

Association between living with children and outcomes from COVID-19: an OpenSAFELY cohort study of 12 million adults in England ^[1]

Author: Forbes, H., ... Tomlinson, L. A.

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AVAILABILITY

Access online ^[2]

Excerpts from abstract

Background. Close contact with children may provide cross-reactive immunity to SARs-CoV-2 due to more frequent prior coryzal infections from seasonal coronaviruses. Alternatively, close contact with children may increase risk of SARs-CoV-2 infection. We investigated whether risk of infection with SARs-CoV-2 and severe outcomes differed between adults living with and without children.

Methods. Working on behalf of NHS England, we conducted a population-based cohort study using primary care data and pseudonymously-linked hospital and intensive care admissions, and death records, from patients registered in general practices representing 40% of England. Using multivariable Cox regression, we calculated fully-adjusted hazard ratios (HR) of outcomes from 1st February-3rd August 2020 comparing adults living with and without children in the household.

Findings. Among 9,157,814 adults ≤65 years, living with children 0-11 years was not associated with increased risks of recorded SARS-CoV-2 infection, COVID-19 related hospital or ICU admission but was associated with reduced risk of COVID-19 death (HR 0.75, 95%CI 0.62-0.92). Living with children aged 12-18 years was associated with a small increased risk of recorded SARS-CoV-2 infection (HR 1.08, 95%CI 1.03-1.13), but not associated with other COVID-19 outcomes. Living with children of any age was also associated with lower risk of dying from non-COVID-19 causes. Among 2,567,671 adults >65 years there was no association between living with children and outcomes related to SARS-CoV-2. We observed no consistent changes in risk following school closure.

Interpretation. For adults living with children there is no evidence of an increased risk of severe COVID-19 outcomes. These findings have implications for determining the benefit-harm balance of children attending school in the COVID-19 pandemic.

Related link: There's no extra COVID risk from living with kids, study finds ^[3]

Region: Europe ^[4]

Tags: health and safety ^[5]

Source URL (modified on 10 Nov 2020): <https://childcarecanada.org/documents/research-policy-practice/20/11/association-between-living-children-and-outcomes-covid-19>

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