

Lessons from COVID19 pandemic; how to protect the elderly and to build a robust and sustainable healthcare system

CPCE conference, Sept 20, 2021

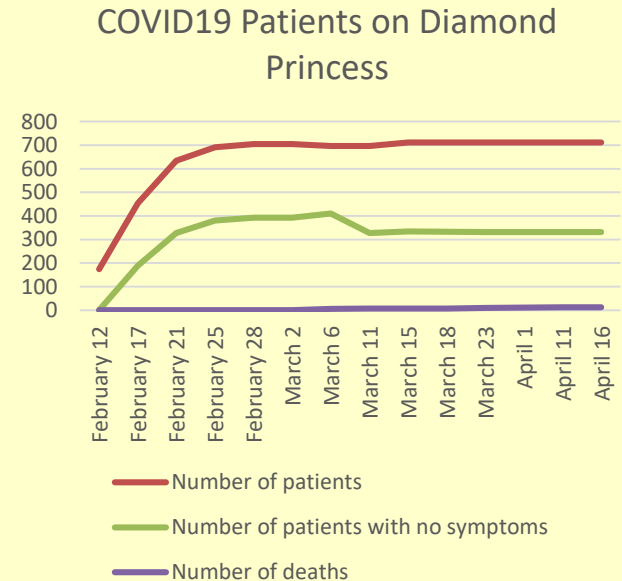
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Presentation Plan

- Epidemiology of COVID19
- 2 different diseases
- Governmental strategy
- Behavioral change
- Clusters
- Vaccination; strategy and effects
- Lessons learned

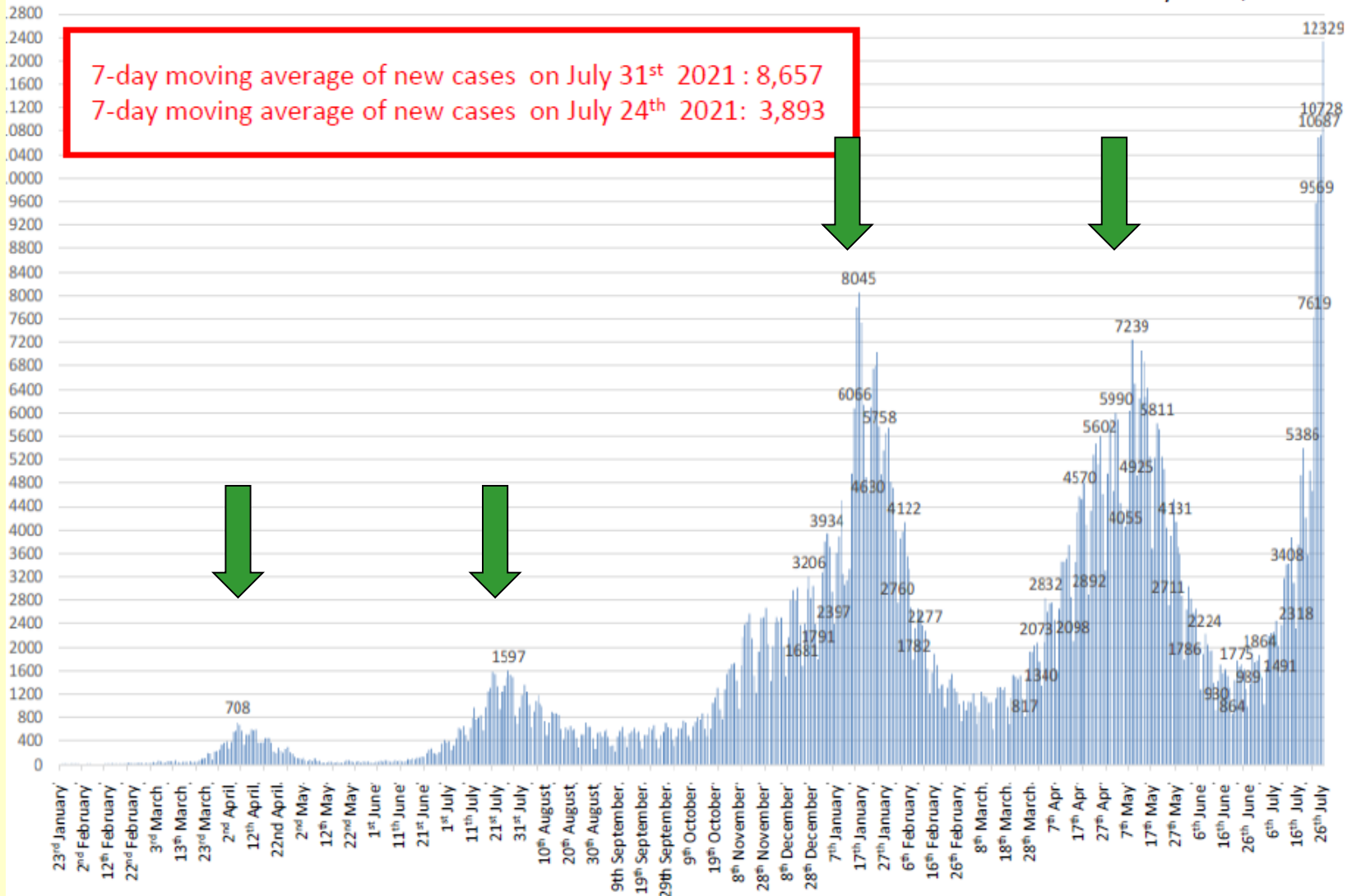
In Japan, COVID19 became known as a cluster on a luxury liner, *Diamond Princess*.



