COVID cases are rising in England. How things might play out as we move toward winter

October 7 2022, by Paul Hunter

Credit: Unsplash/CC0 Public Domain

COVID infections in England had been falling since July. But the proportion of people testing positive started to rise again in the first few

days of September.

At its July peak the Office for National Statistics (ONS) estimated that roughly 3.1 million people in England (1 in 17 people) tested positive, but by the first week in September this had fallen to 700,000. During the week ending September 17 (the most recent ONS data we have at the time of writing) almost 900,000 people were estimated to be infected in England.

There's always a lag between new infections starting to increase and this being reflected in the figures, so the number of new daily cases will have begun to rise about a week before the end of August. And the number of people infected by now is likely to be somewhat greater than 900,000.

We are now into the next big wave of COVID infections in England, and probably elsewhere in the U.K. The ZOE COVID study app broadly agrees with this timeline.

This wave of infections is different, however. Previous major COVID waves in the U.K. have been driven by the emergence of new variants, such as alpha, delta, and most recently, a string of omicron subvariants.

There are two relatively new variants under investigation in the U.K., BA.2.75 and BA.4.6, but neither represent more than a few percent of infections. By far the most common variant in the U.K. remains BA.5, which fueled the wave of infections in June and July. So the current wave isn't being driven by a new variant.

What's behind this new wave?

Schools started back during the first week in September, and while this may now be contributing to the new wave, infections started increasing too early for schools to be the primary driver.

One possibility could be people returning from overseas holidays. A recent ONS analysis found traveling abroad was one of the strongest risk factors for testing positive.

But probably the main driver behind this current wave is waning immunity. We know that for most highly transmissible endemic infections the incidence of infection is largely driven by the rate at which immunity is lost in the population.

We also know that protection against infection or reinfection following COVID vaccination or indeed an infection may not last long. Fortunately protection against severe disease is more durable.

Hopefully the fourth dose will provide somewhat longer-lasting protection against infection, but it's too early to know for sure.

What next?

Many respiratory infections such as influenza, RSV (respiratory syncytial virus) and the other human coronaviruses cause more infections in the autumn and winter months.

While we don't fully understand all the reasons for this, contributing factors may include falling temperatures, reduced sunlight, and people being indoors more. It's likely that these factors, along with waning immunity, will drive up new COVID infections for a few weeks to come.

But for how long and how high infection rates will climb is difficult to predict with any accuracy. Past modeled estimates of future infection trends have often been wide of the mark. Also, we don't know whether a new variant might appear in the coming weeks that could drive up infections even further, particularly if it's more transmissible or better at

evading our immune defenses.

Perhaps of even more relevance than infection rates is the likely impact infections will have on health services this autumn and winter. New admissions to hospital in England have been rising since early September .

Notably though, most new infections are now reinfections. Almost 90% of England's population had already had at least one infection by August 2022. On average reinfections are less likely to end up in hospital than first infections.

During 2022 we've seen the number of people in hospital because of COVID falling during each successive wave, and this trend should continue.

But in recent months the infection rate in older people has been higher than in younger people. This contrasts with much of the past two years, where infections have been lower in people over 50.

Because fewer older people have had a first infection—and are more likely to be hospitalized for COVID in the first instance—this could increase hospital admissions.

The autumn booster campaign, which is offering fourth doses to people over 50, those with certain medical conditions and health and social care staff should go a long way to reducing this pressure. But by September 28 only about 15% of people over 50 in England had received an autumn booster.

Twin peaks

The other big concern is how badly influenza will come back this winter

and whether a peak in flu infections will coincide with the peak in COVID infections. If the U.K. has a particularly bad flu season and the peaks coincide, then it can expect severe pressures on health services due to both high numbers of admissions and staff sickness.

So far influenza activity in England remains low, but that could change very rapidly. Australia has seen a high number of flu infections this year, though not not as many as some years in the past decade.

The pandemic is not yet over and we're likely to see high numbers of infections this winter. Whether infection numbers exceed the peaks from earlier this year, only time will tell. In my view, it's unlikely that we will see pressures on the health service anywhere near as great as we saw last winter, but that does depend in part on the effectiveness of the current vaccination campaign. Please, if invited for an autumn booster, do take up the offer.

Provided by The Conversation

Citation: COVID cases are rising in England. How things might play out as we move toward winter (2022, October 7) retrieved 19 April 2024 from https://medicalxpress.com/news/2022-10-covid-cases-england-winter.html