COVID-19 Update

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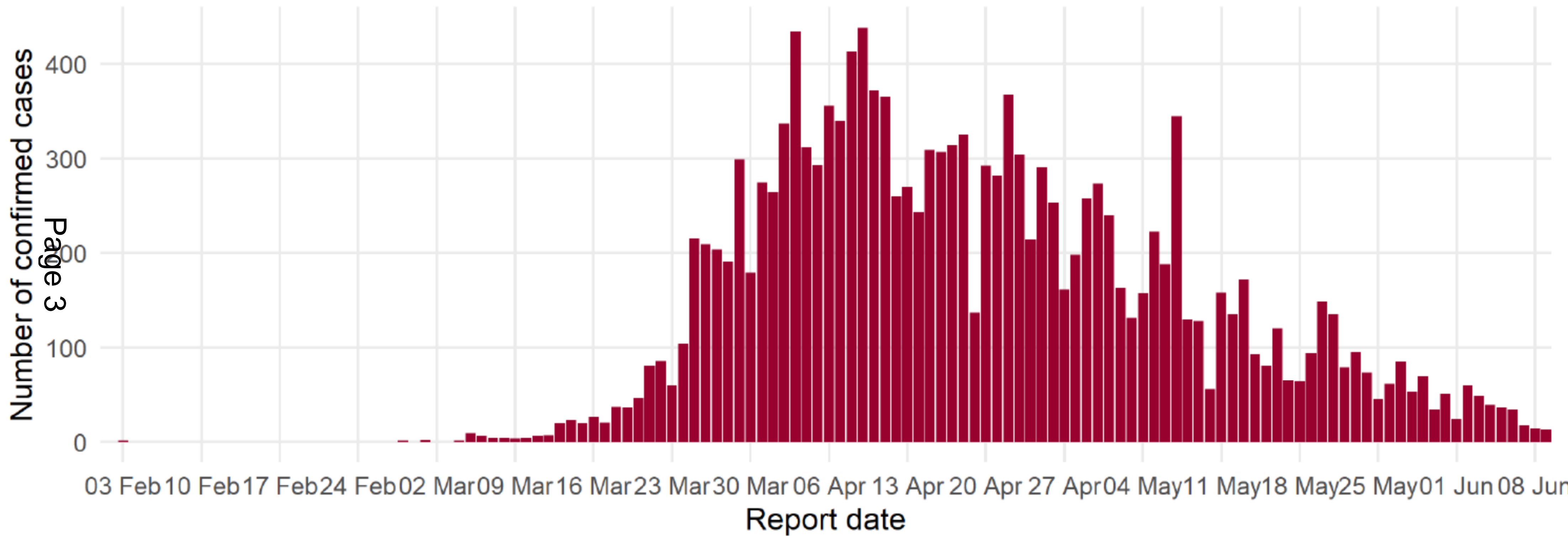
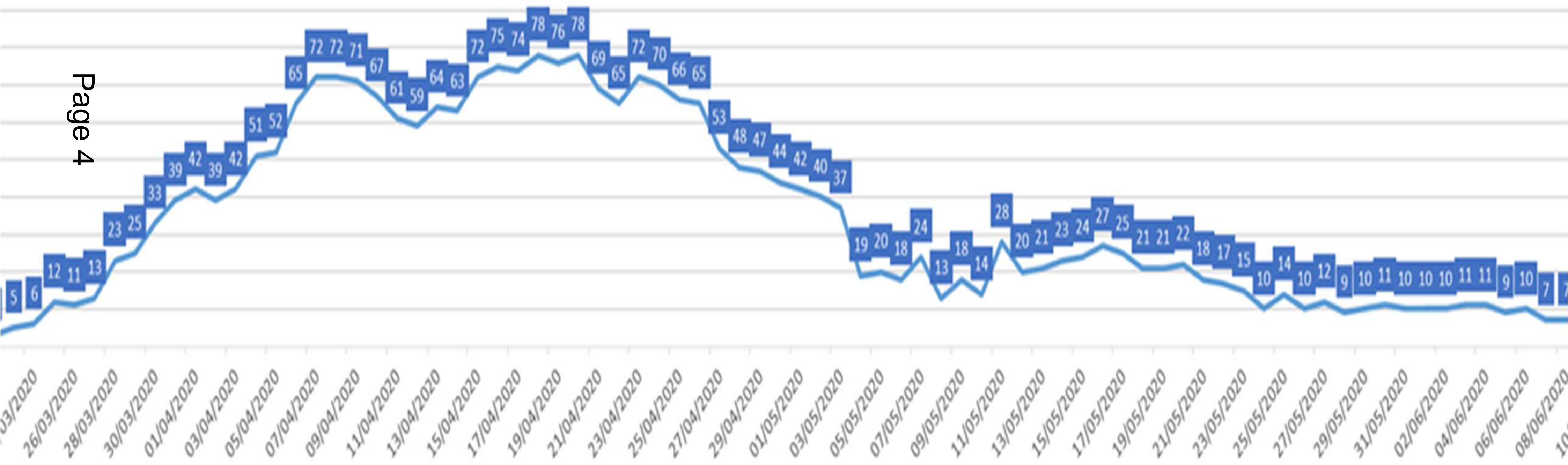
Overview

