

COVID-19 Update

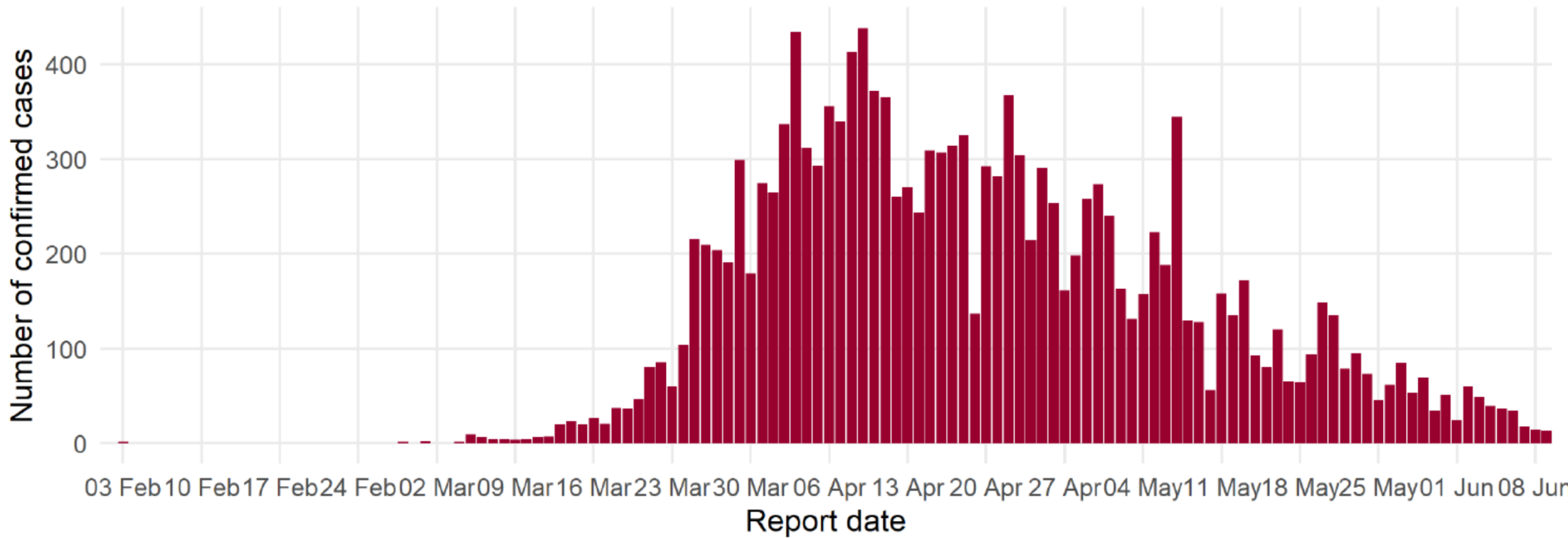
Ian Wake
Director of Public Health

18 June 2020

Overview

- Epidemic curve to date
- Deaths data
- Impact of lockdown
- Current situation
- Exiting lockdown – future policy implications
- Test and Trace

