

COVID-19: Public health update and implications for the NHS in Wales

Health and Social Care Coronavirus Planning and Response Group

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1. Background

Coronavirus

- Novel coronavirus (CoV) newly identified strain in humans
- Virus named SARS-CoV-2
- Disease named COVID-19
- First report in Wuhan City, Hubei Province, China on 31 December 2019
- From epicentre in Wuhan City now cases across 37 countries
- Person to person community transmission evident
- Healthcare worker transmission

2. Situation report

Global context

- As of 27 February 2020

- **Global:**
 - 82132 cases
 - 2801 deaths

- **China:**
 - 78528 cases
 - 2745 deaths

- **Outside of China:**
 - 3604 cases
 - 56 deaths
 - 37 countries

Geographic distribution of COVID-19 cases worldwide as of 27 February 2020



3. Situation report

Mainland China

- 65187 of 78191 confirmed cases within Hubei Province (83%)
- 2615 of 2718 deaths within Hubei Province (96%)
- Disparities between mortality rates across China [1]

Region/area	Mortality rate
Wuhan City	>3%
Hubei Province	2.9%
Other Provinces	0.7%

Suggests mortality is correlated with healthcare burden and healthcare resources availability in epicentre of outbreak [1]

4. Situation report

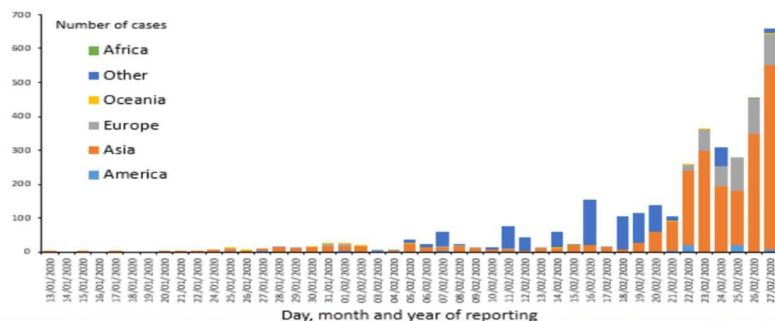
Outside of China

- More new cases reported outside of China than from China
- 37 countries reported cases across six WHO regions:
 - **Western Pacific Region** (Korea, Japan, Singapore, Australia, Malaysia, Vietnam, Philippines, Cambodia)
 - **South-East Asia Region** (Thailand, India, Nepal, Sri Lanka)
 - **Region of the Americas** (USA, Canada)
 - **European Region** (Italy, Germany, UK, France, Austria, Croatia, Israel, Russia, Spain, Belgium, Finland, Sweden, Switzerland)
 - **Eastern Mediterranean Region** (Iran, Bahrain, UAE, Kuwait, Iraq, Oman, Afghanistan, Egypt, Lebanon)
 - **African Region** (Algeria)

5. Situation report

Outside of China

Distribution of COVID-19 cases by continent (except China) as of 27 February 2020
(according to the applied case definition in the countries) Data from ECDC



6. Situation report

UK context

- **Fifteen** confirmed cases of COVID-19 in UK
- Two new cases reported on 27 February 2020 acquired in Italy and Tenerife
- Four cases from Diamond Princess cruise ship
- All confirmed cases treated in HCID units as per protocol for High Consequence Infectious Disease
- As of 27 February 2020:
 - 7690 people tested in UK
 - 7675 tested negative

7. Situation report

Wales context

- As of Thursday 27 February 263 people tested who met possible case definition
- Any confirmed case will be reported by CMO Wales
- Active surveillance of contacts of confirmed cases (contact with confirmed case outside of UK) undertaken by All Wales Health Protection Team
- Active surveillance involves daily monitoring:
 - Check remain well and no reported symptoms of COVID-19
 - Ensure remain in home isolation

8. Public Health Wales Response

Enhanced response

- PHW remain in **enhanced response**
- Upscaling of All-Wales Health Protection Team capacity
- Helpline open 7 days with dedicated coronavirus team
- Training and upskilling from general public health workforce
- Increased demand following widening of geographical areas of concern
- 500 calls within 24 hour period to PHW following change in case definition

9. Updated case definition on 25 February 2020

Countries and areas of concern

- **Category 1:** includes Iran, towns under containment measures in Italy, Daegu or Cheongdo (Republic of Korea) and Hubei province
 - The guidance for Italy, Iran and Daegu or Cheongdo (Republic of Korea) applies only to individuals who returned from these specific areas on or after 19 February 2020
- **Category 2:** Cambodia, China, Hong Kong, Italy (north), Japan, Laos, Macau, Malaysia, Myanmar, Republic of Korea (excluding in Category 1), Singapore, Taiwan, Thailand, Vietnam



Aim to identify travellers from at risk areas. Home isolate to reduce risk of transmission in community. Phone 111 to ensure that not in contact with healthcare settings when unwell.

