

# Deputy Chief Medical Officer Jonathan Van-Tam opinion piece in The Sunday Telegraph

Next Saturday will mark the first anniversary of the World Health Organization's declaration of a Public Health Emergency of International Concern and next Sunday will be one year on from the first case of COVID-19 detected in the UK. It has been a terrible year as the virus has spread across the world causing misery, hardship, death and severely disrupting all of our lives.

The silver lining has been the incredible work of scientists and healthcare professionals across the world. If you had told me 12 months ago, that the UK would have discovered, in dexamethasone, the first treatment proven to reduce COVID-19 deaths, and vaccinated over 5 million people by this point, I would have been astonished. But that is the place in which we find ourselves. Hardship, but also hope.

Many people have played an important role in getting vaccines in arms, including the teams of researchers behind the development of the vaccines, the volunteers who took part in clinical trials, the Vaccines Taskforce who ensured we had supply of vaccine and the NHS staff and volunteers who are now working hard to administer them to people quickly and safely.

Their work has been incredible and we should rightly celebrate this.

Vaccines do offer the way out of the pandemic and a return to life as we knew it – having a pint before watching your local football team, multigenerational family gatherings and big weddings. These really will return! But to make that happen as quickly as possible we need to bring the number of cases down as soon as we can whilst we vaccinate our most vulnerable. To do that there are some important scientific points I want to highlight:

No vaccine has ever been 100% effective so no-one will have 100% protection from the virus. The way to reduce everyone's risk is to break the chains of transmission and really push down the number of cases.

Vaccines work by tricking your body into thinking it has to fight the virus. It trains you for this fight by making antibodies and stimulating T-cells; then you are ready if you do come across the real thing. However, like any training, getting up to 'match fitness' takes time. Your body's response, the immune response, is only fully trained up around 2 or 3 weeks after you have each of your 2 jabs. If you are older it's better to allow at least 3 weeks. You can still get COVID in this time.

Even better and longer lasting protection then comes from the second dose so it is really important that everyone gets the second jab.

Really importantly we do not yet know the impact of the vaccine on transmission of the virus. So even after you have had both doses of the vaccine you may still give COVID to someone else and the chains of transmission will then continue. If you change your behaviour you could still be spreading the virus, keeping the number of cases high and putting others at risk who also need their vaccine but are further down the queue.

We still have a very high number of hospitalisations and deaths. A quarter of hospital admissions for COVID-19 are in people under the age of 55. Despite the speed of the rollout, these are people who will not have the vaccine for a while yet.

Some people are questioning the UK policy of trying to give as many at-risk people as possible the first dose of vaccine in the shortest possible time, inevitably extending the interval before the second dose is given. But what none of these (who ask reasonable questions) will tell me is: who on the at-risk list should suffer slower access to their first dose so that someone else who's already had one dose (and therefore most of the protection) can get a second? Everyone on the JCVI priority list is at risk from this nasty virus, and vaccines just can't be produced at an unlimited rate.

It has been a very difficult year for us all and everyone, including me, is desperate to return to seeing the people we love. The vaccine has brought considerable hope and we are in the final furlough of the pandemic but for now, vaccinated or not, we still have to follow the guidance for a bit longer.