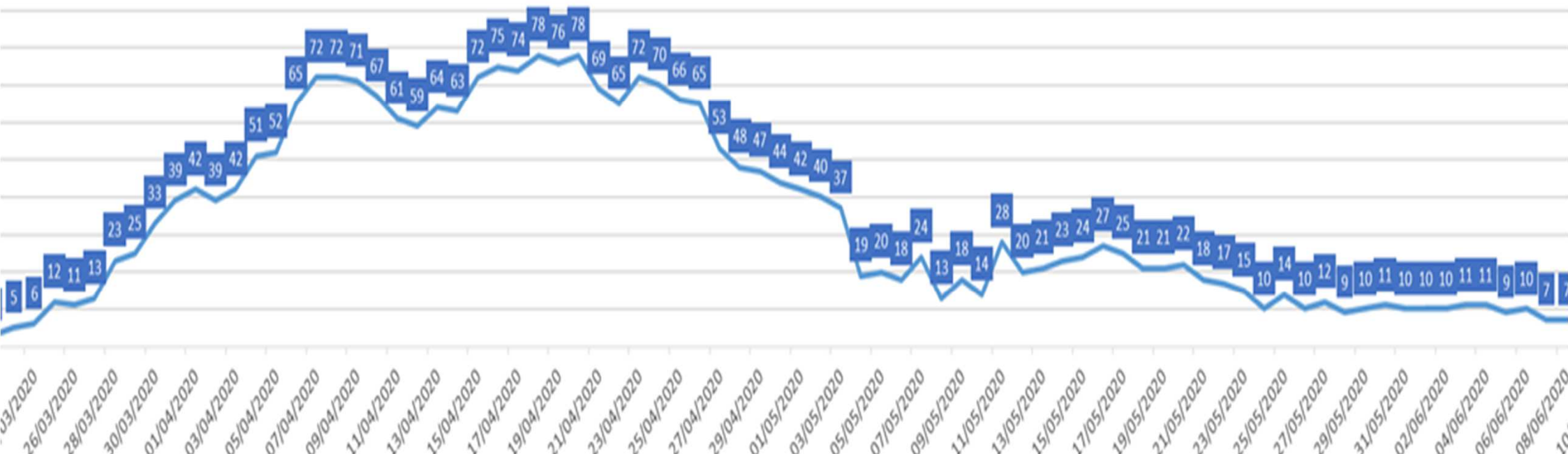
Epidemic Curve: Lab Confirmed Cases



Excludes cases with unassigned PHE Centre

Epidemic Curve: ICU Bed Occupancy

Number of confirmed COVID-19 patients in ITU at 0800, MSE Total



Health Service Usage

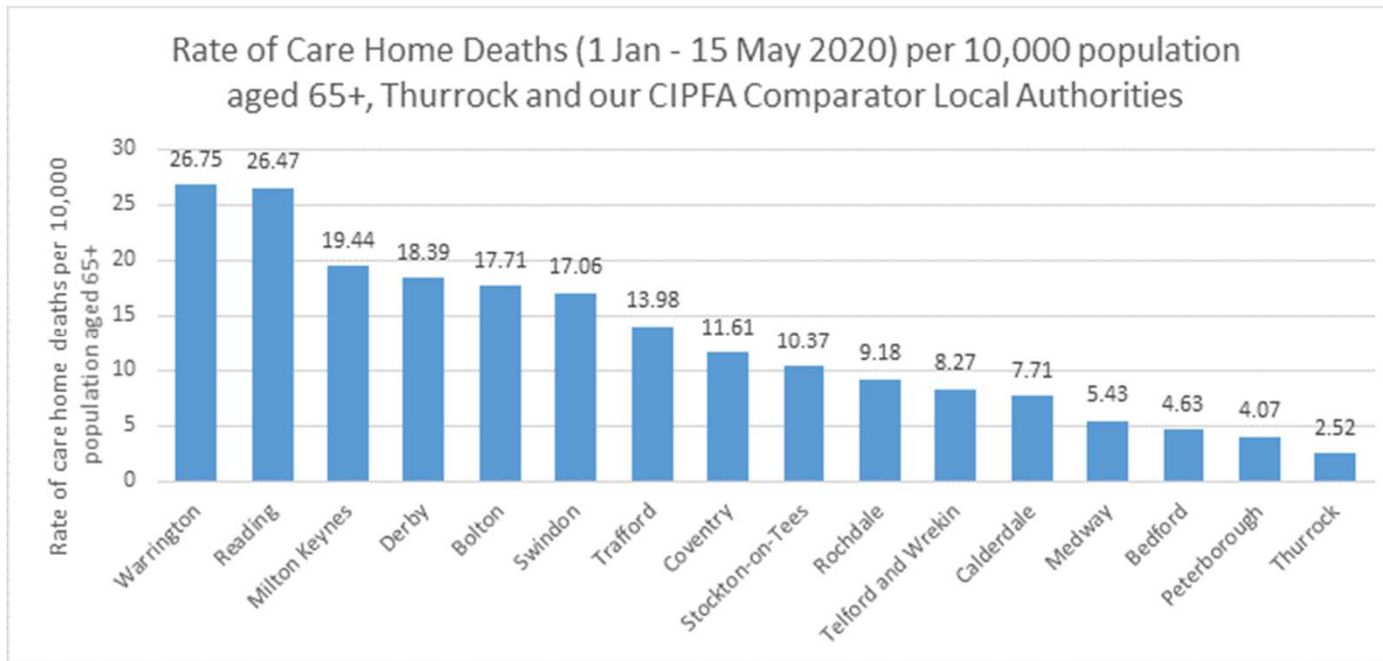
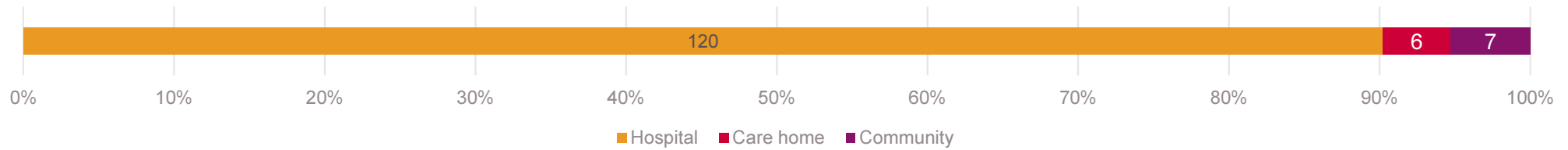
Scenario 4 - Demand vs. Capacity				
	Covid-19 Demand	Total Capacity	% capacity for Covid	Available Non-Covid
1	295	1215	24%	920
2	41	225	18%	184
3	81	338	24%	257
4	103	210	49%	107
5	166	378	44%	212

