

Call with Dr. Adachi, (April 23, 2020)

Weekly Update: at midway point through 4-week emergency declaration in Japan

### Vaccine development

Vaccines are considered to be one of the key tools in controlling virus.

WHO has estimated it will take 12-18 months to develop a COVID19 vaccine.

Already several vaccine candidates may be ready within months. Larger scale clinical trials are beginning. One of the larger studies is being done by Oxford University, using a similar platform as ebola vaccine. Starting clinical trial on 24 April

Oxford Vaccine project to start 23rd April

[https://www.pmlive.com/pharma\\_news/oxford\\_university\\_covid-19\\_vaccine\\_to\\_start\\_human\\_testing\\_tomorrow\\_1338762](https://www.pmlive.com/pharma_news/oxford_university_covid-19_vaccine_to_start_human_testing_tomorrow_1338762)

Osaka University's larger scale clinical trial starting in July. By the end of the year, they are aiming to produce 200k vaccines. The fact that this announcement was made means that there are already promising developments in their research

Osaka Vaccine trial to start in July, production of 200,000 by end of year

<https://www.nikkei.com/article/DGXMZO58262020Q0A420C2TJ2000/>

### Immunological Research

Immunologists are beginning mass testing population for antibodies

Some people may already be immune. US, Europe, testing targeted parts of the population for immunity. This testing is being coordinated by WHO and will be concluded in a month or so. Results will help navigate longer term prognosis of virus' path.

Best approach is to continue avoiding rapid spread of virus. Social distancing still important

CDC NIH recommend against point of care screening tests (drive through, self-testing) because of quick testing's high rate of false negatives (25%). Test is not accurate enough in larger scale

Testing criteria

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>

<https://covid19treatmentguidelines.nih.gov/overview/>

Cause of false negatives because of poor quality of collected samples.

Trade-off: tests people with mild symptoms may result in a false negative as they may not have enough virus to be detected yet; negative result is not really negative

## Mental Health

If people do not get enough sunlight and exercise, stress and anxiety will start to affect general health, causing hypertension, headache, tightness in body.

It is important to be aware of emotional and physical symptoms. Recognizing that they may be stress-related is the best way to minimize effects.

### Stress management

#### General

<https://www.copemanhealthcare.com/resources/4-signs-stress-manage>

<https://www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/stress-symptoms/art-20050987>

<https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html>

#### Workplace

[https://www.osha.gov/SLTC/emergencypreparedness/resilience\\_resources/support\\_documents/supervisor\\_intra/intradeployment\\_supervisors.html](https://www.osha.gov/SLTC/emergencypreparedness/resilience_resources/support_documents/supervisor_intra/intradeployment_supervisors.html)

#### Stress management for physicians

[https://www.aafp.org/journals/fpm/blogs/inpractice/entry/stress\\_crisis\\_tips.html?cmpid=em\\_FPM\\_20200422](https://www.aafp.org/journals/fpm/blogs/inpractice/entry/stress_crisis_tips.html?cmpid=em_FPM_20200422)

#### Other

##### Off-label uses of medication:

<https://www.aafp.org/news/health-of-the-public/20200421covidguidance.html>

#### Treatment guidelines

Prophylactic: <https://covid19treatmentguidelines.nih.gov/overview/prophylaxis/>

Treatment: <https://covid19treatmentguidelines.nih.gov/overview/management-of-covid-19/>

**Q: Where is Japan on the graph in terms of peak?**

A: Johns Hopkins website shows the trends on newly reported cases in those hospitalized.

Peaked out countries: China, Spain, Italy

Japan has suppressed the peak (flattened the curve); cases are within limits of Japan's health system

NHK interview conducted 2 weeks ago with HK epidemiologist who stated that COVID19 will come in phases, therefore regulations will change with the phases. Since the interview, there have been some positive developments, so some of the information may be out of date.

NHK World Interview with Hong Kong Epidemiologist  
<https://www3.nhk.or.jp/nhkworld/en/news/backstories/1039/>

**Q: Immunity and cases of relapse**

A: Instances of COVID19 patients being hospitalized again are not actually relapses, but rather the patient experienced waves of symptoms. US looking into long-term immunity of the general population

**Q: How flooded are the hospitals in Hyogo, Kobe?**

A: Regular emergency calls (heart attack, etc.) can still be accepted in Hyogo

There were concerns about the collapse of emergency care in Japan.

More guidance has been issued and primary care physicians have a better understanding now about who needs to be tested and who only needs to self-monitor at home. As much as possible, doctors are using tele-medicine to stay in touch with patients with milder symptoms and people suspected of being infected with COVID19 in order to optimize emergency facility use.

With time, there has been better communication between patients and hospitals. Request for milder case testing has reduced.

**Q: Does Vitamin C boost the immune system? Is Vitamin D3 effective?**

A: In general, vitamin C and D3 are good but it is not scientifically supported for COVID19 prevention.