

Masks Masks Masks

I have spoken and written about masks many times. In my mind they are the cornerstone of how we can crawl out of the COVID hole this country is in.

A little history first. When the world started taking COVID seriously the initial advice from both the CDC and WHO was there was no need to wear a mask. Clearly that was a mistake with significant consequences. The reasons given now about why that advice was given then are 1) we didn't know enough back then 2) we didn't want to siphon PPE from health care professionals. Clearly the use of cloth masks would have been a better way to go over no masks.

And although I lead the CDC in my advice to wear masks, I don't want to hide that initially I bought into the CDC's and WHO's advice. My policy has been to go with those organizations unless I strongly disagree. As evidence came out, I had to break with the CDC.

The evidence about wearing masks now is overwhelming. The articles below barely scratch the surface of articles proving the point.

- [Community Use Of Face Masks And COVID-19: Evidence From A Natural Experiment Of State Mandates In The US](#) reported that 21 days after government mandates requiring the use of masks the growth rate of the virus was reduced 2%. For perspective, in NJ on 4/6/2020, the peak 7 day smoothed average of cases, the growth rate was 9.1%. So 2% is significant.
- [Identifying airborne transmission as the dominant route for the spread of COVID-19](#) reported the use of masks reduced the number of infections by over 78,000 in Italy from April 6 to May 9 and over 66,000 in New York City from April 17 to May 9. They concluded that wearing of face masks in public corresponds to the most effective means to prevent interhuman transmission.
- [Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis](#) reported a risk reduction from 17.4% to 3.1% in health care workers by wearing masks.

Want visual proof look at [Visualizing Speech-Generated Oral Fluid Droplets with Laser Light Scattering](#) which shows a video of how droplets are effected by wearing a mask.

When we get to coughing [Visualizing the effectiveness of face masks in obstructing respiratory jets](#) summaries

Mask type	Material	Threads/in.	Average jet distance
Uncovered	~8 ft
Bandana	Elastic T-shirt material	85	~3 ft 7 in.
Folded handkerchief	Cotton	55	1 ft 3 in.
Stitched mask	Quilting cotton	70	2.5 in.
Commercial mask ^a	Unknown	Randomly assorted fibres	8 in.

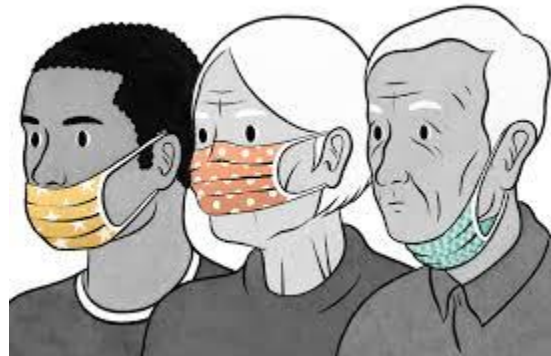
^aCVS Cone Face Mask.

Clearly masks help, but not every mask or the way you wear them. Here is an article titled "[5 Mistakes When Wearing A Mask](#)"

I'll add



Not wearing it



Not covering your nose

Not covering your chin

Wearing it under your chin



That's just not right



Masks with valves

Let me take some time on masks with valves. The purpose of the valve is to allow your exhalation to more freely flow away from your face making it more comfortable. The problem is the valve allows your exhalation to more freely flow away from your face making it more dangerous for the people around you. The main purpose of the surgical mask is to protect others. (It also protects you.) Wearing a valve defeats the purpose. It yells to the world. Me first, I don't care about you. As long as I'm comfortable it's ok if I'm putting you at risk.



Thinking they make you bullet proof.

Just because you are wearing a mask doesn't protect you completely. It reduces risk. Mask and suspenders if you will.

The bottom line is wear a mask, without a valve, properly.

I strongly believe until there is a vaccine the best way to be safe and allow the economy to come back is by wearing a mask, washing your hands, social distancing, testing and contact tracing.