

# Social contacts in the UK from the CoMix social contact survey

## Report for survey week 70

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*Report for SPI-M-O and SAGE, 03 August 2021  
Data up to 27 July 2021*

### **Summary**

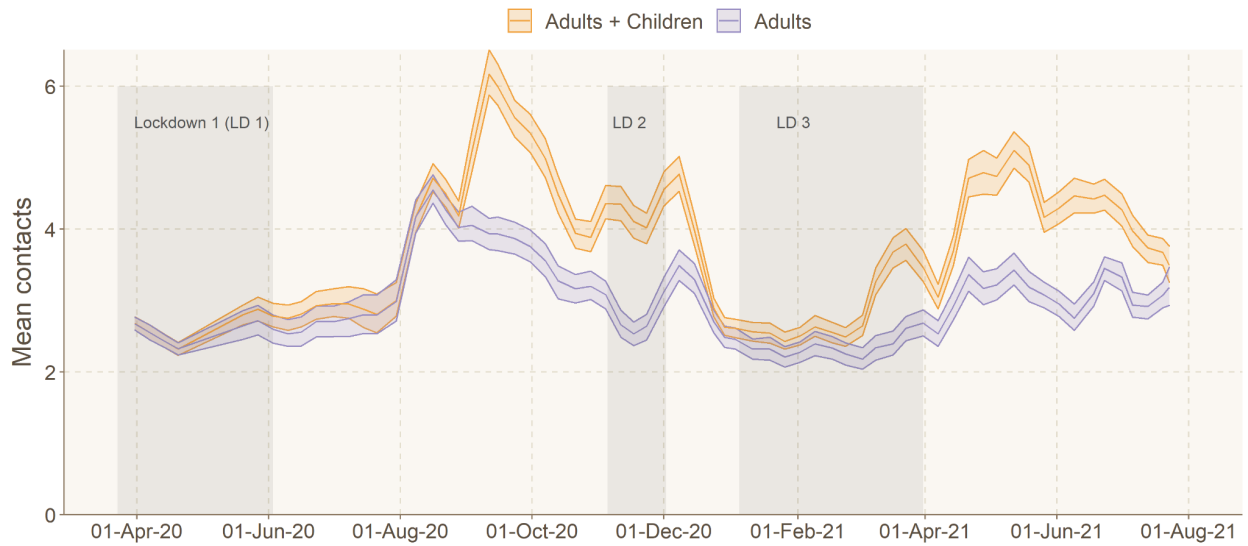
- Mean reported contacts do not appear to have increased since the easing of restrictions on July 19th. Overall, contacts amongst adults remain stable, whereas contacts for children have decreased sharply now that schools have closed.
- Reported contact rates for children are similar to that observed last summer and are much lower than during periods when schools are open.
- Reported contact rates for younger adults appear to be lower than was reported last summer though the number of participants in this age group have been smaller for the prior two weeks of data. Older adults are reporting roughly similar levels of contact as during summer of 2020.
- The proportion of participating children isolating has sharply decreased, but remains in excess of 10% and remains more than twice as high as the proportion of adults who are self-isolating.
- There may be an early indication that levels of mask-wearing may have fallen slightly. However, overall rates of mask wearing remain high.