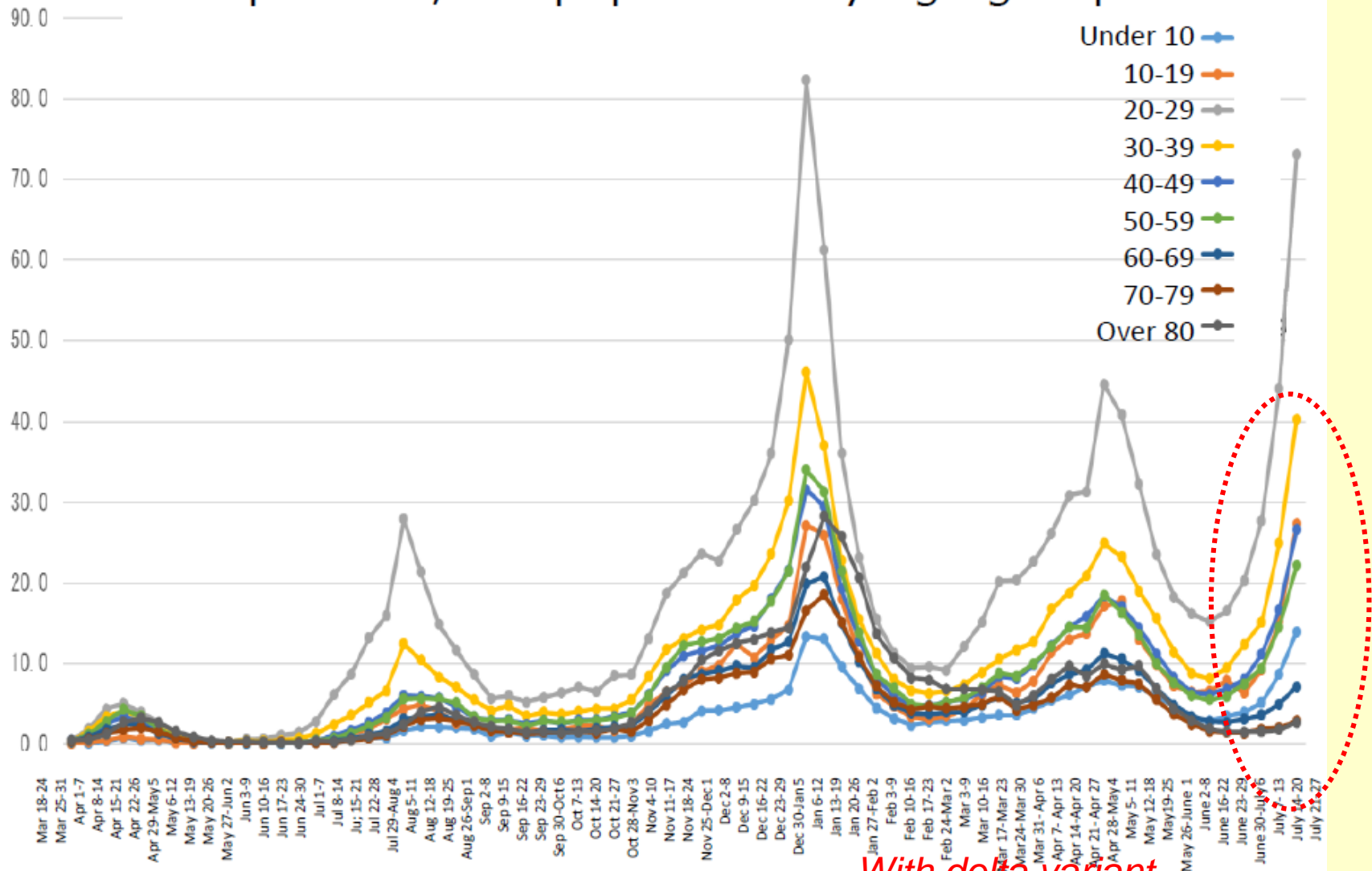
In 3,711 passengers and crews, 712 became infected (334 were asymptomatic), and 7 died.