Demand down for all aspects of the NHS and ASC

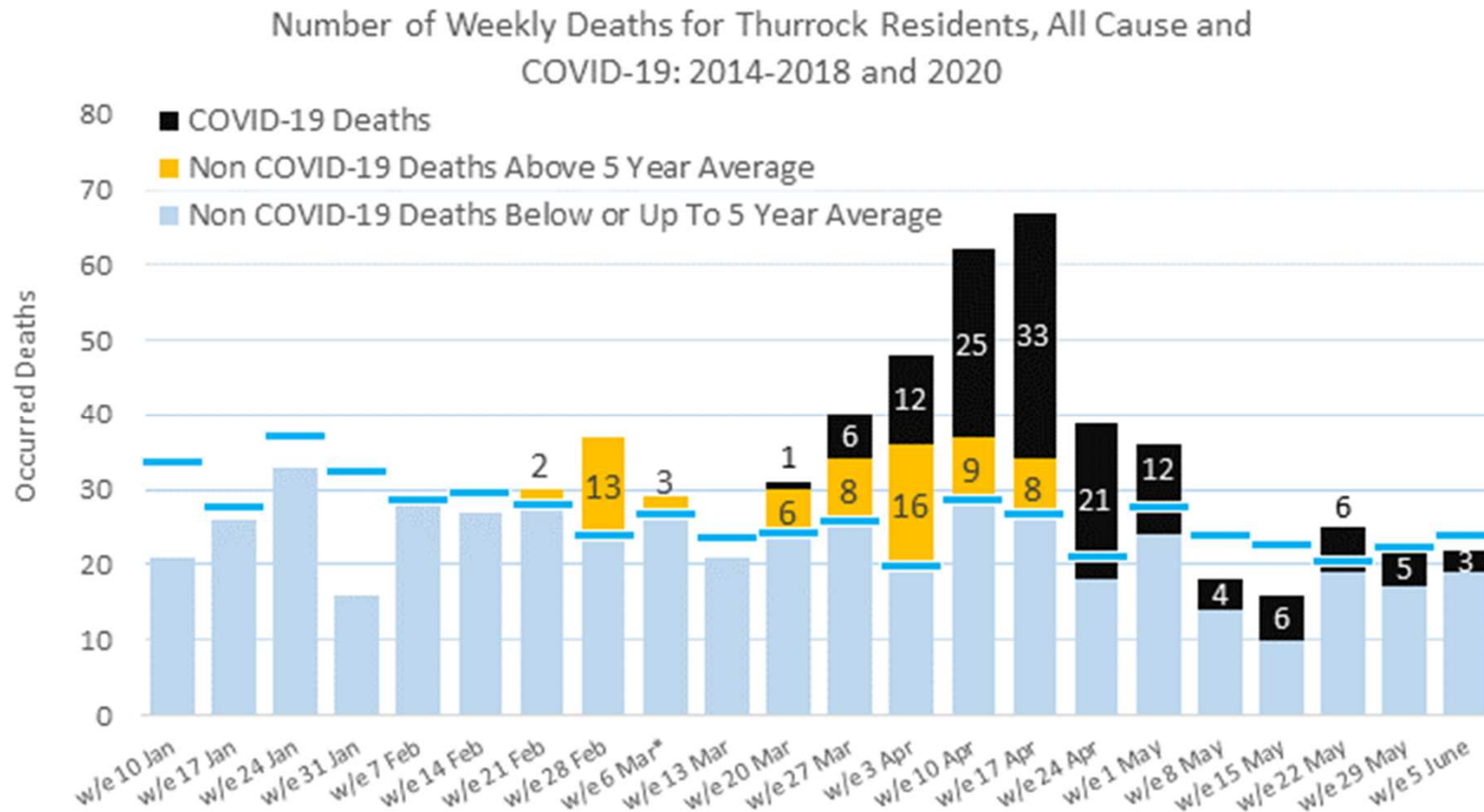
- A&E attendance
- Emergency non-COVID-19 hospital admissions
- Urgent cancer referrals
- IAPT
- Secondary MH care
- Care homes