## Main

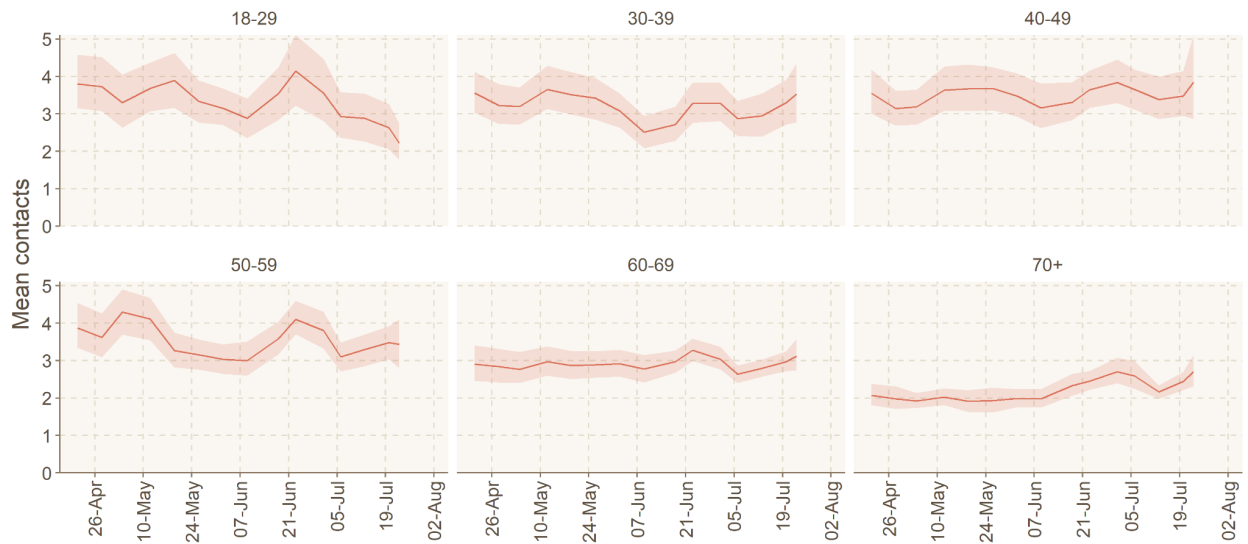
Reported mean contacts do not appear to have increased since July 19th. Overall, reported adult contact rates have remained relatively stable since mid-April (Figure 1 & 2), though this overall pattern masks apparent differences with age - with steady increases in mean reported contacts in older adults and falls in mean reported contacts in the 18-29 age group (particularly in the work and educational settings, data not shown). Reported contact rates for younger adults appear to be lower than was reported last summer, though the number of participants in this age group have been smaller for the prior two weeks of data. Older adults are reporting roughly similar levels of contact as during summer of 2020 (Figure S3). Children's contact rates have continued to fall, which is associated with the summer school holidays (Figures 1 and 3). Reported contact rates for children are at a similar level to last summer and at much lower levels than when schools are open (Figure S2).

The proportion of children in isolation or quarantining has decreased considerably in the last week, though it is still over 10% (Figure 4). The fraction of adults who report having had to self-isolate has remained relatively constant at just less than 5%. Individuals who are isolating report fewer contacts than those who are not, particularly amongst children aged 5-17 (Figure 5). However, now that schools are closed (and contact rates have fallen for children) the difference in contact rates between self-isolating and not self-isolating children has narrowed (Figure 5).

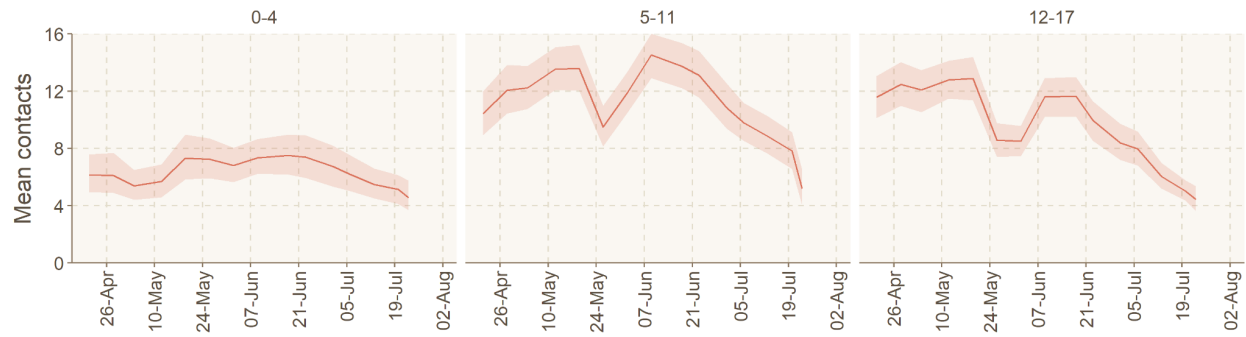
When face-coverings became mandatory in certain settings last summer there was a rapid increase in reported mask-wearing by CoMix participants. Since then, mask wearing has remained fairly stable, with around 85% of individuals who made a contact outside their household on the day of the survey reporting that they wore a mask. There are some early indications that this seems to have dropped over recent weeks (Figure 6), though overall levels of mask wearing remains high.



