COVID-19 vaccines have prevented 10,400 deaths in older adults

Public Health England (PHE) analysis indicates that <u>the COVID-19 vaccination</u> <u>programme prevented 10,400 deaths</u> in those aged 60 and older in England up to the end of March, an additional 4,300 since the previous update.

From 8 December 2020 to the end of March 2021, over 15 million vaccine doses were given to adults aged 60 and over. The analysis compared the observed number of deaths with the number of deaths that would have been expected if the vaccine hadn't been given during this time period. To allow for the time taken to develop an immune response to vaccination, the analysis assumed it would take 31 days before the effect of vaccination on deaths is observed.

Using this method, PHE estimates that around 10,400 deaths were prevented to the end of March -9,100 in those aged 80 and over, 1,200 in those aged 70 to 79 and 100 in those aged 60 to 69.

Expected deaths with coronavirus (COVID-19) were estimated using real-world data on how effective the vaccines are at preventing death and vaccine uptake.

This analysis takes into account the direct effects of vaccines, there is now increasing evidence that vaccines help to reduce transmission, therefore it is likely that an even higher number of deaths will have been prevented by the vaccination programme.

Matt Hancock, Health and Social Care Secretary, said:

It's fantastic to see the impact our pioneering vaccination programme is already having, with over 10,000 lives saved in a short space of time.

That's more than 10,000 families who haven't suffered the loss of a loved one.

The science is clear: vaccines save lives. All 3 of our approved vaccines have been deemed safe and effective by our world class independent medicines regulator.

The new figures published today show why it's so vital that people get their second dose too. When people get the call, they should get the jab.

Dr Mary Ramsay, PHE Head of Immunisation, said:

This latest analysis is further evidence that the COVID-19

vaccinations are continuing to prevent hundreds of deaths every day. I would encourage anyone who is offered a vaccine to take it as soon as possible.

While the vaccines have a striking impact on mortality, we don't confidently know yet how much these vaccines will reduce the risk of you passing COVID-19 onto others. Even if you have been vaccinated, it is really important that you continue to act like you have the virus, practise good hand hygiene and stay at home.

The true value of these vaccines may also be in terms of future deaths avoided, should there be resurgence of COVID-19 in the UK in the future. Older age presents the single greatest risk of death from COVID-19 — prioritisation of the COVID-19 vaccination programme has focused primarily on an aged-based strategy in order to prevent the greatest loss of life possible.

The PHE analysis estimated the impact of the vaccination programme by combining data on vaccine effectiveness against mortality and the vaccine coverage. Observed deaths were then adjusted by the impact to estimate the daily expected deaths in the absence of vaccination.

Vaccine effectiveness against mortality was based on the most recent PHE estimates of effectiveness of vaccination against symptomatic infection (58%) and of death given infection (54%) which combined gives 81% protection against death.

In order to allow for the time taken to develop an immune response to vaccination and for a mortality endpoint, we assumed it would take 31 days before the effect of vaccination on deaths is observed.

The calculation was done in the 60 to 69, 70 to 79, and over 80 year olds separately. The overall total is cumulated across all days until 31 March 2021 and across the 3 years age groups.

Up until and including the 31 March, over 13 million first doses of vaccine and over 2 million second doses of vaccine were given to those aged 60 and over.