

COVID-19 Response - PHW Internal Strategic Review - Discussion Paper

Points for discussion

Background: The CEO of PHW met with the Incident Director on 23/2/20 and asked for strategic stocktake of the organisation’s response to COVID-19. This discussion paper has been drafted in response to that and to assist a strategic discussion within the senior response team.

Context: PHW has been responding, since 22 January 2020, to the COVID-19 epidemic in an “enhanced” status within the emergency response plan. PHW is part of the co-ordinated UK response led by PHE. A command and control structure is in place with a daily Incident Management Team (IMT) overseeing the co-ordination of the response activities. A Tactical Incident Team (Silver group) is undertaking the delivery of agreed tasks and actions. During the last 5 weeks there has been significant developments in the epidemic progression, understanding of the transmission dynamics and consequently the changes to risk assessment.

Strategic issues

- 1. Epidemic progression:** The numbers of reported cases daily increased in mainland China from 24 January until reaching a steady state during the last week. However, the reporting changed twice in this period including a significant increase on 13 February (Figure 1). There is lack of confidence in the accuracy of the numbers reported. But of significant note is the rise in cases outside China in the last 4 days (Figure 2). Notably, between 19 Feb to 23 Feb, these have been in South Korea (31 cases to 602 cases), Iran (0 cases to 28 cases) and Italy (3 cases to 155 cases).

Figure 1. Distribution of COVID-19 cases worldwide, as of 23 February 2020

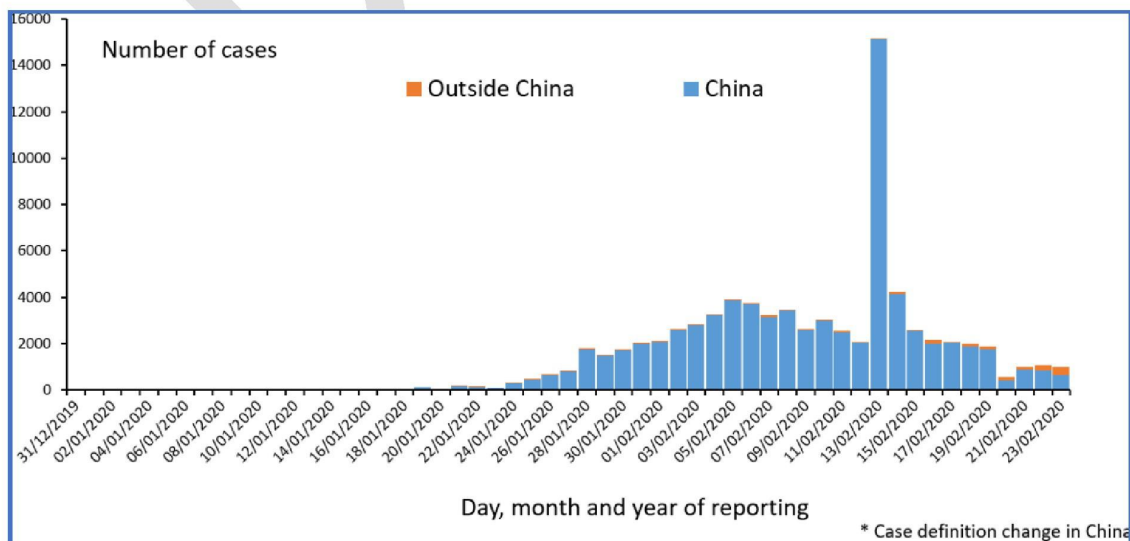
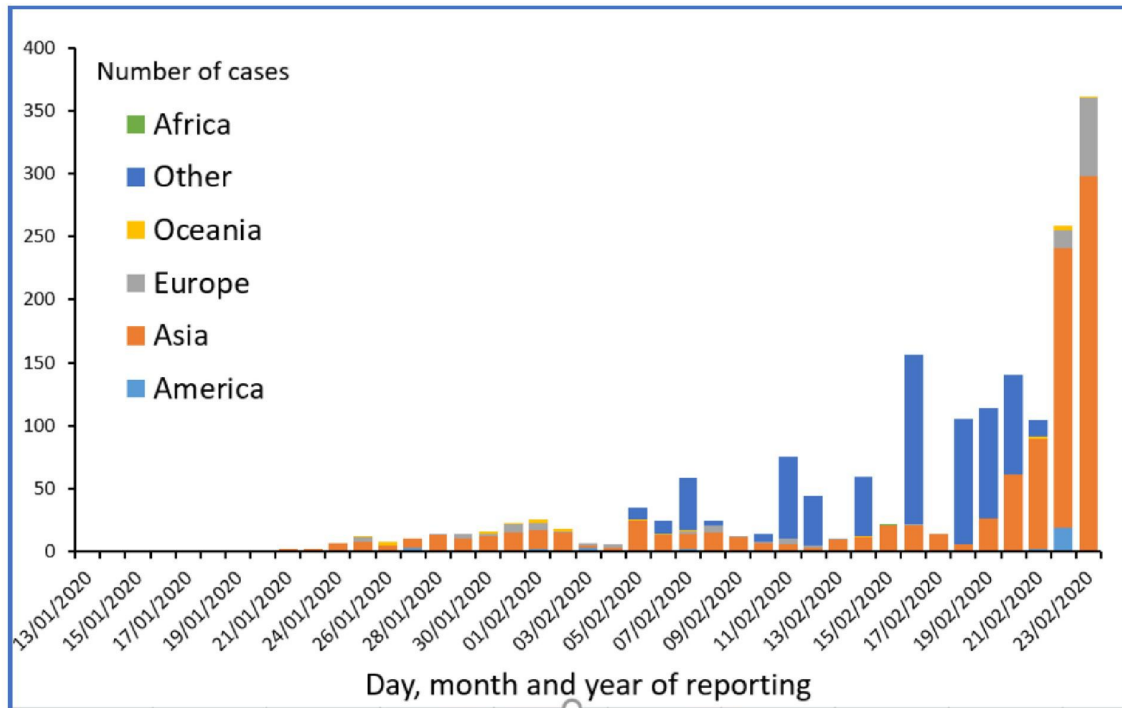


