#### Why I Wear a Mask (even though vaccinated)

# The single best defense against severe disease / death from Covid-19 is to be vaccinated. I encourage everyone to get vaccinated. But also consider:

- 1. No vaccine is 100% effective.
- 2. Many vaccines may lose effectiveness over time.
- 3. There are millions of Americans, who, because of philosophy, religion, politics, or belief in absurd conspiracy theories will not be vaccinated. I have had such students in my WCC chemistry class.
- 4. There are millions of Americans who have a disease state (diabetes or Lupus, etc) that prohibit receiving a vaccine. I have had such students in my WCC chemistry class.
- 5. There are millions of Americans whose medical treatments prevent the formation of protecting anti-bodies.
- 6. RNA virus types (single strand RNA is vulnerable to attack / change) easily mutate. Variations (mutations) can occur at each transfer of a RNA virus from one host to another. There are more than 5700 sequenced variations of the corona virus responsible for the covid-19 disease.
- 7. Most viral variations do not alter biological activity. But, with time, variations will increase in infectiousness and lethality. Data from variations beta, gamma, delta plus, epsilon and lambda are still sparse.
- 8. As newer variations emerge, current vaccines will decrease in effectiveness.
- 9. While vaccines will apparently protect most from severe illness, data are emerging that suggest that covid-19 infections can create long term physiological impairments. (Newer variations are showing an increase in ability to bind to lung tissue).
- 10. "Break-through" infections (of those vaccinated) have been observed. I have had such students in my WCC classes.
- 11. According to Washtenaw County Health Department:
  - a. the most infectious adult age group is < 24.
  - b. most cases of covid-19 are in ZIP code 48197 (immediately south of WCC);
  - c. the second most infectious zip code is 48198 (immediately east of 48197).

### 12. According to the CDC:

- a. the adult age group that is the least vaccinated is < 29
- b. the University of Michigan (Ann Arbor) has one of the highest infection cases (>7000) of all US universities.
- c. majority of hospital admissions /deaths (99.5 %) currently are non-vaccinated young people.
- d. masks are advised in public places and indoors.

## 13. According to WHO:

Emerging variations are of such concern that wearing masks in public is advised, regardless of vaccination state.

Vaccinated individuals (even when asymptomatic) can carry and spread the corona delta virus.

## 14. According to American Academy of Pediatrics:

All students > 2 years old should wear a mask upon returning to school this fall.

- 15. Non-vaccinated people (~50% of Michigan population), if carrying active virus, pose a health risk to everyone.
- 16. The corona virus responsible for covid-19 is like no other known respiratory viral infection and research continually shows an increasing need for concern.
- 17. The lesson of history is that wearing masks limits the spread of disease via air borne virus entities.
- 18. The "honor system" (non-vaccinated will wear masks) is ineffective as many infected will not wear masks.
- 19. Virus borne diseases are not affected by borders, politics, philosophies, economics, or conspiracy theories.

Nearly everything in life has a risk / benefit ratio that is an individual evaluation / determination.

So, everyone must choose their own level of protection;

Since it is inevitable that some carrying / spreading the active virus will be on campus, I choose to wear a double mask (surgical mask with cloth mask to hold surgical mask closer to face ... CDC states cloth mask alone is not recommended) as a means of added personal protection. (I will always error on the side of safety based on science and data.)