Number of newly confirmed cases per 100,000 population

As of 24:00 July 31th, 2021



Number of newly confirmed cases per 100,000 population by age group



With delta variant, young people are likely to be infected

COVID19: 2 Different Diseases ?

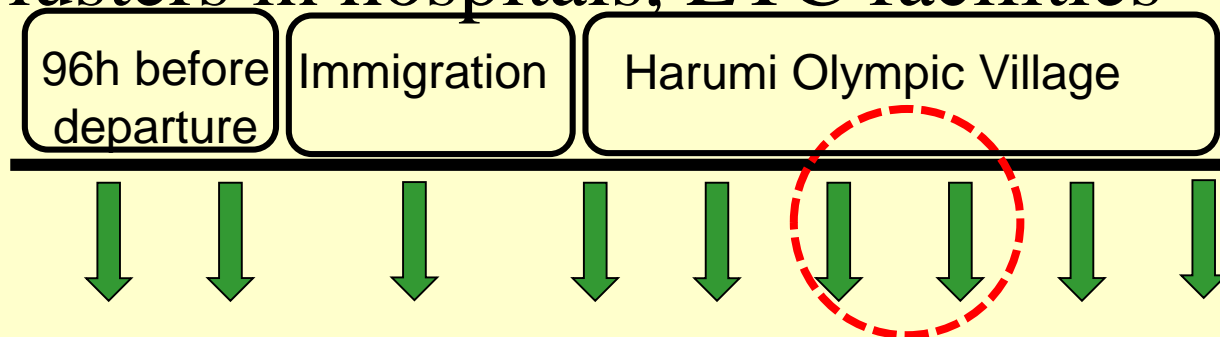
- Young people
 - Something like a “flu”
 - Difficulty in accepting behavioral change
- Elderly people
 - Scary illness that sometimes causes death
- Severity rate: 1.6% (admission to ICU, use of respirator or death)
 - 0.3% (age ≤ 50) , 8.5% (age > 60)
- Case fatality rate: 1.0%
 - 0.06% (age ≤ 50), 5.7% (age > 60)