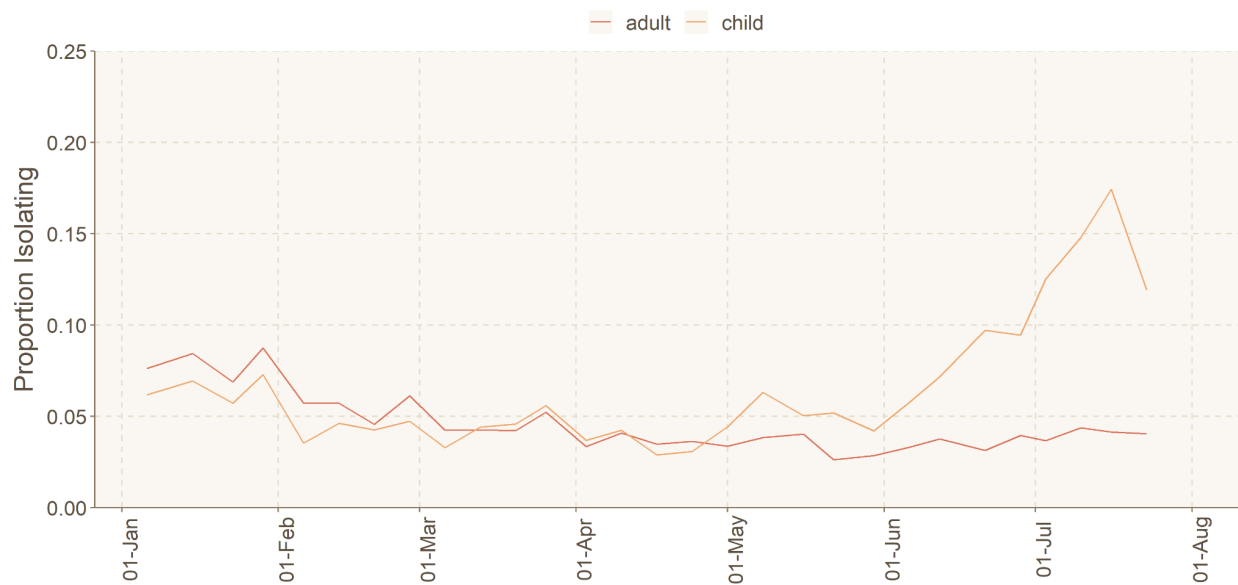
**Figure 1: Mean contacts in the UK since the 23rd March 2020 for adults and children (all participants) and adults only (18 year +).** Uncertainty calculated using bootstrapping. Contacts truncated to 50 contacts per participant. Observations are smoothed over two weeks to account for panel effects. Date on x axis refers to the midpoint of the survey period.



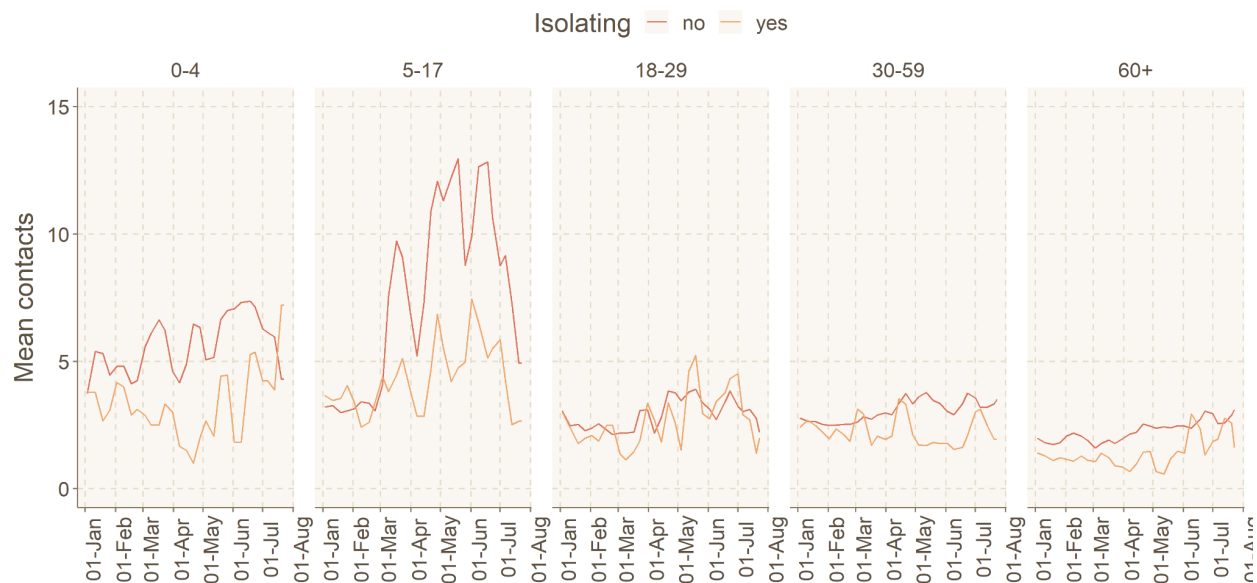
**Figure 2: Mean contacts in all settings by age-group for adults over time.** Uncertainty calculated using bootstrapping. Contacts truncated to 50 contacts per participant. Observations are smoothed over two weeks to account for panel effects. Date on x axis refers to the midpoint of the survey period.