Deaths from COVID-19 in Thurrock

Deaths from COVID-19 by setting to 5 June 2020

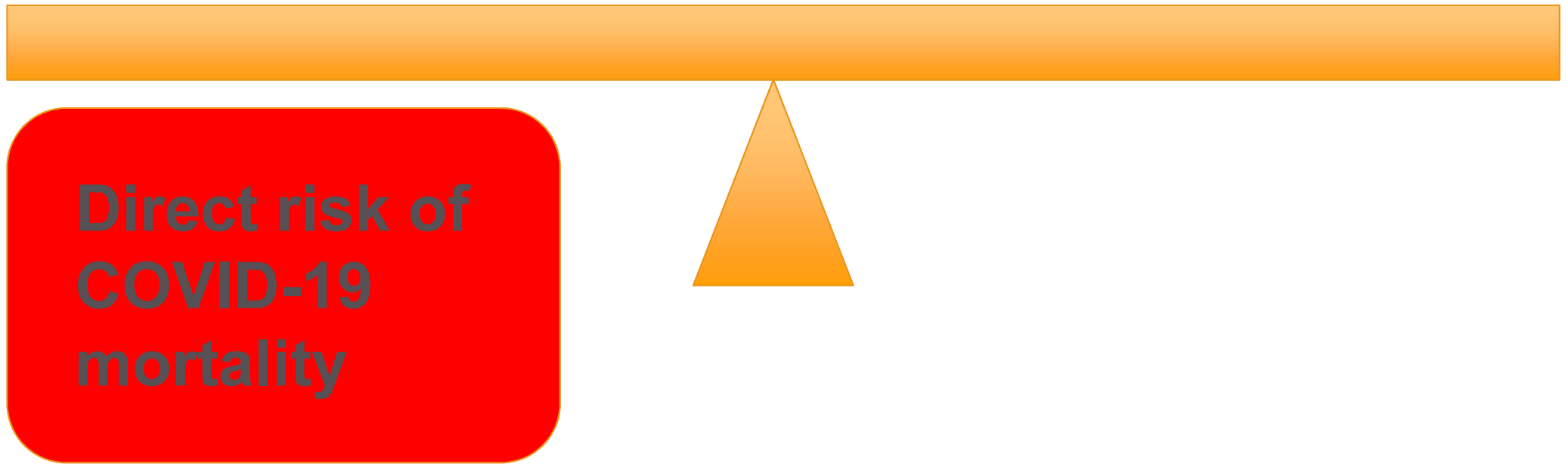


Deaths data: COVID-19 and non-COVID-19 causes



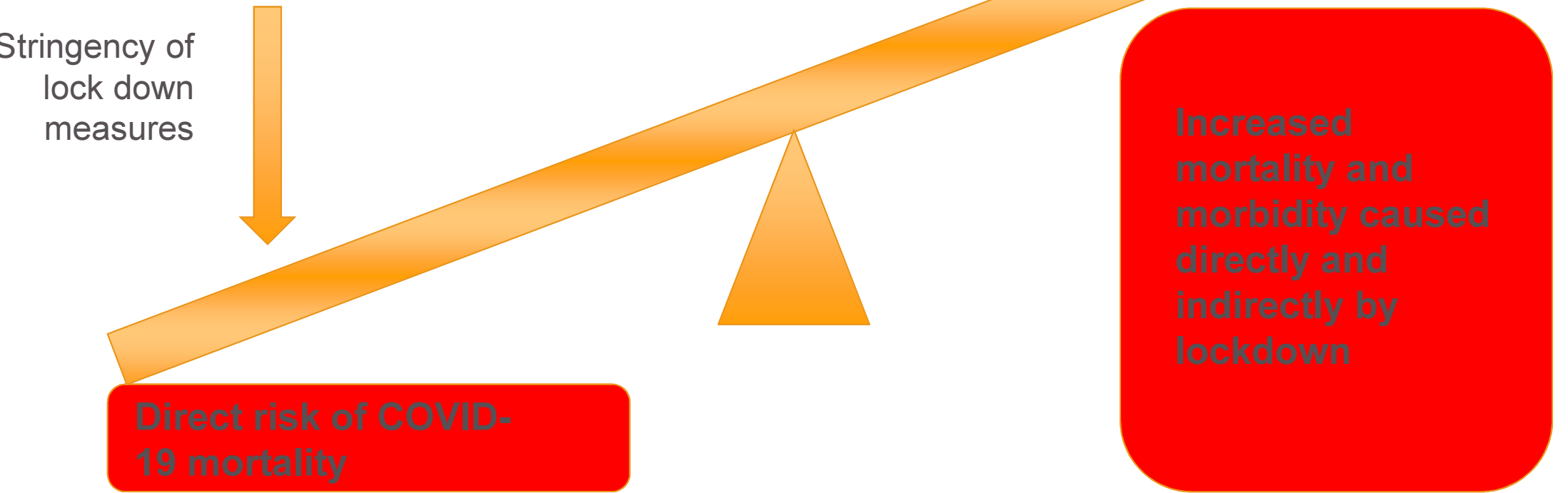
Impact of Lockdown on health and wellbeing

Positive and negative