Data from June, 2020 – Aug, 2021

COVID19: Highly Infectious Disease

- Asymptomatic infected person
- Relatively long latent time
- Relatively long infectious period; from -2 days to +10 days after symptomatic
- False negative diagnostic test
- Clusters in hospitals, LTC facilities

餃子
dumpling



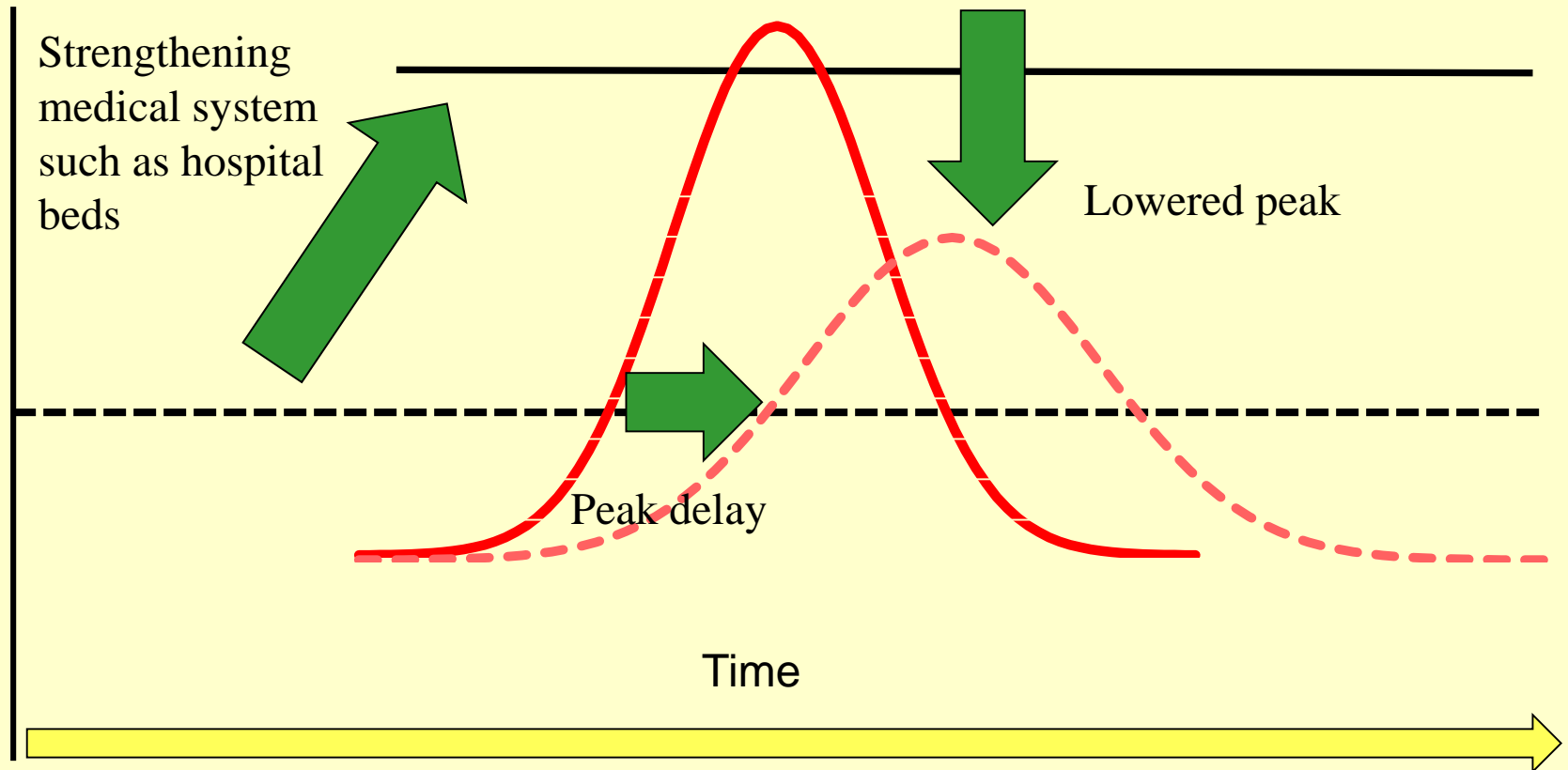
First PCR(+) in village

Japanese Basic Strategy for Controlling COVID19

- Phase 1: Prevention of borders
- Phase II: Delay in the spread of epidemics and strengthening the medical system during that period (including development of vaccines and therapeutic agents)
- Phase III: Damage control (minimization of becoming severely ill and mortality)
- Paying attention to the impact on the economy.

Strategic Plan

No of patients or demand for medical service



Phase 1:
Prevention of borders

Phase II:
Delay in the spread of epidemics

Phase III: Damage control
(minimization of becoming severely ill and mortality)

Avoid 3Cs and 5 situations

Request (not mandatory) from the government

