



Comments from Mark Henley

This is from an intensivist colleague in Coventry which I found helpful

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Viral load is the key to how coronavirus affects each person. This explanation is clear and helpful as to why as little social contact as possible is now crucial, gives a clue how to manage it the Govt should have explained this at the outset.

Why do we need to shut places where people group?

Remember this: VIRAL LOAD

There will be a lot about this. Why is it important?

With this virus, the amount of virus in your blood at first infection directly relates to the severity of the illness you will suffer. This isn't unusual - HIV management is all about reducing viral load to keep people alive longer. BUT it's very important in COVID-19.

So if you are in, say, a pub or religious building or entertainment venue with 200 people and a large number don't have symptoms but are shedding, you are breathing in lots of droplets per minute and absorbing a high load of the virus. In a crowded space. They become ill over the next 48 hours. You then three days later wonder why you can't breathe and end up in hospital. You'd decided because you were young and healthy it wasn't going to be a problem. Wrong.

Fortunately but unfortunately because the elderly are isolating quite well, the initial UK data suggests that all age groups above 20 are almost equally represented in ICUs in England. Most of the cases are in London but the wave is moving outwards.

This means that being under 60 and fit and well doesn't seem to be as protective as we thought. Why? Viral load.

This may be skewed simply by the fact that too many Londoners didn't do as asked and congregated in large groups in confined spaces and got a large initial viral load. They then went home and infected their wider families. Which is why, as London is overwhelmed, we need to shut everything down to save the rest of the UK. We are a week at most behind London.

Our sympathies go out to the families affected in London and the critical care teams battling right now to save as many as they can.

If I sit with one person and catch this virus, I get a small viral load. My immune system will start to fight it and by the time the virus starts replicating, I'm ready to kill it.



No medicines will help this process meaningfully hence there is no “cure” for this virus. All we can do is support you with a ventilator and hope your immune system can catch up fast enough.

If I sit in the same room with six people, all shedding I get six times the initial dose. The rise in viral load is faster than my immune system can cope with and it is overrun. I then become critically ill and need me (or someone of my specialty) to fix it instead of just being at home and being ok in the end.

THIS BIT IS IMPORTANT:

If you are a large family group, remember that by being ill and in the same room, you will make each other ill or “more ill”. If you get sick, isolate just yourself to one room and stay there. Don’t all sit in one room coughing. You will increase the viral load for all of you, reducing your survival rate.

A family of six people may produce double the droplets of a family of three in the same space. Maths is important.

If one of you is symptomatic, assume you are all shedding and make sure you keep some space.

Parents are getting it from their kids because no one is going to stop comforting their child (nor should they) so the parent gets a big hit as well as the child. I don’t think that can be helped.

REMEMBER: THINK ABOUT VIRAL LOAD

It could save your life or your child’s.