Danger of seeing only one side of risk equation



Impact of Lockdown on health and wellbeing

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Health impacts of lockdown

Direct:

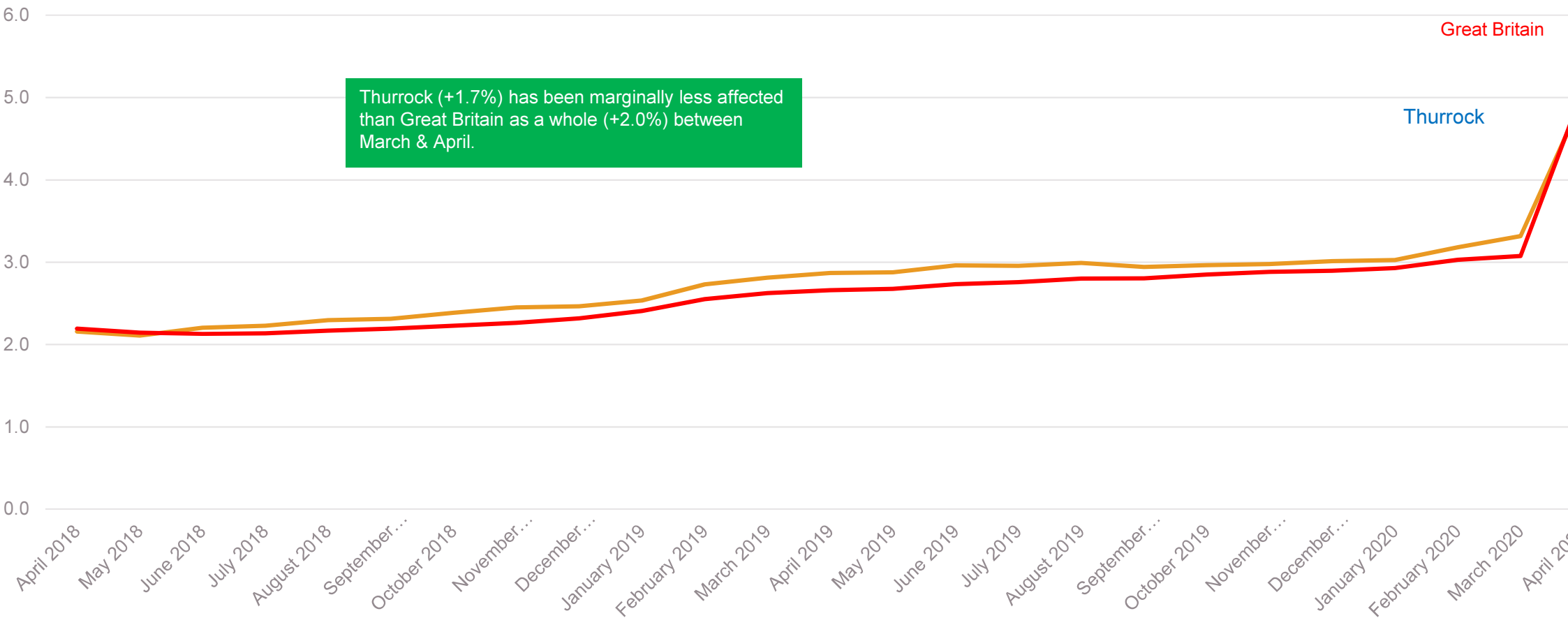
- MH and social isolation
- DV
- Fear in accessing services