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

Epidemic Curve: Lab Confirmed Cases



Epidemic Curve: ICU Bed Occupancy



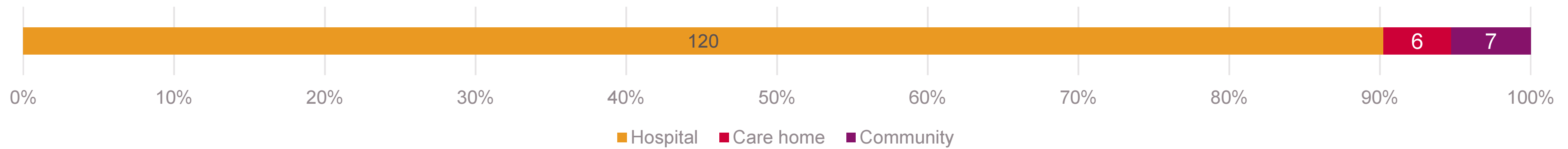
Health Service Usage

rio 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
sive	103	210	49%	107
nced	166	378	44%	212

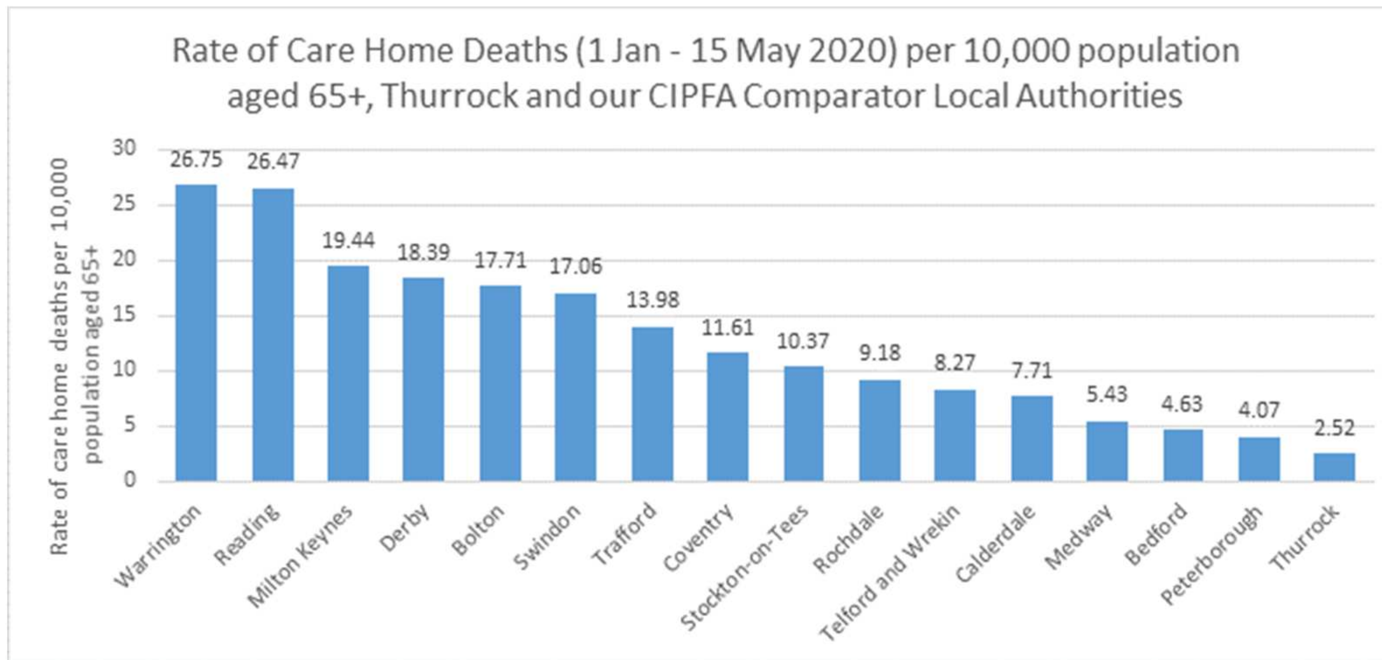
Demand down for all aspects of the NHS an ASC

