Covid in Georgia

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## Intro

Georgia reported their first confirmed case of Covid-19 on 26 February 2020. As of 2 July 2020, only 939 confirmed cases and 15 deaths have been reported. The success of Georgia’s limitation of spread of Covid-19 can be attributed to early non-pharmaceutical interventions including closing schools (early March), closing borders and mandatory quarantining of international arrivals, lockdown of individual affected areas (late March) and full lockdown throughout the country (30 March). Alongside this, they have implemented extensive contact tracing and testing, and all confirmed cases are treated in hospital. There is regular screening of key workers. As of 2 July 2020, 117,701 PCR tests for Covid-19 have been conducted, a rate of more than 30,000 tests per million population.

Here we use test data and contact tracing data collected by the National Center for Disease Control (NCDC) in Georgia to characterize the epidemic in Georgia. This includes demographics of those infected compared to the general population, symptom and death rates by age, and rates of transmission to different types of contacts. We also calculate the secondary attack rate for different types of contacts and overall number of secondary cases per primary case (observed reproductive number).

## Methods

### Data collection

* Types of test used, criteria for testing (case identification)
* More detail on policies - maybe in a figure
* Ethics waiver from NCDC and registered in Bristol

### Analysis

* De-identified personal IDs used to link contact tracing database to confirmed cases
* Data cut off date?
* Analysis conducted in R
* Can we compare demographics of infection to national demographics? geostat or other source?

## Results

After data cleaning how many data points do we have

Table of demographics of those infected (treated database)

Table of demographics of those tested (tested database)

Table of symptom and death rates by age and gender (treated database)

Rates of transmission by type of contact, gender and age of index case

Contact by age groups and type of contact

Transmission by age groups and type of contact

Total number of secondary cases per primary case

## Discussion

* main outcomes
* limitations of study
* comparison to other contact tracing studies (Bi, etc.)
* comparison to other countries in the region
* understanding how and why the response was able to be so strong (eg HCV testing and treatment infrastructure)