Figure 2. Distribution of COVID-19 cases by continent (except China), as of 23 February 2020 (according to the applied case definition in the countries)



2. Transmission Dynamics: The human-to-human transmissibility of the SARS-CoV-2 virus has now been well established and in an immunologically naïve population the spread is fast and significant (previous R_0 estimates on Chinese data is between 2 and 3). Several clusters have been reported in health care settings. Limited low grade evidence from case reports suggests potential transmission from asymptomatic carriers.

Confirmed cases are highly likely in Wales as a result of the epidemic progression and better understating of transmission dynamics. The window of opportunity to undertake effective contact tracing diminishes once third generation cases arise.

3. Strategic aims

- i. **Case definition:** The case definition has been revised twice now. Once to expand the geographical areas to outside Hubei province to mainland China and subsequently to include 8 other countries/territories and revise the clinical component of the definition. Recent reporting from Iran and Italy is likely to force a further change in case definition imminently.
- ii. **Containment vs Management:** The current strategic aim is one of containment and is based on the following objectives.
 - Limit human-to-human transmission including reducing secondary infections among close contacts and health care workers, preventing transmission amplification events, and preventing further international spread from China
 - Identify, isolate and care for patients early, including providing optimized care for infected patients.
 - Identify and reduce transmission from the animal source.

- Address crucial unknowns regarding clinical severity, extent of transmission and infection, treatment options, and accelerate the development of diagnostics, therapeutics and vaccines.
- Communicate critical risk and event information to all communities and counter misinformation.
- Minimize social and economic impact through multisectoral partnerships.

When there is evidence of sustained community transmission with second and third generation cases, the containment strategic is highly unlikely to be effective and a shift in strategic aim to one of “management” is recommended based on previous experience of large scale, multi-country outbreaks caused by respiratory pathogens that spread by droplet route. **Containment still appears to be the right strategy for Wales at this point in time.**

- 4. Incident status, command and control arrangements:** The current arrangements are operating at an incident director led IMT level with a strategic director overseeing the response. The need for a strategic (Gold) group is under review on a regular basis. **A Gold group should be established immediately after the change of case definition.**
- 5. Risks, resources and reputation:** Considerable effort has been put into to scale up PHW’s internal resources to be deployed to various tasks of the response. PHW has also taken the initiative to mobilise the NHS in Wales in relation to community testing, NHS preparedness and engagement. This has meant a significant draw on the wider organisational resource and other activities of the organisation has needed to be re-prioritised. **Consideration should be given to sustainability of this approach by identifying the risks, resources and reputation to the organisation.**
- 6. System leadership for Wales:** Due to the fast-evolving nature of this epidemic PHW has had to undertaken quite a number of co-ordination tasks to mobilise the NHS and wider partners in Wales on behalf of Welsh Government. **The is a need for clarity on roles and responsibility between that of PHW and WG. PHW can (and should) act on behalf of PHW to discharge some of the key system leadership tasks.** There is a need to engage the NHS in Wales and the wider LRF partners in Wales to the next higher levels of preparedness.
- 7. Port Health:** The increase in cases in Europe (Italy) and Middle East (Iran) is likely to impact international air travel into Wales. **Enhanced monitoring at Cardiff airport should be considered for immediate implementation.**
- 8. Communication:** **Clear risk-communication for a range of stakeholders, articulation of the strategic approach and resource requirement to implement the strategic approach is needed.**

**Drafted by
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