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

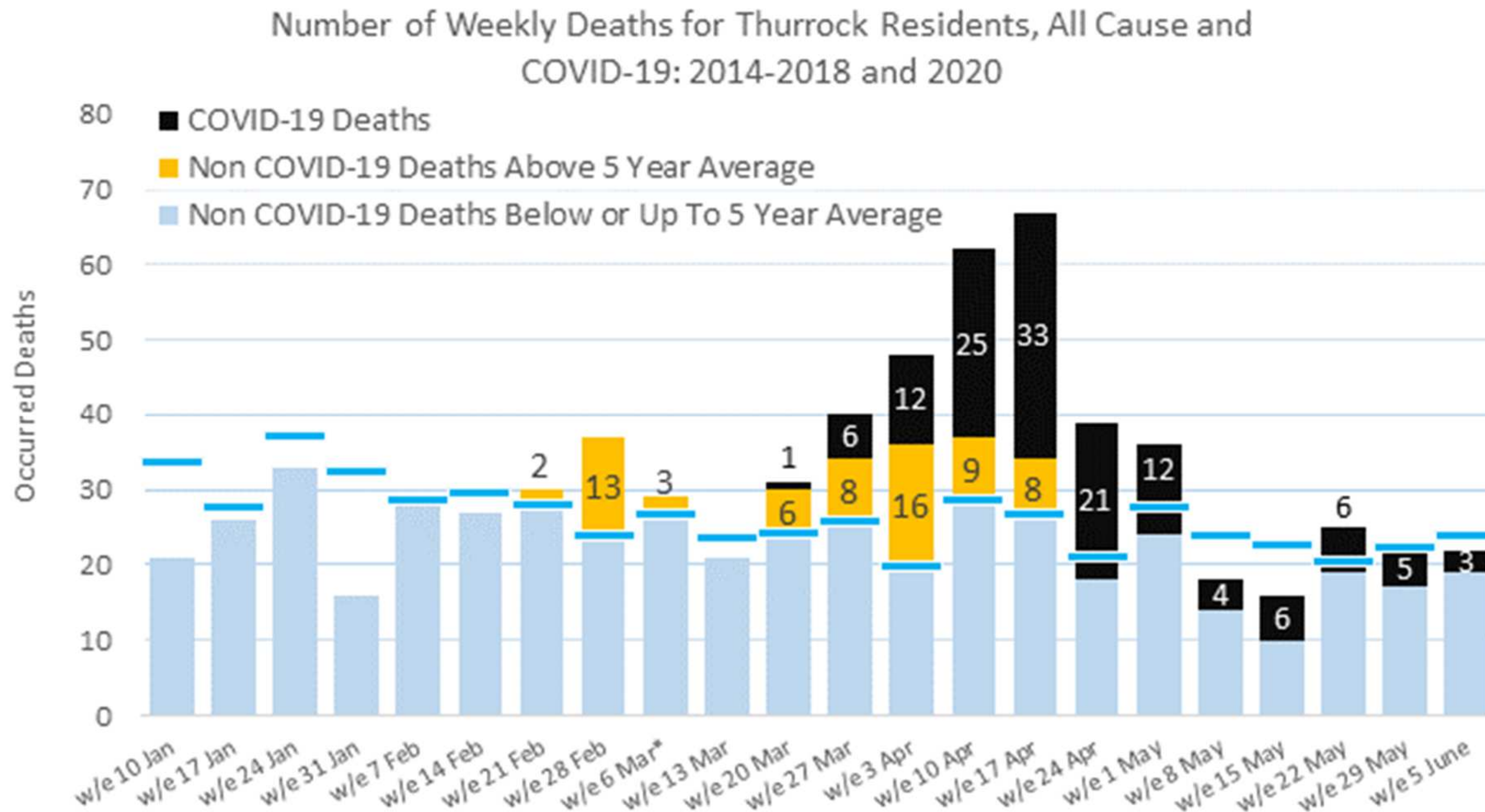
Deaths from COVID-19 in Thurrock



To
13

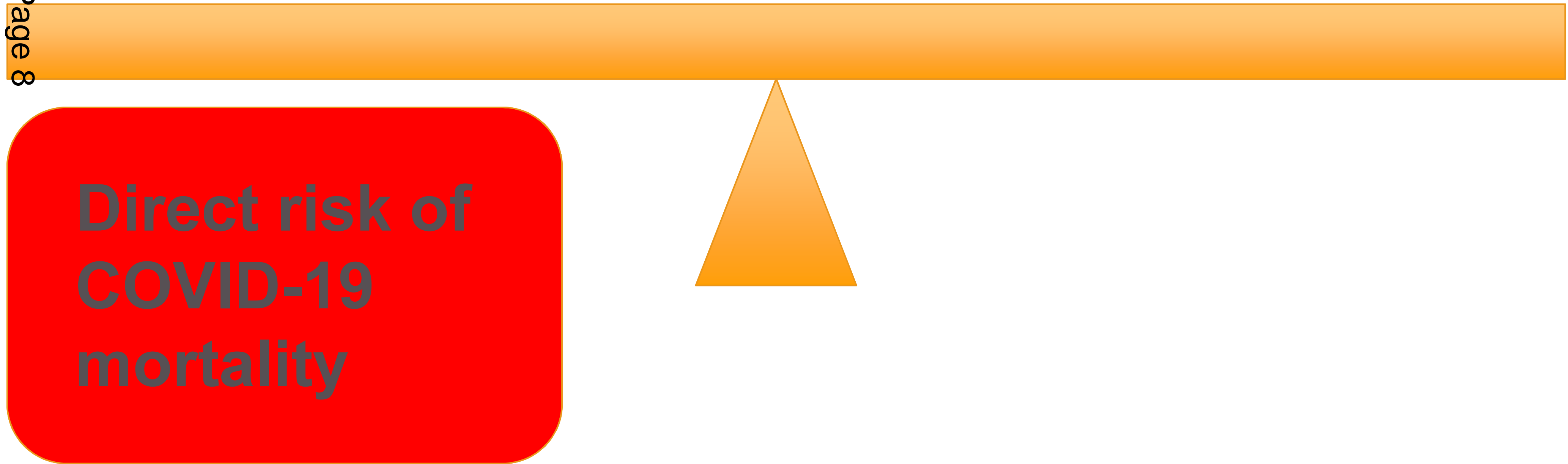


Deaths data: COVID-19 and non-COVID-19 causes