Indirect

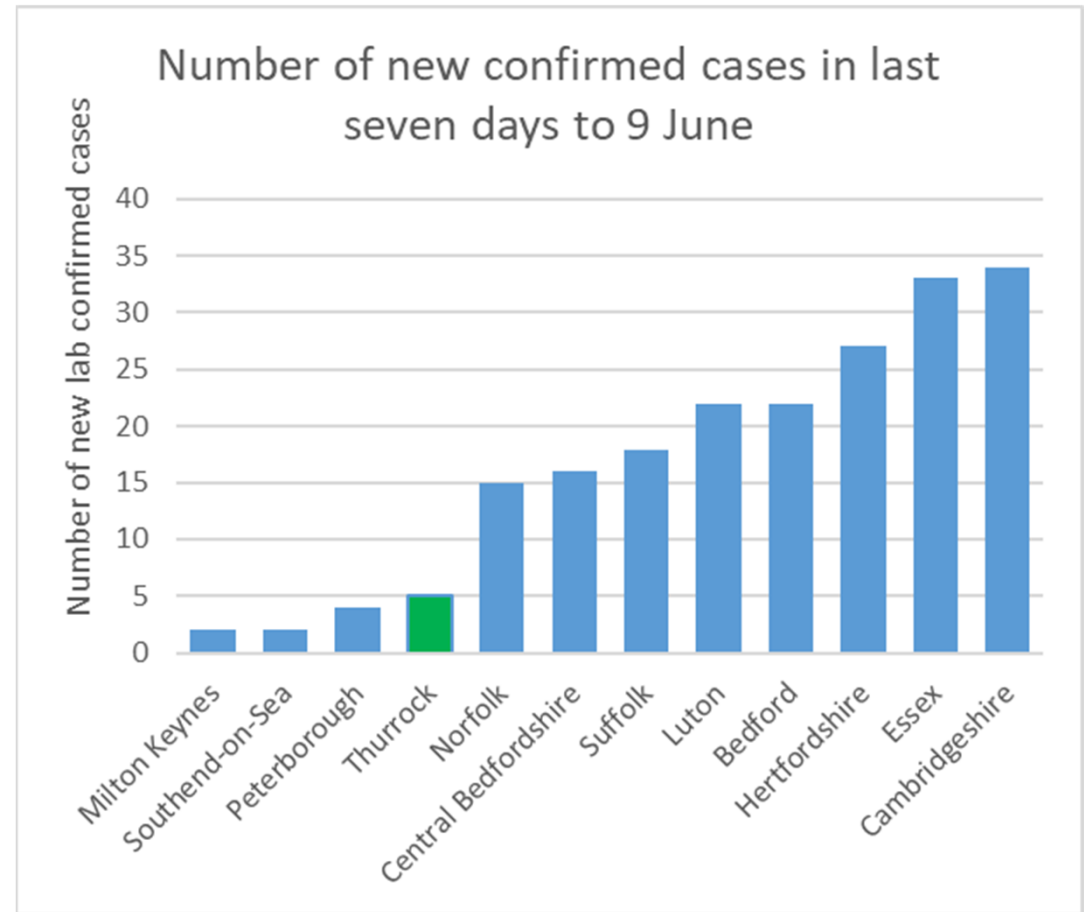
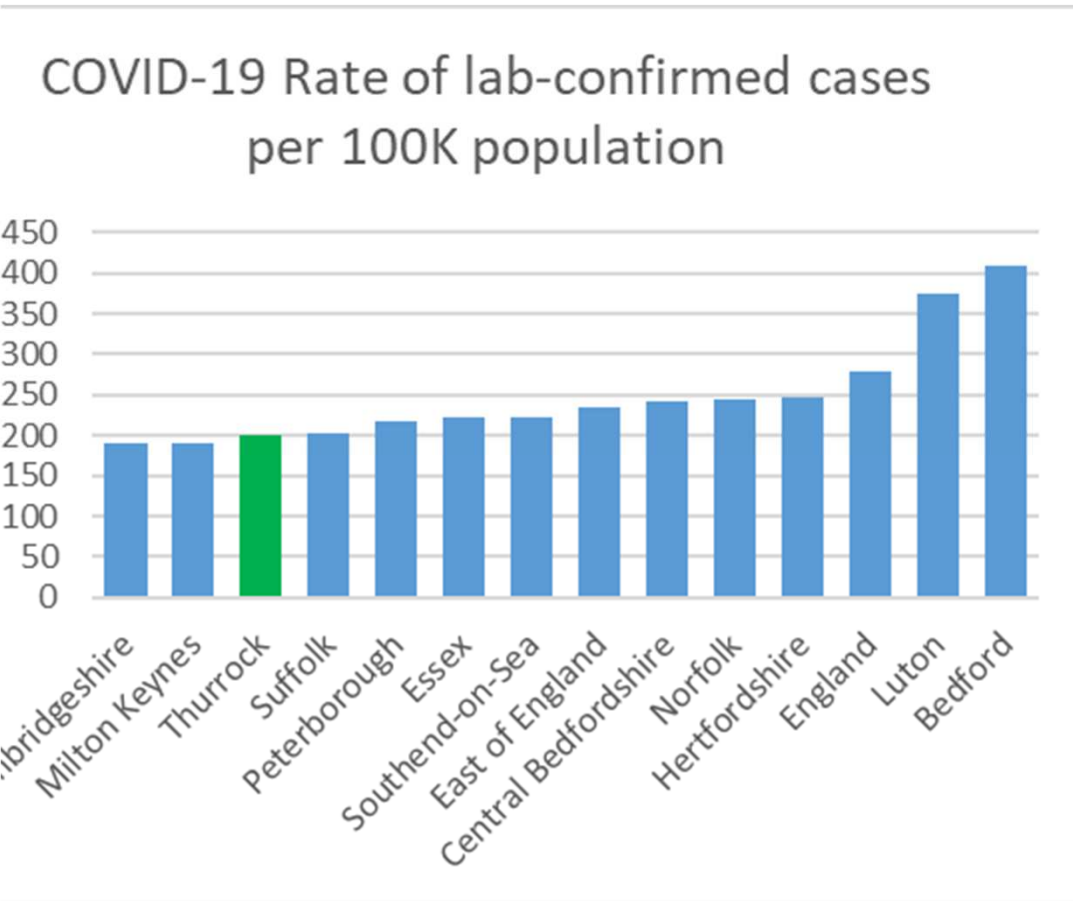
- Withdrawal of services, esp. health and education
- Wider determinants, particularly economic
- Taxation base

