

SPI-M-O

Medium Term Projections

As at 01/09/2020

SPI-M-O medium term projections

- These projections are **under development** and represent SPI-M-O's **best assessment of the potential trajectory** of the epidemic over the next 6 weeks, based on the patterns seen and data available up to **1st September 2020**. Projections for **infections, hospitalisations, and deaths** are provided for **England**.
- These **portray a range of possible futures** and are produced by fitting epidemiological models to trends in the past data. SPI-M-O members extrapolate forwards and use their expert judgements about how viral transmission will change **in the absence of additional government intervention or behavioural changes**.
- Modelling groups have made assumptions about the likely impact of opening schools on viral transmission. **They do not account for the increase in transmission seen between 1st and 9th September**.
- **Further work is required on these projections**; currently only two SPI-M-O groups have developed these medium-term projections and only one group has submitted results for hospital admissions. **Other groups are developing their methodologies** and will provide results over the coming weeks and that will lead to more robust combined results in the future. Until this point, these projections should be considered as **drafts for discussion** and a **work in progress**.
- **Making projections at the turning point of an epidemic is particularly challenging**; this was the situation in the UK at the time these projections were developed. The lagged nature of many data streams makes it difficult to detect and interpret changes.

Metrics include:

- **New infections per day**: Number of new symptomatic and asymptomatic COVID-19 infections per day
- **New hospitalisations per day**: Number of individuals admitted with COVID-19 and the number of inpatients diagnosed with COVID-19 in the past 24 hours
- **Deaths per day (by date of death)**: Number of COVID-19 deaths with a positive test, by date of death. Note this does not apply a cut-off to the length of time between testing positive and death.