Impact of Lockdown on health and wellbeing

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



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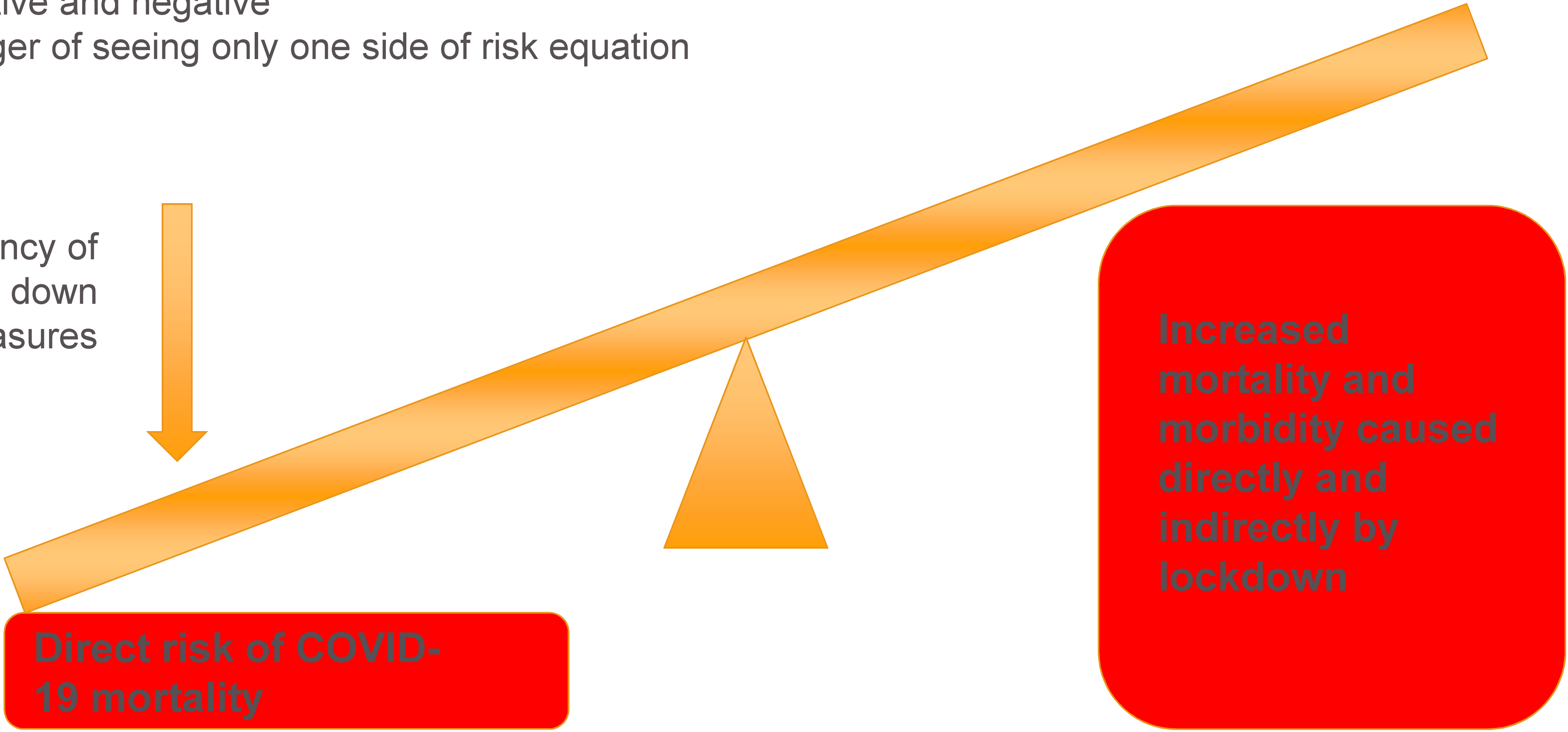


Health impacts of lockdown

Direct:

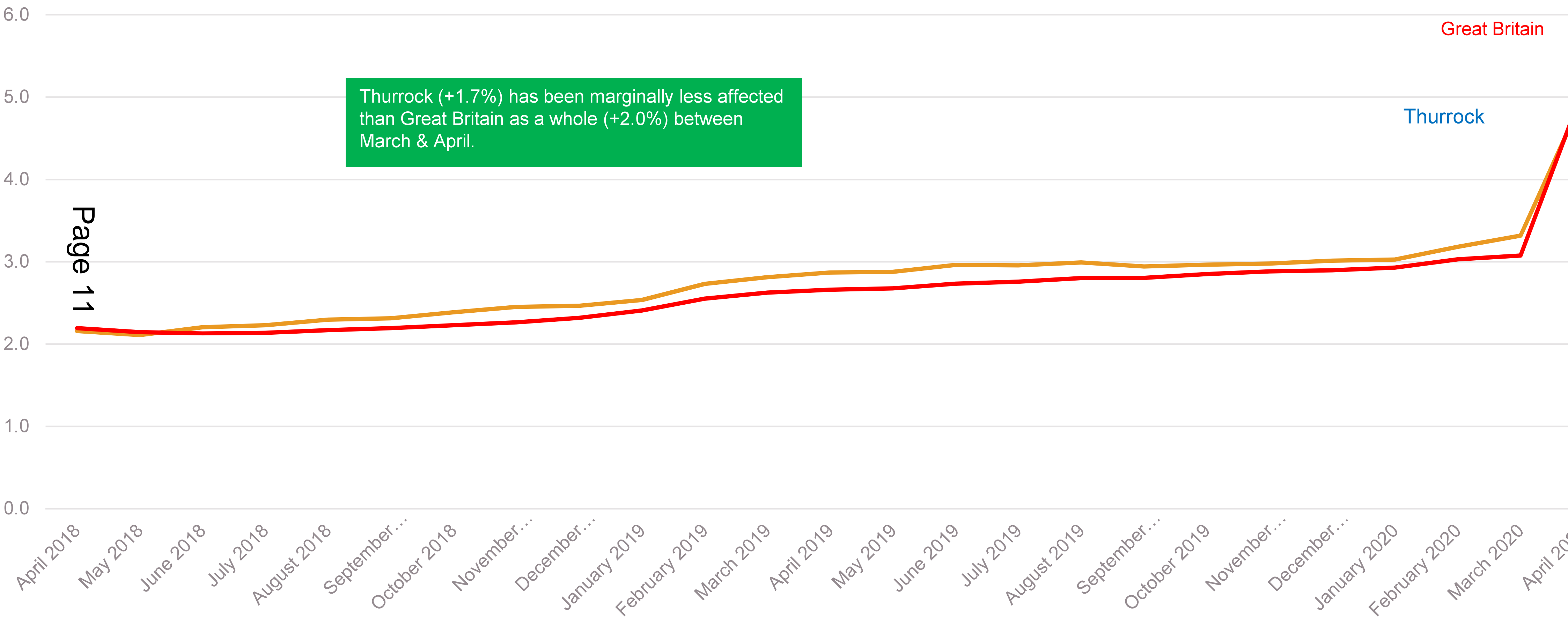
- MH and social isolation
- DV
- Fear in accessing services

