



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

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The following thread regards how we should be planning for the possibility that nCoV cannot be contained. $\underline{#2019nCoV}(1/x)$

Containment of nCoV is, and should be, the highest priority in China. This requires gov, health care/PH system & the public to work together to ID those w/ sx, get them tested rapidly, get them isolated (home or hospital), provide good med care while keeping HCWs protected. (2/x)

The global community should be doing all it can to be helping China w/ the terrible set of challenges it is facing in its effort to contain nCoV. It is not only the right thing to do for China, but it is critical in trying to help prevent global spread. (3/x)

We don't know what overall CFR will be w/ nCoV-that requires more data, time. SARS-like illness has been seen in some, but we don't know what % of nCoV pts will get severe disease. We all hope it'll be far less than SARS, but we don't know enough to predict %. (4/x)

We also don't have enough data on H2H transmission yet to make confident predictions about how it will spread. We don't know enough about extent of asymptomatic cases, asymptomatic spread, proportion of spread happening in health care facilities vs community. (5/x)

But given uncertainties + very high stakes, part of global & national planning efforts should now be aimed at possibility that nCoV containment could fail. (6/x)

Others have raised this possibility too, including <u>@neil ferguson</u> at Imperial who has said in last 24 hrs that containment of nCoV might not succeed. (7/x)

Global and national leaders should be looking ahead to what must be done to prepare for the possibility nCoV can't be contained, even as we continue to work as hard as possible to contain it in China and beyond. (8/x)

The work to prepare for the possibility of failed containment could be called something like: Plan for Global Mobilization to Respond to a nCoV Pandemic. There are a series of highest priorities that should be at the top of that Plan, including: (9/x)

Crash vaccine development. Top of list because would so dramatically change response and outcomes. <u>@NIAID</u> & <u>@CEPI</u> working on vaccines, as are others. All pharma+biotech companies that could have a vaccine or therapy candidate of relevance should be enlisted in the effort. (10/x)

Multiple vaccine efforts should be pursued in parallel. Money should not be rate-limiting. Timelines should be shortened in whatever ways possible that doesn't get in the way of a final safe, effective product. Rapid clinical trials prepared. (11/x)

Global plan for mass manufacturing of vaccine when it is created. This should be planned for multiple places in the world concomitantly. Cannot have a successful vaccine come out of only one place and remain only in that country. It will need to be broadly distributed.(12/x)

Plan for WHO global stockpile w/ global allocation plan. Once vaccine developed, WHO will need to allocate vaccine quickly to countries around world. WHO can work w/ UN system to help distribute, but will also need partnerships w/ global logistics companies to succeed. (13/x)

Urgent serology development programs. Need this to help determine severity of nCoV. If many have been exposed and are immune, but never had disease, this suggests asymptomatic spread and that disease will be mild in many. We need serology testing. (14/x)

Massive expansion of diagnostics development capacity in China and around world. We need diagnostics to isolate and triage and care for people, and if containment fails will need very high numbers of reliable diagnostic tests around the world in the months ahead. (15/x)

Rapid clinical trials for antivirals. There isn't much evidence current antivirals will be useful, but there should be in vitro studies, clinical trials to study all reasonable candidates. Other med interventions that have sound theoretical basis should be studied quickly. (16/x)

Major expansion of personal protective equipment for health care workers. We have seen in SARS that much of the spread of disease is through hospitals. We will need to make sure health care workers have needed equipment to protect themselves. (17/x)

Hospital infection control plans. Beyond protecting health care workers, hospitals will need administrative plans, equipment, engineering controls where relevant, to care for higher number of patients at same time they are working to prevent resp spread of disease. (18/x)

Government plans to provide transparent, full, rapid communication. People need to trust that governments giving them the full story so that they will agree to get tested, isolated and treated. (19/x)

Good accurate info needs to flood out the bad, the harmful rumors, the conspiracy info. Govs may need to partner w traditional and social media to get factual info out to people. (20/x)

Plans to keep travel&trade moving in the world, even if we do have disease spread around the world. nCoV airport screening efforts make sense now as a way of early ID of pts. But if containment fails and disease is widespread in world in time ahead, new plans are needed. (21/x)

If nCoV spreads widely in the world, it will be in strong interest of all countries, to keep trade going despite the pandemic– global economy is highly interdependent. Govs would need to work w/ orgs like WTO and travel industry orgs like IATA to keep goods, people moving.(22/x)

Certainly there are other key elements of such a Global Plan, and additional recommendations welcome here. (23/X)

Overall in this Planning effort, countries will need to take some actions on their own. Others will require international coop. e.g. many countries don't have capacity to develop, make vaccines, Dxs, masks, et al so will need to work w/ countries that do. (24/x)

Other elements of this Plan will require close cooperation between countries, global business and international orgs. Organization of the elements of this Global Planning effort will be hard and consuming. (25/x)

It is important to move ahead on planning for the possible failure of nCoV containment in event we need it. In truth, we should have already done a lot of this planning work in advance of nCoV, but we haven't. So it should be done now. (26/x)

If nCoV is contained – as we all hope it can be, we should see work on this Plan as an insurance policy that was only partially needed now, but will help us be prepared for what comes next. But if nCoV containment fails, we will need all of this Plan to deal with it. (27/x)