

Protecting workers aged 60–69 years from COVID-19

Lancet Infect Dis 2020
[https://doi.org/10.1016/S1473-3099\(20\)30311-X](https://doi.org/10.1016/S1473-3099(20)30311-X)

The initial estimates of the case fatality rate of coronavirus disease 2019 (COVID-19) from China and the published modelled estimates both show a very strong age-dependence.^{1,2} In the UK, this pattern has been interpreted in public health terms as advice to cocoon (ie, isolate) those older than 70 years and those with underlying health conditions but is this the right age cutoff? Applying the infection fatality rate ratios from new estimates (which assume a constant attack rate by age) to the age structure of the population of the UK,³ we can see how many deaths we would expect in each age group if there were 1 million infections (table). This shows that 70% of all deaths are in the over-70-years age group, so it is important that they are protected. However, nearly two thirds (64%) of the remaining deaths occur in the 60–69 years age group. This age group is not being particularly protected and includes many who are working on the frontline.

| | Proportion of UK population (%) | Infection fatality ratio (%) | Number of deaths if 1 million population infected | Proportion of deaths | Proportion of deaths if over 70s successfully cocooned |
|-------|---------------------------------|------------------------------|---|----------------------|--|
| 0–9 | 12% | 0.00161% | 2 | <1% | <1% |
| 10–19 | 11% | 0.00695% | 8 | <1% | <1% |
| 20–29 | 13% | 0.0309% | 41 | <1% | 1% |
| 30–39 | 13% | 0.0844% | 112 | 1% | 3% |
| 40–49 | 13% | 0.161% | 206 | 2% | 6% |
| 50–59 | 13% | 0.595% | 803 | 8% | 25% |
| 60–69 | 11% | 1.93% | 2054 | 19% | 64% |
| 70–79 | 8% | 4.28% | 3535 | 33% | .. |
| 80+ | 5% | 7.80% | 3853 | 36% | .. |

Age group given in years. Infection fatality rates from Verity et al,² and the population structure of the UK in 2018 from the Office for National Statistics.³ SARS-CoV-2=severe acute respiratory syndrome coronavirus 2.

Table: Estimated deaths by age group if 1 million people in the UK population are infected with SARS-CoV-2

Indeed, health-care workers have even been encouraged to come Based on the Chinese data,¹ each death corresponds to about two critical cases (needing intensive care) and six people who require hospitalisation. Both for humanitarian reasons and to prevent overload of the health service, shouldn't we be protecting people older than 60 years and ensuring that those in that age group who are currently not working from home are moved to jobs with minimal person contact, whether it is in the health service, schools, government, or the private sector?