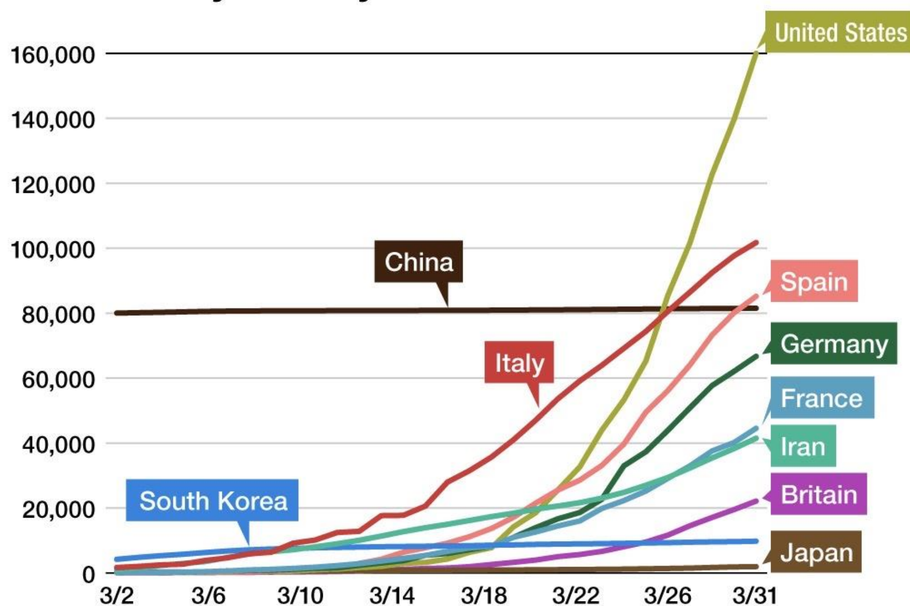
Situation report – Covid-19; Japan, Tuesday 7th of April 2020

Covid-19 Reported Caseload in Japan and Tokyo

Background (Feb/March 2020) - The overall caseload and mortality from Covid-19 remains comparatively low in Japan by international standards. Throughout February, the countries reporting the highest number of cases outside of China were Japan, South Korea and Thailand. Given Japan's dense, elderly population, there was justifiable concern that there would be a significant escalation of cases in March. In the event, large outbreaks have occurred in Europe and North America, where at peak, infections and mortality numbers were doubling every 2-3 days. In contrast, during this time, case numbers in Japan increased at a much slower pace, doubling approximately every three weeks.



Based on data from MHLW

This comparatively slower increase in the rate of new infections has been observed in other Asian countries including Singapore, Taiwan, Thailand and in South Korea, where a comparatively modest outbreak now appears to be well under control without the imposition of a nation-wide lockdown. There is significant speculation as to why Covid-19 is spreading less rapidly in these countries. The WHO has commented that contact tracing and testing protocols in place in Taiwan, Singapore and S. Korea are excellent and significantly retard the spread of infection – these countries benefited from their experiences in the SARS outbreak of 2003. Some researchers have speculated that widespread BCG vaccination, still in common use in Asia, may provide some protection against Covid-19 infection and trials to examine this are underway (1), though existing evidence is weak and European countries where BCG was routine until comparatively recently (France and the UK) do not appear to have benefited. It is also possible that different social customs such as the absence of skin contact in social greetings (no hugs or handshakes) may account for slower transmission in Asia and also that widespread wearing of face masks may be of some benefit, although there is an understandable reluctance to

endorse the latter given the strain that this would place on the available supply of protective equipment which is required for use by healthcare workers. It is highly unlikely that it will be possible to give a definitive evidence-based explanation to the differences in contagion rates in the near future, though.

Recent events – over the past week concern has focused the possibility of what has been locally termed an "overshoot" – an acceleration in the rate of new infections – in Tokyo and to a lesser extent, Osaka, as a consequence of which a state of emergency is due to be announced today. In the 4 days up to the 30th of March, the average rate of new case diagnoses in Tokyo was 62; in the 4 days up to the 5th of April, 112, a near-doubling in the space of 6 days. There is a justifiable concern that without more stringent measures to impose social distancing, an outbreak may ensue in which local medical resources are overwhelmed.