10. Advice for returning travellers

Countries and areas of concern

- **Category 1:** Travellers should immediately self-isolate, even if asymptomatic, and call NHS Direct on or 111 Wales to inform of recent travel
- **Category 2:** Travellers do not need to undertake and special measures, but if develop symptoms they should self-isolate and call NHS Direct on or 111 Wales

11. COVID-19 testing in Wales

Countries travelled to by possible cases of COVID-19

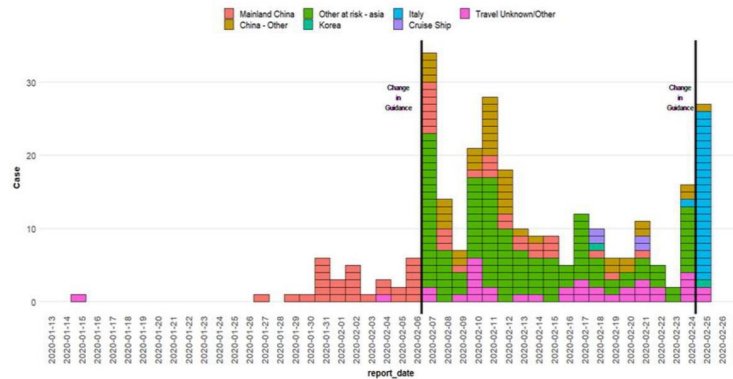


Figure 1 – impact of case definition

Figure 2 – age groups indicated in travel history – younger age groups China. Older age groups to Thailand

12. COVID-19 testing in Wales

Possible cases of COVID-19 in Wales, by report date and region of travel



COVID-19: Public health update and implications for the NHS in Wales

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Figure 1 – impact of case definition

Figure 2 – age groups indicated in travel history – younger age groups China. Older age groups to Thailand

13. Planning and preparedness

Monitoring for community transmission

- RCGP sentinel practices surveillance
 - COVID-19 testing in patients without history of travel
- ICU surveillance:
 - COVID-19 testing with independent presentation and diagnosis
 - ECMO network to detect admission requiring ECMO with COVID-19

14. Wider partner engagement

LRFs

- Signpost to PHE Guidance that receives regular updates to ensure consistent, pragmatic and proportionate messages to the public:
 - Educational settings
 - Staff in transport sector
 - Employers and businesses
 - Social or community care and residential settings
 - Decontamination in non-healthcare settings
- Port Health key control measure
 - Airport Public Health Enhanced Monitoring within Cardiff Airport
- Enforcement of home isolation
 - Exploring option for sustainably obtaining Part 2a orders if required across Wales

15. Public Health Wales response

Future demand

- Assumptions:
 - 8% of travellers will have an acute respiratory infection [2]
 - ONS survey data of visits to the UK applied to a Welsh population as a proportion of UK population
- Estimates that in Wales over two week period high numbers will meet the case definition for possible COVID-19:
 - 678 individuals who have travelled from Asia & Middle East
 - 642 individuals from Italy will meet the possible case definition for COVID-19
- Estimated 10 fold increased demand with further widening of geographical area within Europe
- Estimated 100 fold increased demand to account for historic cases that will then meet possible case definition

16. Healthcare providers response

Future challenges

- Step change in magnitude of response required
- Capacity to offer timely assessment and diagnostic testing
- Any requirement for clinical examination and investigation currently requires hospital transfer by ambulance and admission
- Potential delay in diagnosis and treatment of life threatening condition due to concerns in ascertaining COVID-19 status

17. Planning and preparedness

Capacity within containment phase

- Contact tracing

- Reproductive number = 3 indicates 30-50 contacts per case
- First generation: 50 contacts
- Second generation: 3 cases, 150 contacts
- Third generation: 9 cases, 450 contacts

- HCID capacity

- Increase capacity across UK
- Consideration of admission for clinically well when capacity reached

18. Planning and preparedness

Pandemic strategic planning

- Movement from containment and treatment phase to escalation
- Surge management
- Prioritisation and triage of service delivery
- Resilience and contingency planning
- Enhanced local public health measures to reduce transmission

References

1. Yueping et al. 2020. Potential association between COVID-19 mortality and health-care resource availability. Lancet Global Health.
2. Szilagyi et al. 2016. Incidence and viral aetiologies of acute respiratory illnesses (AIR) in the united states: a population based study. Epidemiology & Infection V144 Issue 10