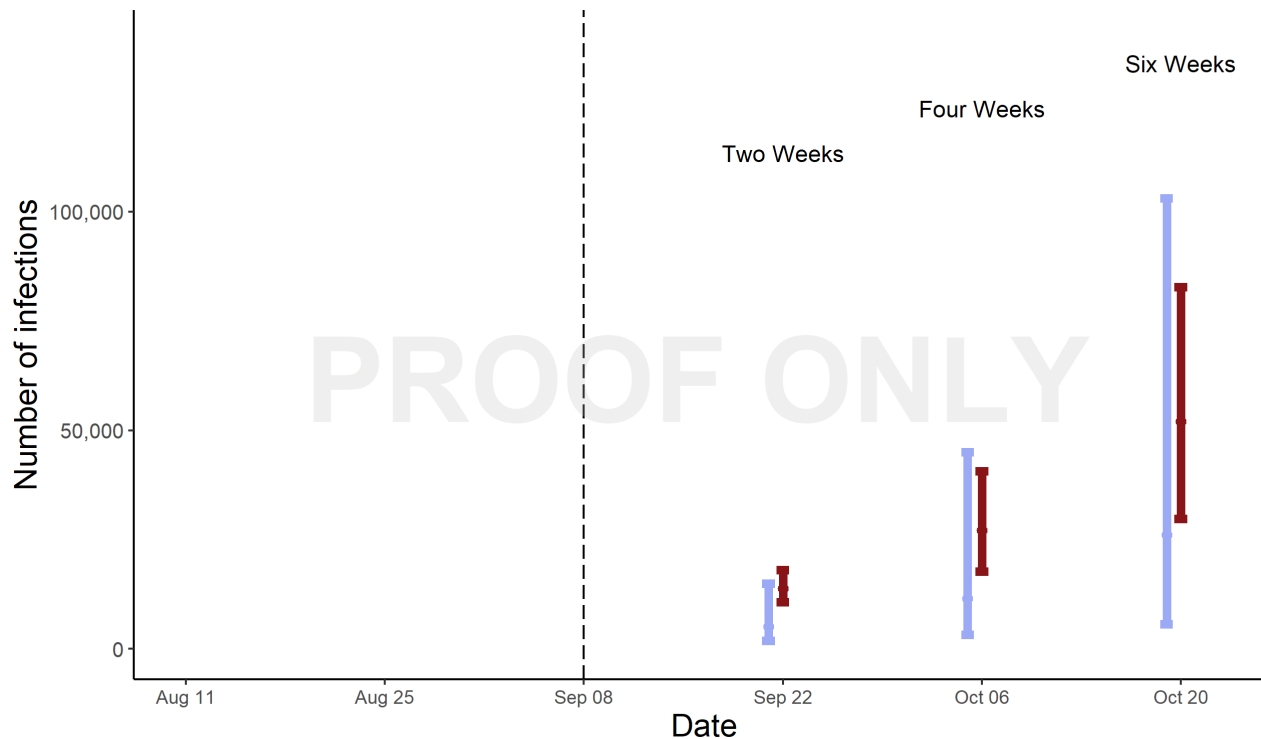
Individual Model Projections

New infections per day

As at 01/09/2020

DRAFT

ENGLAND



PROOF ONLY

Model

Individual model predictions from each respective SPI-M participant.

- Warwick ODE WITH CASES
- PHE/Cambridge REGIONAL/AGE

Key

- Real data
- Unconfirmed data
- Today's date

Notes:

The number of new symptomatic and asymptomatic COVID-19 infections per day.

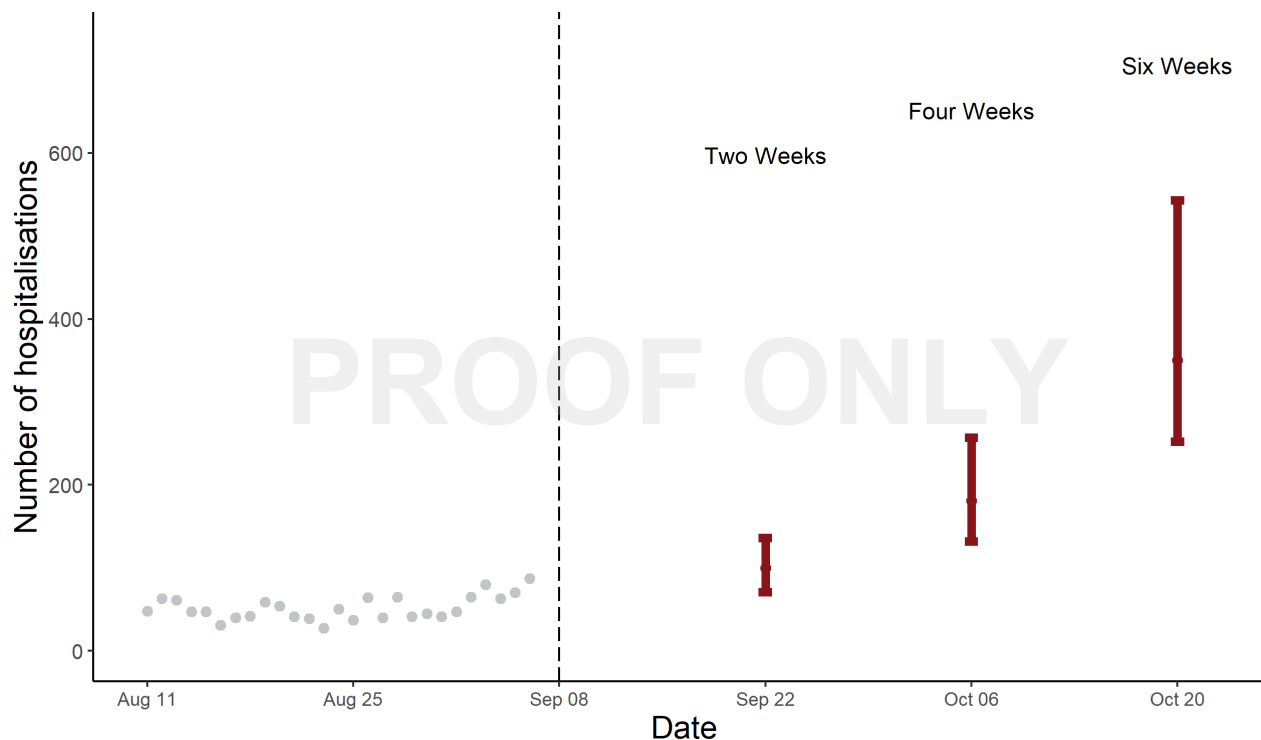
Individual Model Projections

New hospitalisations per day

As at 01/09/2020

DRAFT

ENGLAND



PROOF ONLY

Model

Individual model predictions from each respective SPI-M participant.

