A thread by Tom Inglesby

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This thread regards US policies and actions intended to prevent spread of nCoV into the US and to prepare to respond to a nCoV epidemic within the US. #2019nCoV (1/x)

Until Friday the US approach to travelers from China was: Arriving passengers who’ve been in China in last 2 wks get fever screened, symptom questionnaire, education about disease, clear instructions for what to do if they develop illness https://www.cdc.gov/coronavirus/2019-ncov/travelers/from-china.html (2/x)

For those w/ signs of illness, they are to be tested, and if positive, then isolated. This policy made sense. (3/x)

The USG approach changed Friday: w/ some exceptions, non-US residents who’ve been to China in last 2 wks are banned; US residents from Wuhan to be quarantined on military bases; other US residents from China to be quarantined in their homes for 2 wks https://www.whitehouse.gov/presidential-actions/proclamation-suspension-entry-immigrants-nonimmigrants-persons-pose-risk-transmitting-2019-novel-coronavirus/ (4/x)

These new policies raise big concerns. It’s understandable US officials are doing what they judge most likely to keep disease from spreading to US, it’s important to consider short & long term consequences and whether these policies will work as planned to contain disease. (5/x)

Dr Fauci @niaid said in @NYTimes today that “Its very, very transmissible and it almost certainly is going to be a pandemic, But will it be catastrophic? I don't know.” And this view is shared by a number of top global health leaders. https://www.nytimes.com/2020/02/02/health/coronavirus-pandemic-china.html (6/x)

If its almost certainly going to be a pandemic, then we need to consider if it continues to make sense to pursue travel bans and quarantines on military bases. (7/x)

Travel bans will have negative ramifications. We import many key products from China on daily basis, including PPE that will be important to dealing w/ epidemic, and huge supply of other materials, medicines, etc across the economy. US-China trade could be swept up in this. (8/x)

Also, does the ban mean we’ll block travelers from other countries (including allies, neighbors?) if wide community transmission occurs there? Countries beyond China may very well face similar patterns of rapid spread of disease once community transmission is established. (9/x)
A prominent modeling team led by G. Leung in Hong Kong published a paper yesterday in Lancet reporting there were more than 84,000 passengers/month flying out of Wuhan to cities around the world in the last couple months. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30260-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30260-9/fulltext) (10/x)

If US has widespread nCoV transmission in time ahead, should Americans be banned from flying to other countries? Will other countries ban US goods? Travel bans like this could be like a series of dominoes that fall, choking off interaction between the US and the world. (11/x)

We don’t have historical reason to believe travel bans work. Every year seasonal flu spreads extensively around the world. 2009H1N1 also spread quickly around world despite early attempts to put bans in place. The reproduction rate of nCoV has rivaled that of flu so far. (12/x)

Recognition of the lack of effectiveness of bans and the major consequences of travel and trade bans led all countries to agree by treaty (the International Health Regulations) to not put these kinds of bans in place during outbreaks. [https://www.who.int/ihr/en/](https://www.who.int/ihr/en/) (13/x)

Regarding plans for quarantine–US residents returning from Hubei to be in mandatory quarantine for 14 days on military bases. It’s one thing to have up to 1,000 people in a military quarantine for 2 wks, [https://www.militarytimes.com/news/your-military/2020/02/01/pentagon-prepared-to-house-nearly-1000-quarantined-us-citizens-over-coronavirus-fears/](https://www.militarytimes.com/news/your-military/2020/02/01/pentagon-prepared-to-house-nearly-1000-quarantined-us-citizens-over-coronavirus-fears/) but what happens as the epidemic expands? (14/x)

Also Leung et al: data suggest “independent self-sustaining human-to-human spread is already present in multiple major Chinese cities, many of which are global transport hubs w/huge numbers of both inbound and outbound passengers (eg, Beijing, Shanghai, Guangzhou, & Shenzhen).” (15/x)

If other Chinese cities have high transmission, will USG policy expand so that Americans coming from all of China get military quarantine? Estimates are that there are as many as 70,000 Americans or more living in China. Will we start quarantining all of them who come home? (16/x)

If other countries get high transmission, will Americans returning from those countries also be sent into military quarantine? There’s no evidence that kind of quarantine is better for containment than airport screening, education, instruction to get tested if ill. (17/x)

Also new US strategy: US residents returning from other parts of China get home quarantine for 2 wks, even if no sx. Will be highly challenging, resource intensive for Pub health agencies, some who say that work could be zero sum w/ other critical nCoV preparations. (18/x)
We should look ahead, consider the effectiveness of bans and forced quarantines and what kinds of consequences they will bring on, and reassess. (19/x)

Policies now will set direction for nCoV response. Will force be used to compel actions w/ little evidence behind them? Even if pandemic is likely in any event? We need to look at each potential new action, gauge if likely to work, and at what societal cost. (20/x)

It makes sense for US to take specific proven measures to try to interrupt spread of nCoV here, including screening, education, isolation of sick, protection of HCWs. At same time, work of preparing for response to a possible nCoV epidemic in US should move ahead quickly. (21/x)

We need pub health agencies, labs, providers to be ready to Dx large numbers of infected much more rapidly than is happening now – there are many day backlogs now. We should also start sentinel surveillance for nCoV around country to see if nCoV already circulating in US. (22/x)

We need hospitals to be prepared to take care of increased number of patients with ARDS-like illness. We need to move ahead rapidly on development of vaccines, antivirals, monoclonals and other therapies. (23/x)

We need to communicate to public about nCoV preparations, what they can do to lower risk of spread of infxn. Explain CFR may be 2% now, but will likely go down, perhaps a lot, when we get more data. Right now in China, it is the most severe are getting diagnosed. (24/x)

At the start of 2009H1N1 initial case fatality estimates were much higher than would prove to be the case when more data was collected with time. There is good reason to think that CFR in nCoV will also fall substantially when we get more info over time. (25/x)

If nCoV starts spreading in US it’s not because USG failed to contain it, it’s because it’ll have been a dz that was not possible to stop. That needs to be communicated clearly, or the public may lose confidence in the response, and that will make challenges of nCoV worse.(26/x)