Economic Impact of Lockdown

Unemployment claimant percentage



Current situation: Positive test results



Ascertainment fraction extremely difficult to determine accurately but currently circa 10-15%

Current situation: R Value

Region		Median	95% CrI (lower)	95% CrI (upper)
1	East_of_England	0.94	0.73	1.14
2	London	0.95	0.72	1.20
3	Midlands	0.90	0.73	1.07
4	North_East_and_Yorkshire	0.89	0.75	1.04
5	North_West	1.01	0.83	1.18
6	South_East	0.97	0.78	1.17
7	South_West	1.00	0.77	1.29

Exiting Lockdown: Our knowledge is increasing but there's still much we don't know for certain

Only certain exit strategy is herd immunity either by vaccination or infection + recovery
Herd immunity influenced by pathogen itself and variation in susceptibility

Things we know more about:

- Variation in susceptibility: groups and settings
- Variation in transmission
- Variation in outcome after infection
- Some progress on treatment: Remdesivir / Dexamethosone.

Uncertainty

- Population herd immunity threshold
- Level of population immunity
- IgG concentration to deliver immunity
- Length of any immunity conferred by IgG
- Connection between public policy and population behaviour
- Connection between population behaviour and R
- Effectiveness of mitigation strategies like Test and Trace

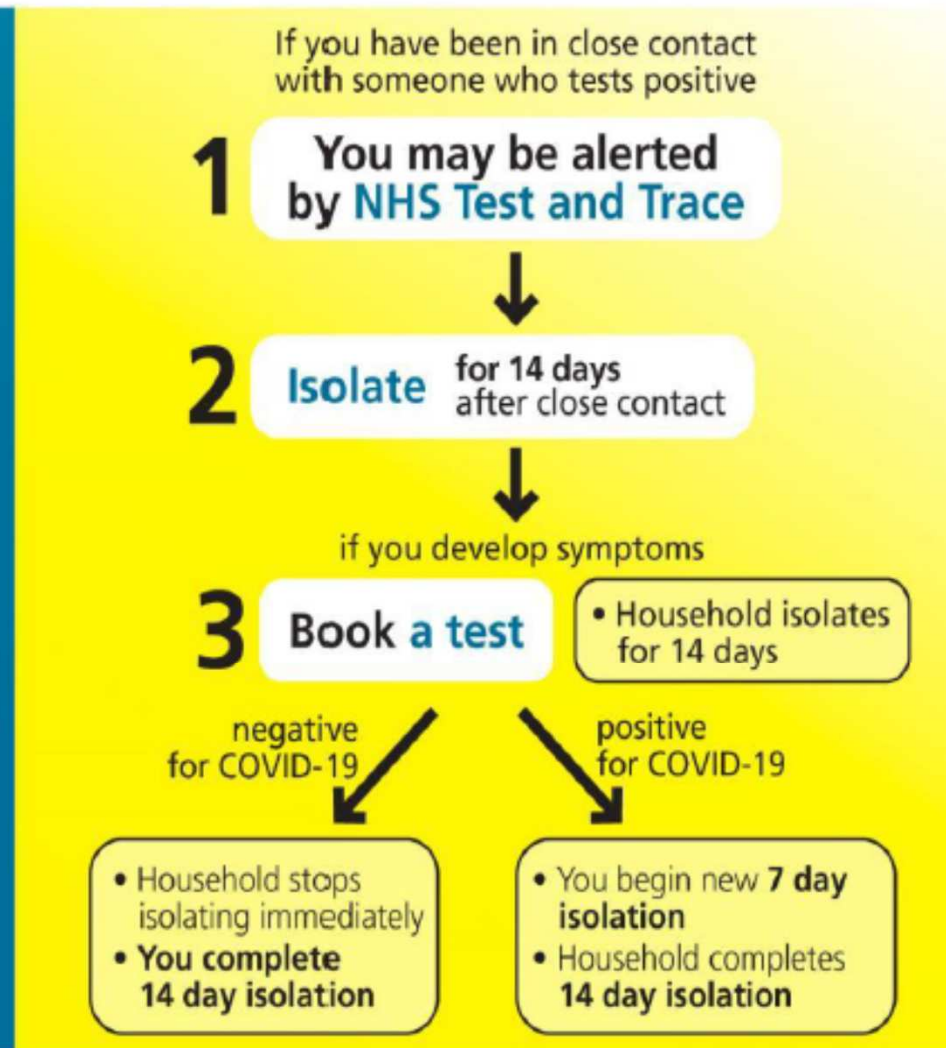
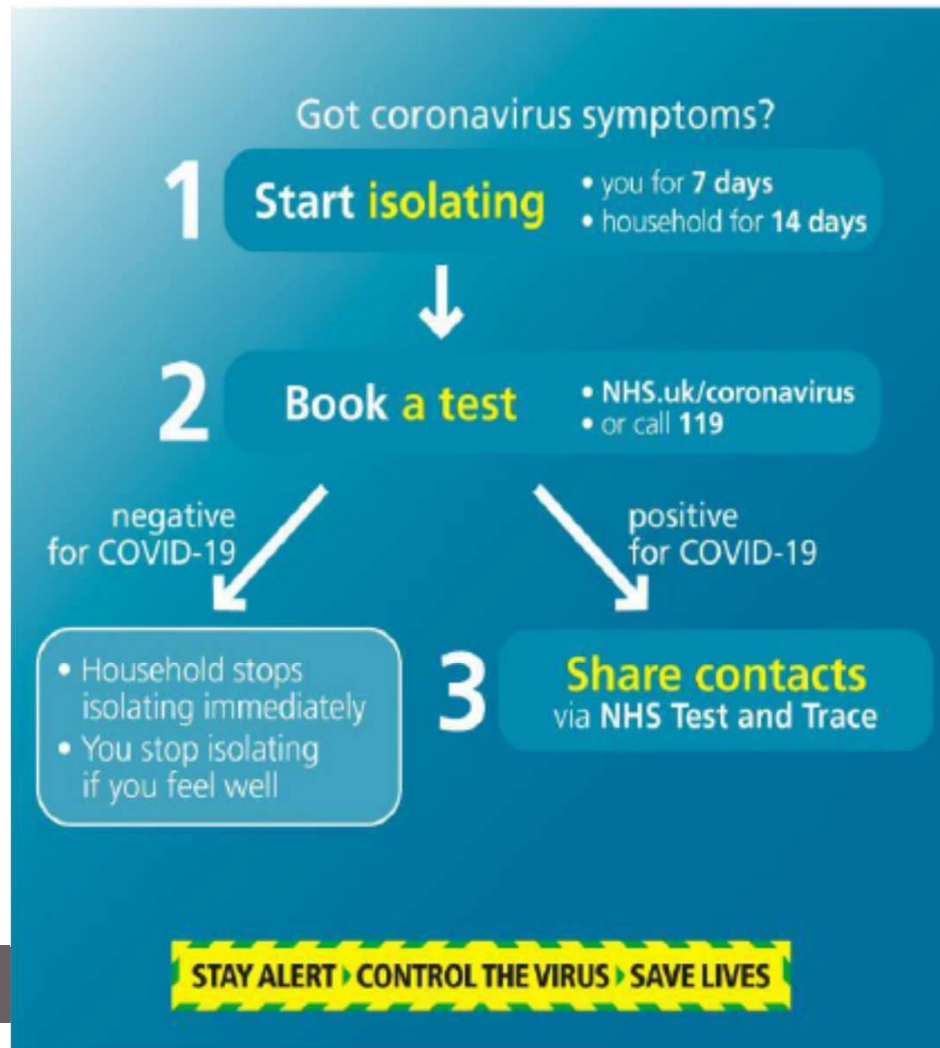
- Can we relax public policy and keep R below 1?
- Importance of maintaining everything that can be done virtually, virtual.