- Warwick ODE WITH CASES
- PHE/Cambridge REGIONAL/AGE

Key

- Real data
- Unconfirmed data
- Today's date

Notes:

Number of patients admitted with confirmed COVID-19 and the number of inpatients diagnosed with COVID-19 in the past 24 hours.

Individual Model Projections

New deaths per day (by date of death)

As at 01/09/2020

DRAFT

Model

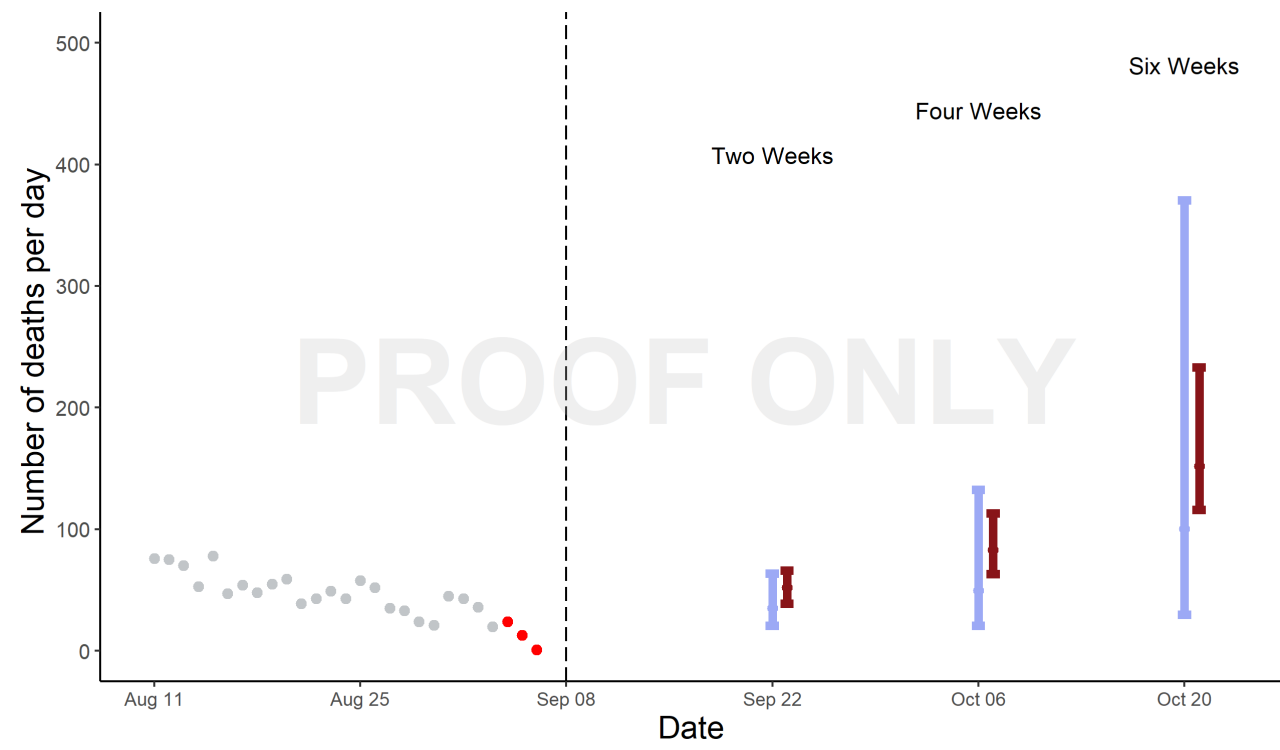
Individual model predictions from each respective SPI-M participant.

- Warwick ODE WITH CASES
- PHE/Cambridge REGIONAL/AGE

Key

- Real data
- Unconfirmed data
- - - Today's date

ENGLAND



PROOF ONLY

Notes:

The number of COVID-19 deaths with a positive test, by date of death. Note this does not apply a cut-off to the length of time between testing positive and deaths, unlike in published death data.