**Figure 3: Mean contacts in all settings by age-group for children over time.** Uncertainty calculated using bootstrapping. Contacts truncated to 50 contacts per participant. Observations are smoothed over two weeks to account for panel effects. Date on x axis refers to the midpoint of the survey period.

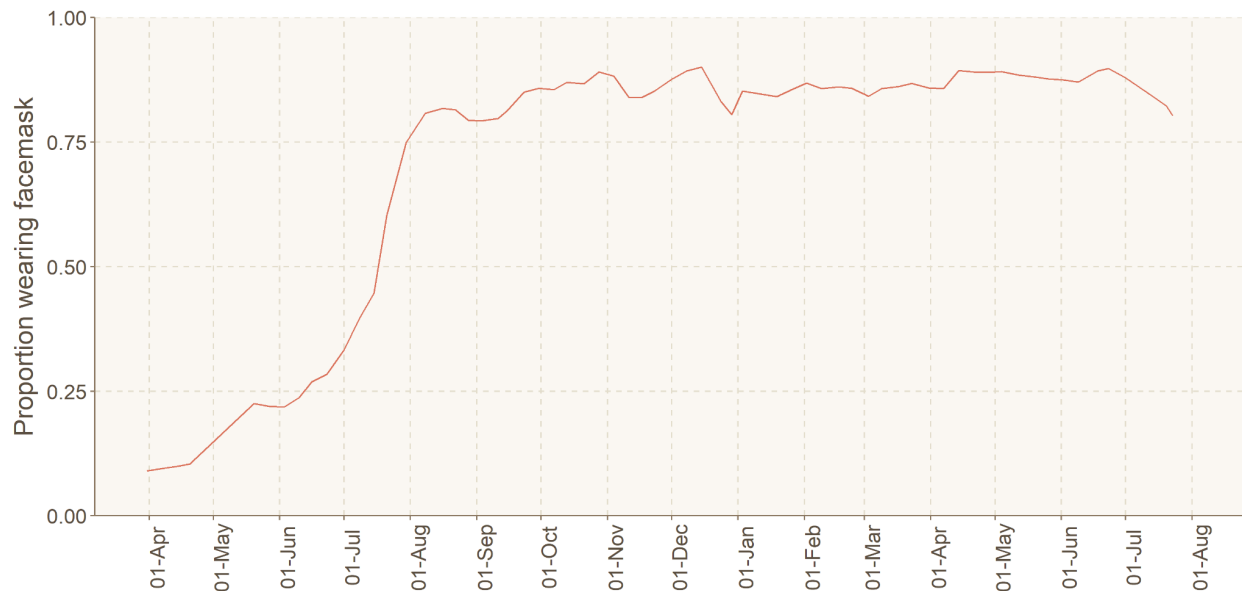


**Figure 4: Proportion of sample isolating by adults and children over time in England since Jan 2021.**



**Figure 5: Mean contacts in all settings in England by age and whether participant is in isolation.** Contacts truncated to 50 contacts per participant. Observations are smoothed over

two weeks to account for panel effects. Date on x axis refers to the midpoint of the survey period.



**Figure 6: Proportion of adults wearing a face mask over time (with at least one contact outside of the home)**

## Methods

CoMix is a behavioural survey, launched on 24<sup>th</sup> of March 2020. The sample is broadly representative of the UK adult population. Participants are invited to respond to the survey once every two weeks. We collect weekly data by running two alternating panels. Parents complete the survey on behalf of children (17 years old or younger). Participants record direct, face-to-face contacts made on the previous day, specifying certain characteristics for each contact including the age and sex of the contact, whether contact was physical (skin-to-skin contact), and where contact occurred (e.g. at home, work, while undertaking leisure activities, etc). Further details have been published elsewhere [1]. The contact survey is based on the POLYMOD contact survey [2].

