Ed Humpherson, Director General for Regulation

Dr Jenny Harries
Chief Executive
UK Health Security Agency

1 November 2021

Dear Jenny,

COVID-19 vaccine surveillance statistics

Thank you for the constructive meeting on Thursday 28 October to discuss the UK Health Security Agency's (UKHSA) COVID-19 vaccine surveillance statistics. We focused on the risk that the data presented on rates of positive cases for those who are vaccinated and those who are unvaccinated have the potential to mislead – and indeed we noted that these data have been used to argue that vaccines are ineffective.

We welcome the changes you have made to the Week 43 surveillance report, published on 28 October. It is also very good that you are working closely with my team and with the relevant teams in the Office for National Statistics (ONS).

There is, however, considerable room for further improvement. It remains the case that the surveillance report includes rates per 100,000 which can be used to argue that vaccines are not effective. I know that this is not the intention of the surveillance report, but the potential for misuse remains. In publishing these data, you need to address more comprehensively the risk that it misleads people into thinking that it says something about vaccine effectiveness. This is not just about the choice of denominator. It is about recognising that the comparison of case rates for vaccinated and unvaccinated groups is comparing datasets with known differences – including, potentially, the greater propensity of people who are vaccinated to come forward for tests. So the data reflect a behavioural phenomenon, not just a feature of how well vaccines work. I do not think your surveillance report goes far enough in explaining this crucial point.

Turning to the choice of denominators, the denominator used by UKHSA is based on the National Immunisation Management Service (NIMS). These data almost certainly overcount the eligible population, and so lead to large systematic biases in the case rates in the unvaccinated groups.

One possibility would be to only publish rates in the vaccinated population, which are known accurately, but I recognise your concern that you are already publishing rates for both groups. The alternative would be to use the ONS population estimates, which are used in the main coronavirus dashboard but which may be flawed for some age groups, as you have pointed out. Given these multiple uncertainties, it is good that you are working

with colleagues in the ONS on the best denominator to use in these calculations. In the meantime, you should consider setting out these uncertainties more clearly, including by publishing the rates per 100,000 using both denominators, and making clear in the table, perhaps through formatting, that the column showing case rates in unvaccinated people is of particular concern.

I recognise that you want to maintain transparency and consistency, but these qualities should not be at the expense of informing the public appropriately.

Yours sincerely

Ed Humpherson
Director General for Regulation