Test and Trace

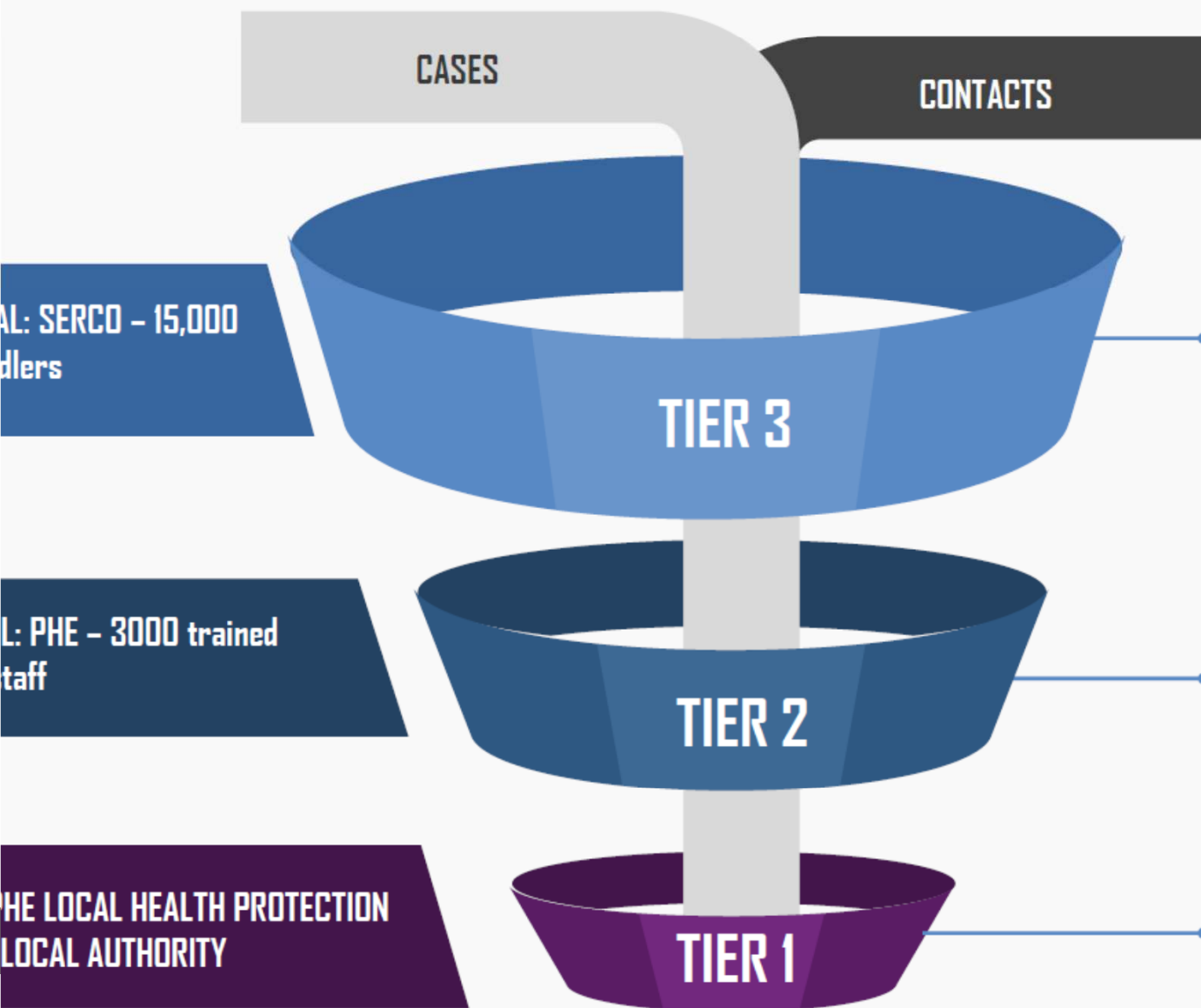


HM Government

NHS Test and Trace



Proposed Architecture of Test and Trace



TIER 3

In the vast majority of cases, details of contacts will be collected for the case by the case completing an on-line form when they receive a positive test result. Call handlers at Tier 3 will then telephone contacts and cases and provide advice on self-isolation where the case has been unable to provide contact telephone details. Tier 3 call handlers will follow a dedicated script. Tier 3 will do this for all routine cases where the necessary information has been provided.

TIER 2

Where a case has failed to or is unable to provide contact details for their contacts, their details are escalated to Tier 2. Tier 2 staff are employed regionally by PHE, generally have some clinical training and have received further training from PHE. Their main role will be to telephone cases and interview them to collect as much information on contacts as possible. They will then communicate with contacts and instruct them to self isolate.

TIER 1

Tier 1 staff will be a mixture of specialist Public Health staff employed through PHE Health Protection Teams, and within other agencies at the local authority level. Their primary function will be to contact trace and manage outbreaks in complex or local settings (see next slide)

Escalation to Tier 1

Liaison with an educational / childcare setting
OR where employer liaison is required

Complex and high risk settings:

- Care homes
- Healthcare workers
- Emergency service worker
- Prison
- Attended healthcare setting for non-COVID-19 reason
- Homeless/shelter

Consequence Management

- Critical infrastructure or public sector operational viability
- High profile media interest
- Cases or contacts unable or unwilling to comply with quarantine

Increased local disease frequency

- 2+ cases in schools
- High workplace absenteeism
- High number of hospitalisations

Next Steps

- Extremely difficult
- Undertake local detailed capacity mapping / skill mix

Fully Assess Demand and Capacity

Dedicated cells and protocols for:

- Education / schools
- Early years
- Health and social care
- Workplaces
- Communities

Local additional testing capacity

Local dedicated contact tracing capacity

Data flows

Develop Local Programme and SOP

- £1M funding allocation
- Overall plan under development

Develop LA Outbreak Control Plan

Clarify:

- Final arrangements with PHE
- Statutory Powers of Health Protection Board

Thurrock specific

Agree and set up Governance Arrangements