We calculated the mean contacts using 1000 bootstrap samples. Bootstrap samples were calculated at the participant level, then all observations for those participants are included in a sample to respect the correlation structure of the data. We collect data in two panels which alternate weekly, therefore we calculated the mean smoothed over the 2 week intervals to give a larger number of participants per estimate and account for panel effects. We calculated the mean number of contacts in the settings home, work and school (including all educational

establishments, including childcare, nurseries and universities and colleges), and “other” (mostly leisure and social contacts, but includes shopping). We look at the mean contacts by age, country, and region of England. The mean number of contacts is influenced by a few individuals who report very high numbers of contacts (often in a work context). The means shown here are calculated based on truncating the maximum number of contacts recorded at 50 per individual per day. We compared the mean reported contacts for the most recent data of the survey to the mean contacts reported during ten time periods over the previous year which represent different levels of restrictions.

Participants were asked whether they were in isolation or quarantine on the day they reported contacts. They were also asked whether they wore a facemask on the day of reported contacts, we filtered to participants who had at least one contact outside of the home. We calculated the proportion who said yes for both these categories over those who responded.

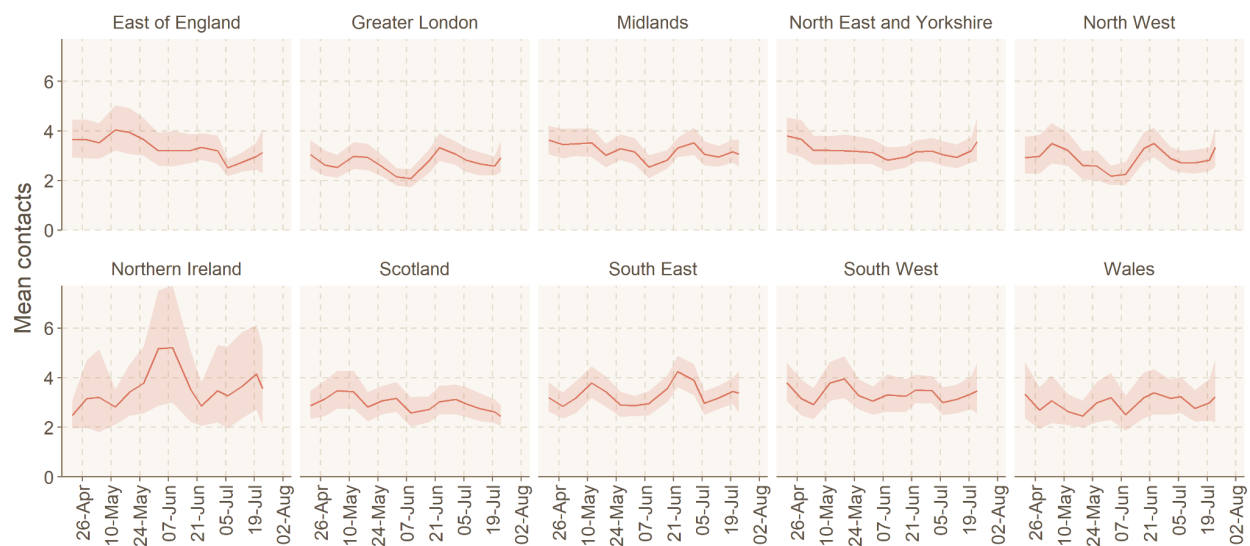
### **Funding**

Medical Research Council (MC\_PC\_19065), the European Commission (EpiPose 101003688) and the NIHR (CV220-088 - COMIX) and HPRU in Modelling & Health Economics (NIHR200908).

## References

1. Jarvis CI, Van Zandvoort K, Gimma A, Prem K, CMMID COVID-19 working group, Klepac P, et al. Quantifying the impact of physical distance measures on the transmission of COVID-19 in the UK. *BMC Med.* 2020;18: 124.
2. Mossong J, Hens N, Jit M, Beutels P, Auranen K, Mikolajczyk R, et al. Social contacts and mixing patterns relevant to the spread of infectious diseases. *PLoS Med.* 2008;5: e74.

