



## A thread by <u>Tom Inglesby</u>

Shared on Twitter on 2/15/2020

This thread notes some key  $\underline{\#COVID19}$  developments of last few days and a number of their implications: (1/x)

China announced more than 1700 HCWs were infected, 6 have died. <u>https://www.nbcnews.com/news/world/covid-19-updates-1-700-heath-workers-infected-more-wartime-n1136841</u>This is very concerning news. (2/x)

Need to learn: what % occurred before best infxn control efforts in place, vs after?; are certain interventions, practices, PPE approaches associated w higher infxn rates? All of this info should have been released as it was occurring, not wks later. (3/x)

In any event, 1700 is a very large number and shows HCWs are at clear risk of infxn elsewhere in China and globally. Hosps need admin controls, engineering controls and supplies of PPE for their HCWs caring for pts with #COVID19. (4/x)

News: efforts to control spread have interfered w supply delivery: "But the sweeping restrictions across China to contain the virus also slowed production and delivery of much-needed medical equipment, said doctors, factory managers, aid workers." <u>https://www.nytimes.com/2020/02/14/world/asia/china-coronavirus-</u>doctors.html?referringSource=articleShare (5/x)

Same NYT article says: "Pervasive road checks and travel restrictions have held up shipments. Factories have faced difficulty increasing production because workers and raw materials have been blocked by lockdowns." (6/x)

Important for China to assess whether some of its containment measures are making it more difficult to provide safe medical care for the hospitalized. (7/x)

Wuhan continues to be the main source of new infections. Number of possible explanations for this, including: outbreaks in other parts of China and world are still early in their epi curves, with Wuhan having a 1-2 month lead on all of them? (8/x)

And/or infection control practices better outside Wuhan because lower case burden, better access to PPE, ability to isolate? (9/x)

And/or are some containment efforts that are happening in Wuhan inadvertently contributing to more cases? (10/x)

And/or are many mild or asymptomatic cases present in high numbers elsewhere but don't have diagnostic tools or strategy in most places to find them beyond China travelers? Substantial percent of pts testing positive on cruise ship are asymptomatic

https://www.washingtonpost.com/world/us-to-evacuate-americans-from-cruise-ship-and-putthem-in-14-days-quarantine/2020/02/15/8b05eadc-4fc1-11ea-a4ab-9f389ce8ad30\_story.html (11/x)

And/or the majority of transmission is being driven by superspreading events, as described as a possibility by <u>@JustinLessler</u> et al <u>https://hopkinsidd.github.io/nCoV-</u> <u>Sandbox/DispersionExploration.html</u> (12/x)

Perhaps other explanations as well. Important to try to understand this so global community can better gauge likelihood of Wuhan-like intensity of epidemic in other major cities around the world. (13/x)

In the US, surveillance for <u>#COVID19</u> will begin in 5 cities using system now in place for flu. Announced as a first step toward setting up national surveillance system <u>https://www.cdc.gov/media/releases/2020/t0214-covid-19-update.html.html</u> (14/x)

This is important, good development. Not clear if other countries doing a kind of sentinel surveillance for COVID19 – would be valuable if resources allow. If positive cases appear, will show there is community spread happening which would require change in approach (15/x)

Important for US state/city pub health + hosps to prepare now for possibility of + test from that surveillance effort. If/when + occurs, will require major change in COVID response strategies including: (16/x)

New strat for diagnosis of flu-like illness in places w/ a + case and elsewhere in the US; communicating safe home care procedures for + cases not sick enough for hospital; managing infxn control, PPE equipment, critical care capacity in hospitals; and (17/x)

including whether or not to put in place non-pharm interventions, and for how long, to slow spread of disease <u>https://www.cdc.gov/coronavirus/2019-ncov/php/pandemic-preparedness-resources.html</u> -- given the implications for those cities, these will be difficult decisions. (18/x)