Indirect

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

Economic Impact of Lockdown

Unemployment claimant percentage



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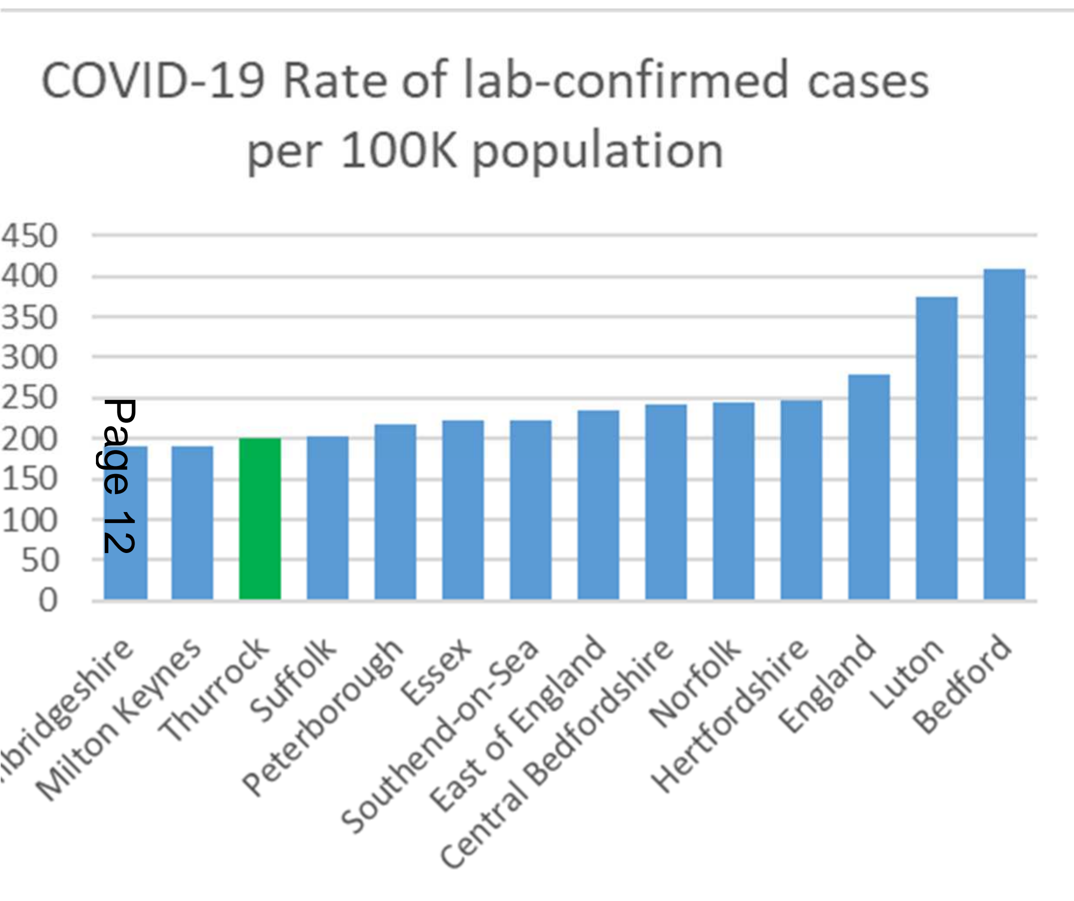
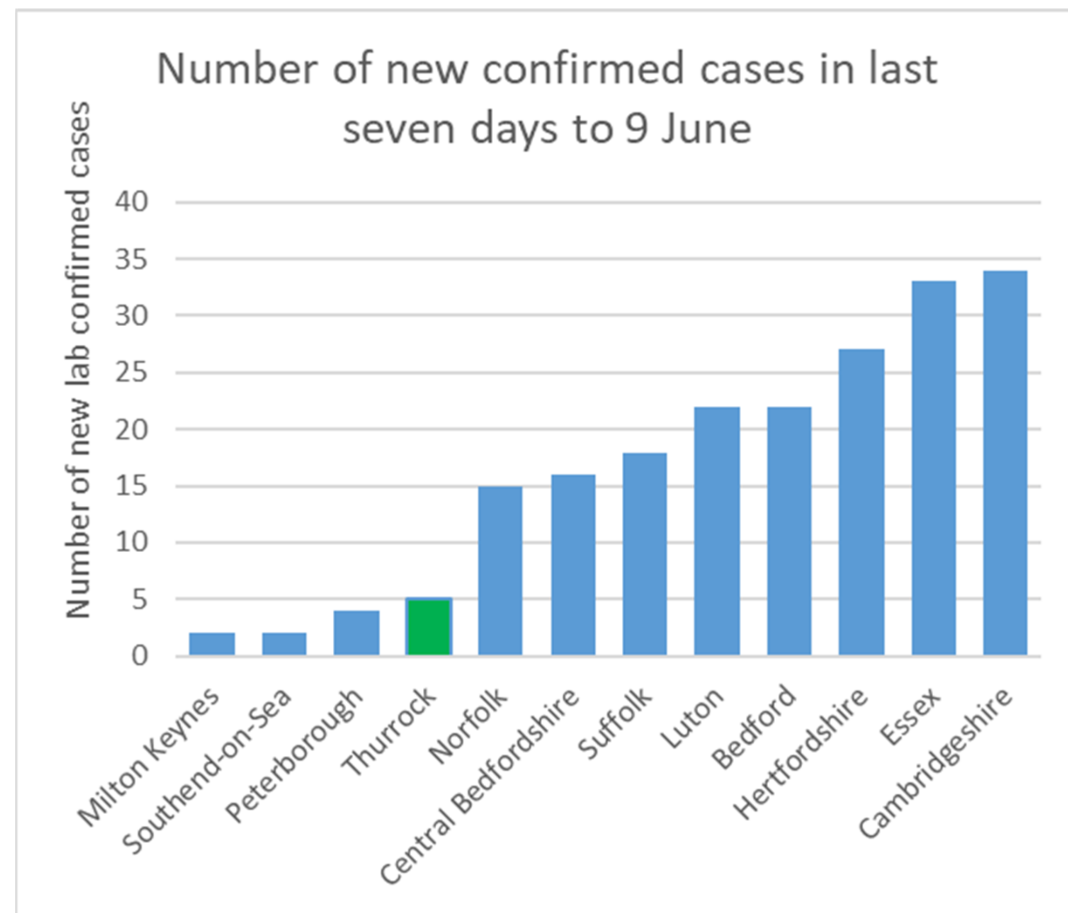
Current situation: Positive test results





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:

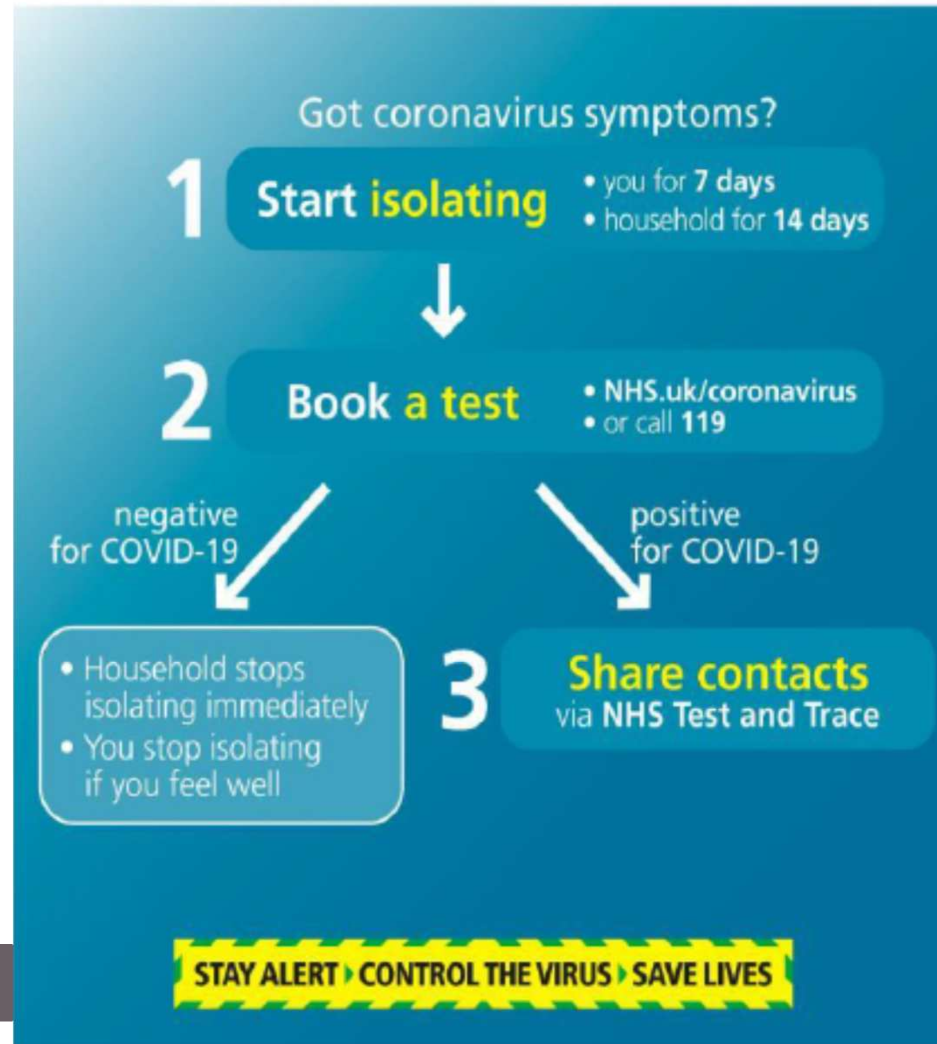
- Variation in susceptibility: groups and settings
- Variation in transmission
- Variation in outcome after infection
- Some progress on treatment: Remdesivir / Dexamethosone.