## Additional graphs

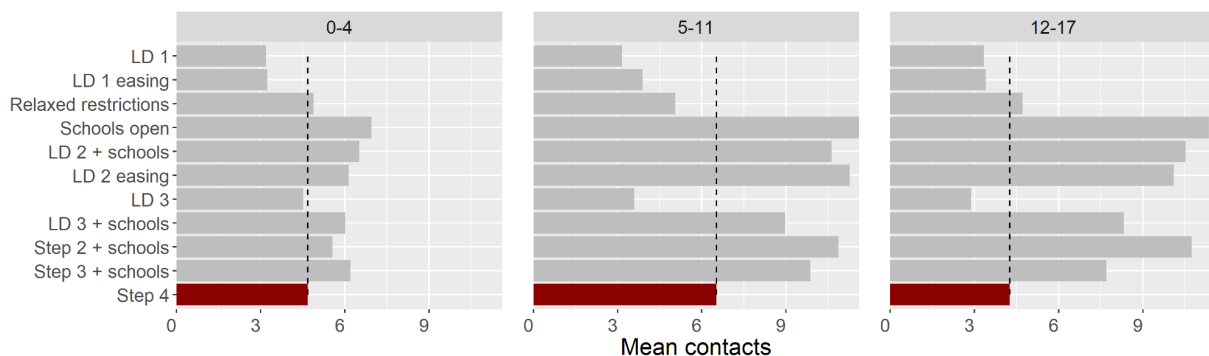


**Figure S1: Mean contacts in all settings in adults for UK nations and English regions over time.** Uncertainty calculated using bootstrapping. Contacts truncated to 50 contacts per participant. Observations are smoothed over two weeks to account for panel effects. Date on x axis refers to the midpoint of the survey period.

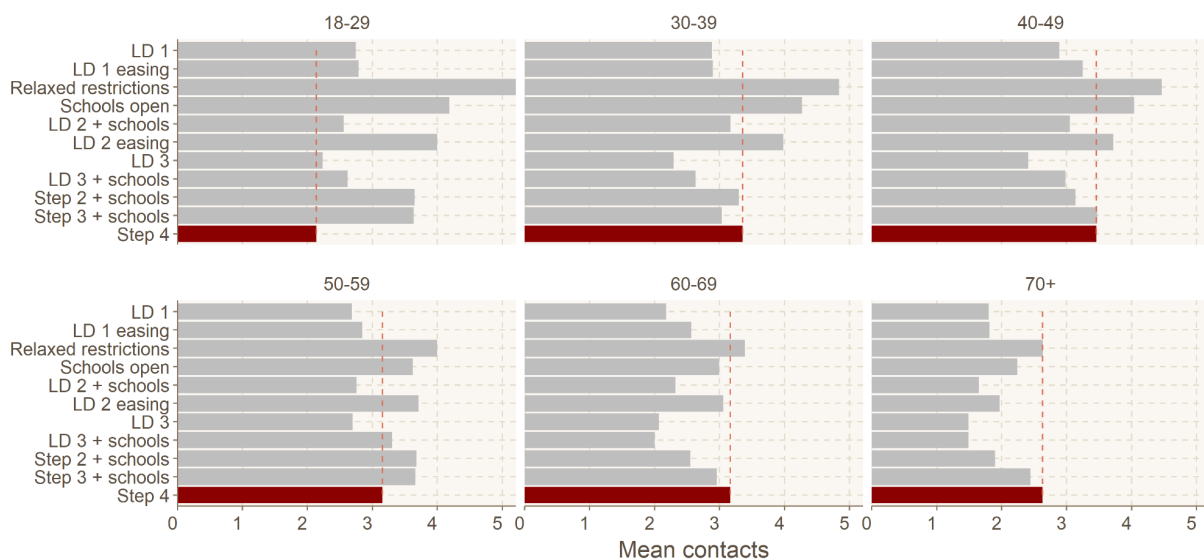


**Table S1. Time periods based on different level of lockdowns and restrictions in England over the previous year**

Period	Date	Period	Date
1. Lockdown 1 (LD 1)	24 Mar 2020 - 03 Jun 2020	6. Lockdown 2 easing	03 Dec 2020 - 19 Dec 2020
2. Lockdown 1 easing	04 Jun 2020 - 29 Jul 2020	7. Lockdown 3	05 Jan 2021 - 07 Mar 2021
3. Relaxed restrictions	30 Jul 2020 - 03 Sep 2020	8. Lockdown 3 + schools	08 Mar 2021 - 31 Mar 2021
4. School reopening	04 Sep 2020 - 24 Oct 2020	9. Step 2 + schools	16 Apr 2021 - 16 May 2021
5. Lockdown 2	05 Nov 2020 - 02 Dec 2020	10. Step 3 + schools	30 June 2021 - 19 July 2021
		11. Step 4	19th July - 27th July



**Figure S2: Comparison of mean weekday contacts from the 19 July to 27 July to ten previous time periods of different restrictions by age for children.** Current period highlighted in red with dashed line for easier comparison to previous periods.



**Figure S3: Comparison of mean weekday contacts from the 19 July to 27 July to ten previous time periods of different restrictions by age for adults.** Current period highlighted in red with dashed line for easier comparison to previous periods.