

# How many care home staff and residents were infected with COVID-19 between 2020-2021?

## SUMMARY

Care homes in England had high numbers of COVID-19 infections and related deaths early in the pandemic before COVID-19 vaccines were widely available. This study aimed to understand:

1. How many people in care homes had been infected with COVID-19
2. How long antibodies against COVID-19 last after infection

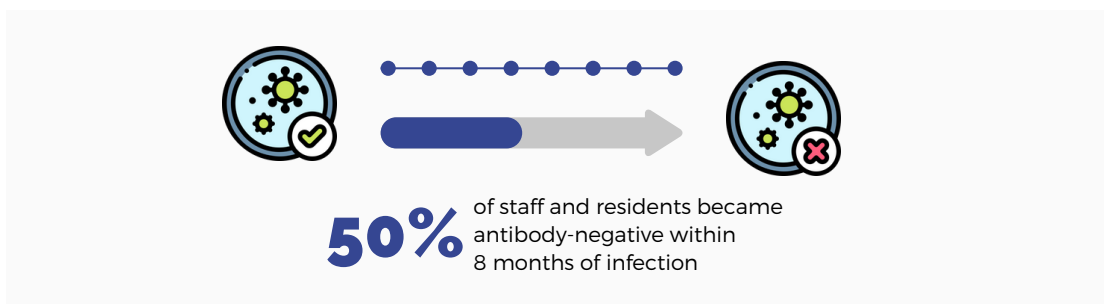
We tested 9488 blood samples from residents and staff in 201 care homes for older adults between March 2020 and May 2021. These blood samples were tested for the presence of antibodies that are produced following COVID-19 infection.

## KEY FINDINGS

Testing of blood samples showed that over a third of residents and at least a quarter of staff had been infected with COVID-19 in the first 15 months of the pandemic (before May 2021).



It took about 8 months from infection for half of the people in the study to become antibody-negative following infection. Staff became antibody-negative quicker than residents.



## CONCLUSION

The findings suggest that a considerable portion of care home staff and residents were infected with COVID-19, but antibody levels can decline substantially following infection. This means if we rely on these antibody tests alone we might underestimate how many people had been infected before. We recommend developing more accurate tests for past infection. This is especially important because we know that people with past infection often have bigger immune responses to COVID-19 vaccines.

## GLOSSARY

### Antibody

Produced by the body to fight specific infections. These can show whether a person has been infected before and can help to fight future infections.

### Care Home

A residential facility for people who need extra help with looking after themselves.

### Care Home Resident

A person who lives in a care home.

### COVID-19

Coronavirus disease (COVID-19) is a highly contagious respiratory infection caused by the SARS-CoV-2 virus.

### Immunity

The ability to resist a particular infection by the action of the body's immune system.

### Infection

The invasion of the body by an infectious agent like bacteria or a virus.

### Older Adult

A person aged 65 years and over.

### Working-age Adult

A person aged under 65 years.

### Vaccine

A product which stimulates a person's immune system to protect them from a specific disease.

Icons made by Freepik  
www.flaticon.com

## READ THE FULL REPORT (PUBLISHED DECEMBER 2021)

Prevalence and duration of detectable SARS-CoV-2 nucleocapsid antibodies in staff and residents of long-term care facilities over the first year of the pandemic (VIVALDI study): prospective cohort study in England  
[www.thelancet.com/journals/lanhl/article/PIIS2666-7568\(21\)00093-3/fulltext](http://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(21)00093-3/fulltext)