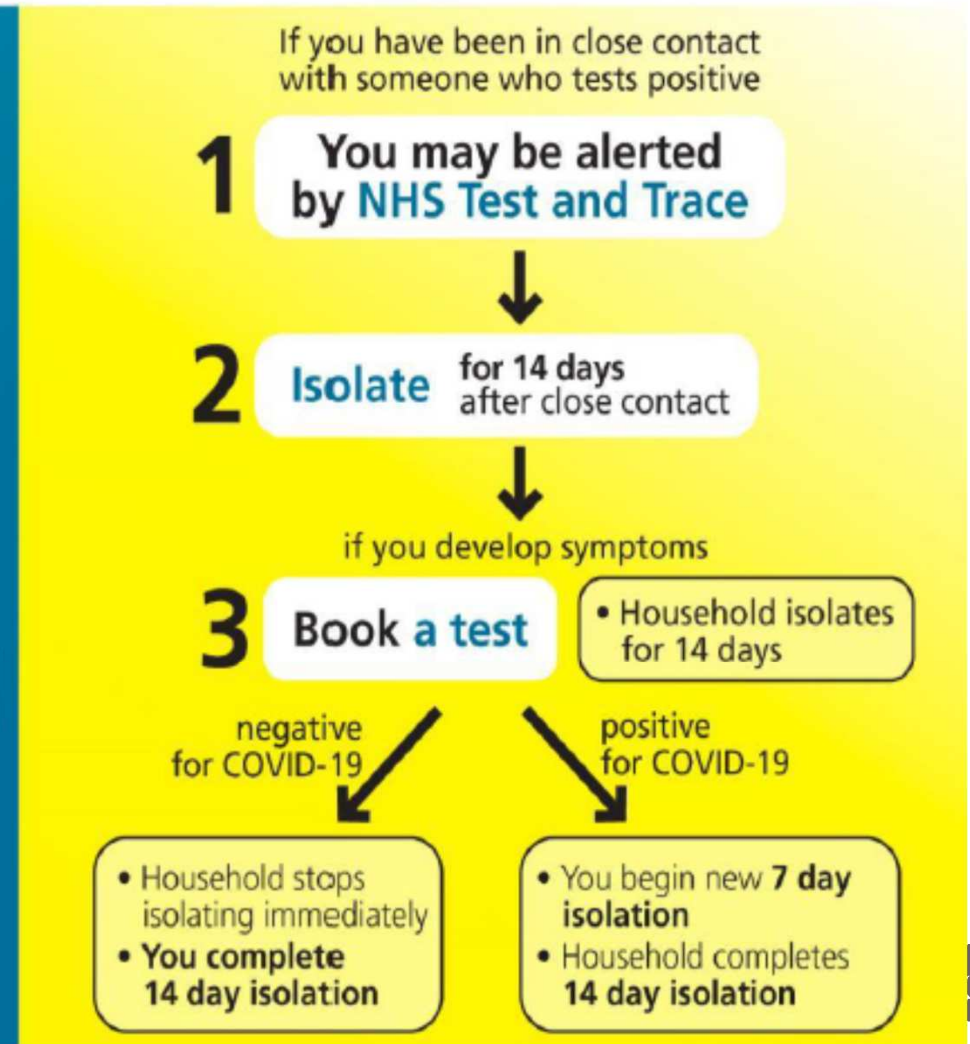
Uncertainty

- 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

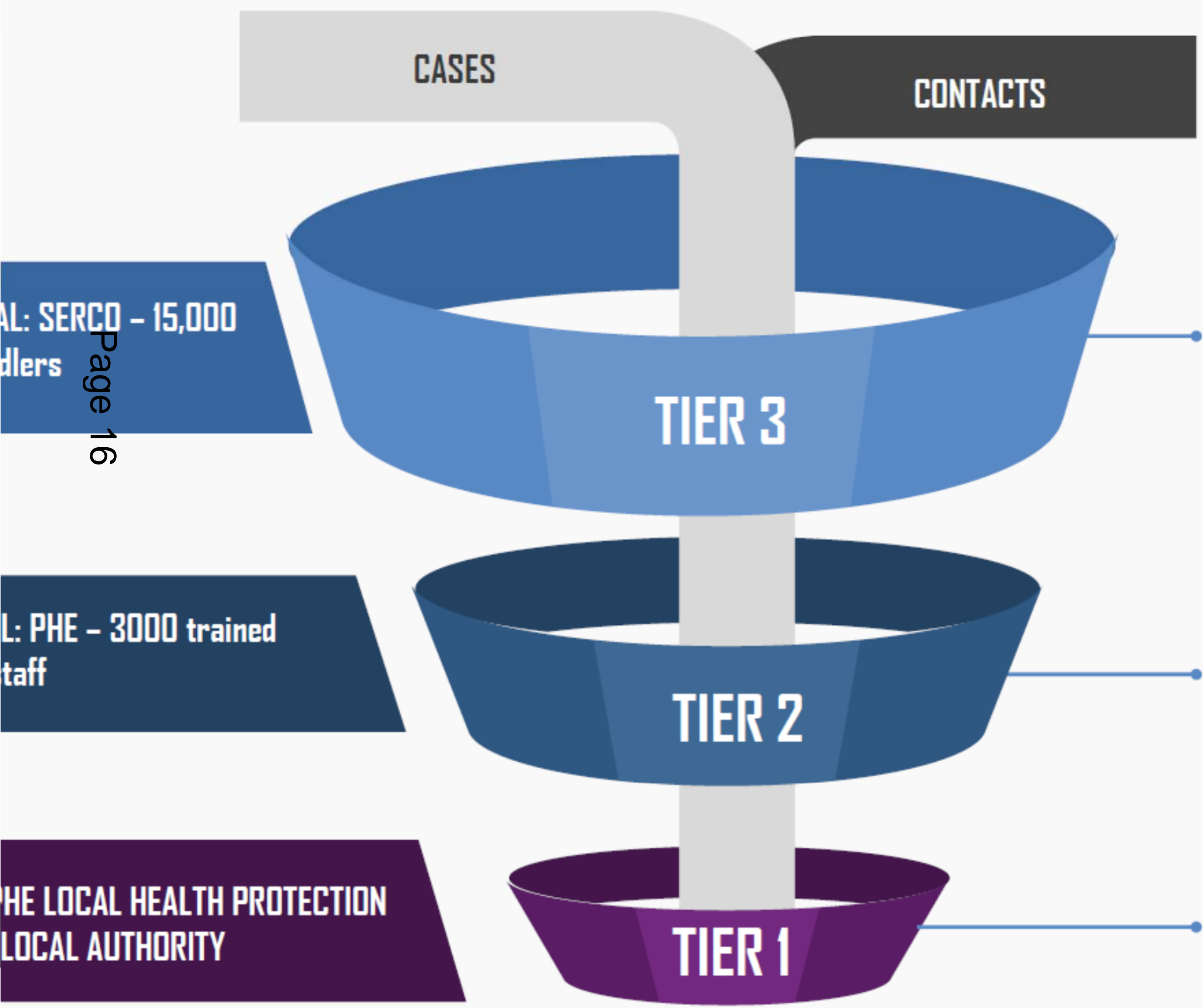
- Can we relax public policy and keep R below 1?
- Importance of maintaining everything that can be done virtually, virtual.

Test and Trace





oposed Architecture of Test and Trace



TIER 3

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

TIER 2

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

TIER 1

Tier 1 staff will be a mixture of specialist Public Health staff em
through PHE Health Protection Teams, and within other agen
local authority level. Their primary function will be to contact tra
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

ext 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