**Masks and other advice about protecting yourself from infection**

* Masks vary >50x in the protection they provide; they are not all the same
* They differ in (1) filtration, (2) fit (or seal) to face, (3) breathability
* Wearing a good mask can prevent infections that might otherwise occur
* If both the infectious person, and susceptible person wear masks, the effects of each wearing mask is multiplied.
* Worst to best for filtration: cloth masks, surgical, respirator (N95, KN95, P2).
* Many exceptions and overlaps.
* Many masks and respirators don’t fit well, depends on individual mask and face. Even small leaks greatly reduce efficacy of masks.
* Likely some cloth masks are better than some surgical masks
* Likely a good-fit surgical is better than a poor-fit P2
* Transmission occurs via inhaling airborne particles of all sizes (‘large’ to ‘small’) generated by talk, laugh, shouting, cough and even breathing.
* Preventing exposure to ‘small’ particles requires superior filtration and a very tight fit between face and mask, otherwise part of the inhaled (and exhaled) air flows through the gaps.
* ‘Small’ particles can travel many metres, stay airborne for hours, and accumulate in rooms. This can lead to mass infection in crowded rooms with poor ventilation. However, most transmission occurs via people in close proximity.
* Most infectious people feel fine; (are yet to develop any symptoms)
* Cloth masks, if worn (not generally recommended) should have a nose-wire to get seal around nose, should have an internal replaceable filter
* Surgical masks, filter pretty well generally, but are notoriously leaky at sides and around nose.
* Can improve surgical mask seal by tying ear loops close to mask and tuck the fold in, use a specialist frame or cloth mask on top to hold mask close to face.
* With surgical masks, take care to carefully fold the nose wire prior to putting on, to maximize seal around nose.
* Respirators, (N95 (USA), KN95 (China), P2 (Australia) have excellent filtration but often leak at edges, depends on the facial fit.
* With P2, KN95 respirators make sure the fabric is responding to your breathing and check fit including around nose and chin.
* Quite a lot of masks and respirators are poor quality and counterfeit. Hard to detect, but don’t buy the cheapest, get from chemists not cheapest on e-Bay.
* Masks and respirators can be reused for several days at least, (not what the packaging will tell you). Dry between use, have more than one in circulation.
* Feasible to wash or steam but not recommended, if do wash don’t use detergent.
* After use, handle by ties, try to avoid touching the surface. Wash hands
* Wear a mask when ever you can, even it is not compulsory, in shops, transport and other indoor venues.
* Need to be particularly careful in crowded indoor venues, where people are heavy breathing (eg exercising, dancing and generally having a good time), also talking, shouting, or singing.
* Transmission outdoors is much less likely, but can still happen, especially if people are close, facing each other and for prolonged times – queues, talking etc.
* Handwashing is unlikely to have much impact on transmission. Yes, there can be virus on surfaces, but it’s unlikely to get to your mucous membranes and infect you. Don’t pick your nose or wipe eyes, etc.
* In theory virus can also enter via the eyes at close range, not clear if common.
* Respirators, especially N95, which have elastic head bands are tighter than P2 or KN95 which have ear loops, can be very hot and uncomfortable after hours of wear. If you wear a surgical mask for comfort, should have a frame or tie the ear loops and tuck in the fold.
* Don’t wary of ‘ventilation’ claims in indoor spaces. A lot of times the air is only recirculated not refreshed, or adequately filtered, try to ensure fresh air supply.
* If indoors, want windows open, doors open at each end, cross-flow using fans to push and pull air through the space
* The ‘2 M’ rule is not explicit; there is no ‘safe’ distance or ‘safe’ time. The closer you are and the longer you are there, the greater the risk. Aerosols travel like smoke and accumulate in spaces over time.
* On aeroplanes and other venues, keep mask on while in toilets
* In places where air lingers even if empty, (eg lifts) keep masks on
* ANY MASK IS BETTER THAN NO MASK AT ALL