Testing for Covid-19 in Japan

Japan continues to perform tests at a much lower rate than other equivalently developed countries (see table below). This has generated some negative comments from the international community, most notably from the US Embassy on Friday (3rd of April), with a website post stating that *"The Japanese Government's decision not to test widely makes it difficult to assess the Covid-19 prevalence rate….we believe a significant increase in cases makes it difficult to predict how the (healthcare) system will be functioning in the coming weeks"* with concurrent advice that its citizens should consider return to the US or face uncertainty over the availability of commercial flights in the foreseeable future (2).

Concerns recently addressed to the Ministry of Foreign Affairs (MFA) by diplomatic missions to Japan have been met by the response that Japan's current approach is consistent with WHO guidelines and that the comparatively low number of deaths due to Covid-19 mean that more widespread testing is not presently justified. This policy position originates in the Ministry of Health, Labour and Welfare (MHLW) and might be informed at least in part by research published last week by Isao Kamae which highlights the problems which false positive and negative results can cause when tests are applied across large populations (3). However, last week, Japan's Prime Minister, Shinzo Abe, was reported to have called for more testing to be carried out and testing capacity is set to increase from 7,500 to 20,000 tests per day.

On a practical level, doctors in Japan are able to request Covid-19 testing for their patients and are informed that requests will not be declined; however, local protocols are still in place advising on the clinical prerequisites for testing to be carried out (a chest X-ray and a blood test). Over the past few days, the policy mandating hospitalization for patients testing positive for Covid-19 has been dropped. Previously this acted as a deterrent to those with milder symptoms from following through with a Covid-19 test as many were reluctant to commit to two weeks in hospital if they deemed themselves unlikely to require hospital treatment. It has also become apparent that the bed capacity for patients with mild symptoms could easily be exceeded based on recent trends.

Covid-19 Comparative case and test numbers, selected countries

	CASES/1,000,000	DEATHS.1,000,000	TESTS/1,000,000
North America			
USA	1,100	33	5,780
Canada	442	9	8,767
Mexico	17	0.7	140
Asia			
Japan	**29**	**0.7**	**365**
S. Korea	201	4	8,996
Singapore	235	1	11,110
Taiwan	16	0.2	1,563
Thailand	32	0.4	359
Europe			
Germany	1,234	22	10.962
Italy	2,192	273	11,937
France	1,502	137	3,436
UK	760	79	3,726
Sweden	714	47	3,654
Middle East/S. Asia			
Iran	720	45	2,214
India	3	0.1	102
Pakistan	17	0.2	162

Data sourced from https://www.worldometers.info/coronavirus/ 08.30AM Tue. 7th April 2020

Hospital Care in Tokyo

One reported consequence of a declared state of emergency would be the provision of a legal framework for state procurement of land, facilities and supplies for emergency medical care.

Hospital doctors who I contacted for comment have advised that hospital beds dedicated to Covid-19 patients have become scarce in Tokyo due to substantial numbers of minimally symptomatic patients being hospitalized and also because many larger hospitals (university hospitals) have been slow and relatively reluctant to dedicate significant capacity to the care of Covid-19 patients. To date, hospitals (the majority of which are private institutions) have been requested but not compelled by MHLW and the Tokyo metropolitan government to provide capacity. A disappointing response from larger hospitals is of concern because these are the institutions with the greatest capability to provide higher level support for the most unwell patients (ventilation and ECMO).

References

(1) https://clinicaltrials.gov/ct2/show/NCT04327206
(2) https://jp.usembassy.gov/health-alert-us-embassy-tokyo-april3-2020/
(3) (2) A Coronavirus Pandemic Alert – Massive Testing for COVID-19 in a Large Population Entails Extensive Errors https://www.canon-igs.org/en/column/macroeconomics/20200402_6324.html