



What we've learnt about how COVID spreads

I have worked as a doctor and now Chief Medical Officer at University Hospital Southampton for the last 30 years. Today, I find us facing the biggest challenge to the health of our community and the NHS who serves it. The threat of COVID.

Nationally, we are in a process of escalating restrictions and local lockdowns in response to regional levels of infection. Right now our local position in Hampshire and the Isle of Wight means we haven't yet had to experience the kind of changes seen by cities like Liverpool and Manchester.

However, rates are rising rapidly here and, if things continue on this path, within weeks we could find ourselves facing similarly stark choices.

We have now learnt a lot about how COVID spreads. This new information makes sense of why we're seeing this increase. It's also key to understanding what changes we can make to stop our region becoming overwhelmed and to ensure we avoid infecting others or catching it ourselves.

8 things we know about how COVID spreads

1. It is mostly airborne. If you breathe enough virus in you will become infected.
2. Most people don't know they have the infection when they pass it on. They either don't have symptoms or they shed the virus before symptoms develop.
3. Infected people mostly shed droplets containing the virus. These droplets don't tend to travel far or last long in the air, which is why keeping apart and wearing a mask reduces your risk. These droplets settle on surfaces so washing your hands regularly stops you transmitting them to your face.
4. The virus can also be released in much smaller particles, which tends to happen when people breathe heavily, talk loudly, shout or sing. This is a problem because in these situations the particles travel further and remain in the air for longer, particularly in enclosed poorly ventilated areas. So beware crowded, noisy and closed environments.
5. The greater the variety of people you meet, the more likely you are to catch or spread COVID.
6. When the levels of the virus in the community are low, you can take a few risks and you'll probably get away with it. When the levels rise, chancing it becomes far more risky.
7. 80% of people who become infected don't pass it on to anyone, but the few that do can have the biggest impact when they're in noisy, confined and closed spaces, including people's homes.
8. Measures to control the spread are most effective the earlier they're introduced. Our rates are rising so we need to act now and do some simple things

Autumn and the onset of winter bring cold days and evenings indoors. Windows and doors are closed in our homes, cafes, pubs and everywhere else we might meet. Essentially, it creates the perfect playground for the virus, which is why the rates are rising.

How to avoid a local lockdown

It is all about making the right choices! For the time being you just need to avoid the 3c's,

- ✓ **Avoid crowds**
- ✓ **Avoid confined and poorly ventilated spaces**
- ✓ **Avoid contact whilst not socially distanced**

Walk apart where you can, wear a mask and wash your hands

It's not too late

Rising infection rates are not a foregone conclusion, it can be stopped in its tracks by the action we each take. Keep yourself, your loved ones and our community safe.

Yours sincerely
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#covidzero

