap), are effective at preventing aerosol inoculation of viruses but they are uncomfortable and in short supply. Psychotherapist Amy Morin explains that wearing the masks does more for our mental health than our physical well-being, by soothing our anxiety and giving us the illusion of being in control. Your most effective risk mitigation is soap and water. Wash your hands frequently. Teach your kids to wash their hands frequently—again, they might not be sickly but they

can certainly pass viruses along. **Hand wash** before you eat so you do not drag that virus from your hands to your mouth. If you are traveling, take antiseptic wipes (Clorox, etc.) and wipe stuff down (trays, seats, armrests, remotes, etc.)—the tray on the seat in front of you on the airplane is dirtier than the toilet seat in the back of the plane. Gross.

WHO mask advice:

If you are healthy, you only need to wear a mask if you are taking care of a person with suspected 2019-nCoV infection.

Wear a mask if you are coughing or sneezing.

Masks are effective only when used in combination with frequent hand-cleaning with alcohol-based hand rub or soap and water.

If you wear a mask, then you must know how to use it and dispose of it properly.

**• Relax. If people will act calmly with common sense, it is likely this virus scare will over-alarm and under-harm, just like the SARS epidemic of 2003 and MERS epidemic of 2012.**

No commercial flight is “risk -free,” but there are ways to minimize risk, many are discussed above. Hang in there, educate yourself. We will get through this together!

All the best and warmest regards, Kris “Doc B”

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