- Unnecessary non-urgent going-out
- Closed spaces, Crowded places, Close-contact settings environment.
- Situations such as social gatherings, long feasts in large groups, having conversation without masks, living together in small limited spaces, and switching

Most of the policies aimed at behavior change were in the form of self-restraint requests, sometimes with subsidies, rather than orders.

Behavioral Change;

Change of medical service use

	Healthcare Expenditure	Use of medical service (day)		Healthcare Expenditure	Use of medical service (day)
			Internal medicine	-4.3	-10.1
Total	-2.9	-8.2	Pediatrics	-22.2	-31.5
75y =<	-3.3	-7.5	Surgery	-12.0	-15.4
6-74 y	-2.3	-7.0	Orthopedic surgery	-3.4	-6.7
0-5 y	-17.0	-28.2	Dermatology	-0.8	-0.9
			Ophthalmology	-3.3	-7.3
			Otorhinolaryngology	-19.7	-24.4

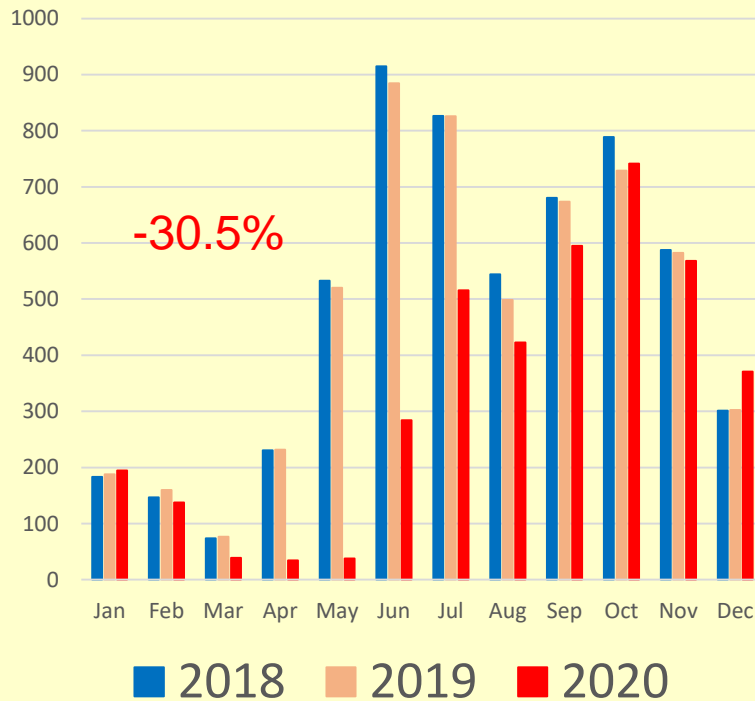
In FY 2020, healthcare expenditure decreased by 1.4 Trillion JPN, but the government funded 4 T JPN to maintain medical system.

Cancer Screening

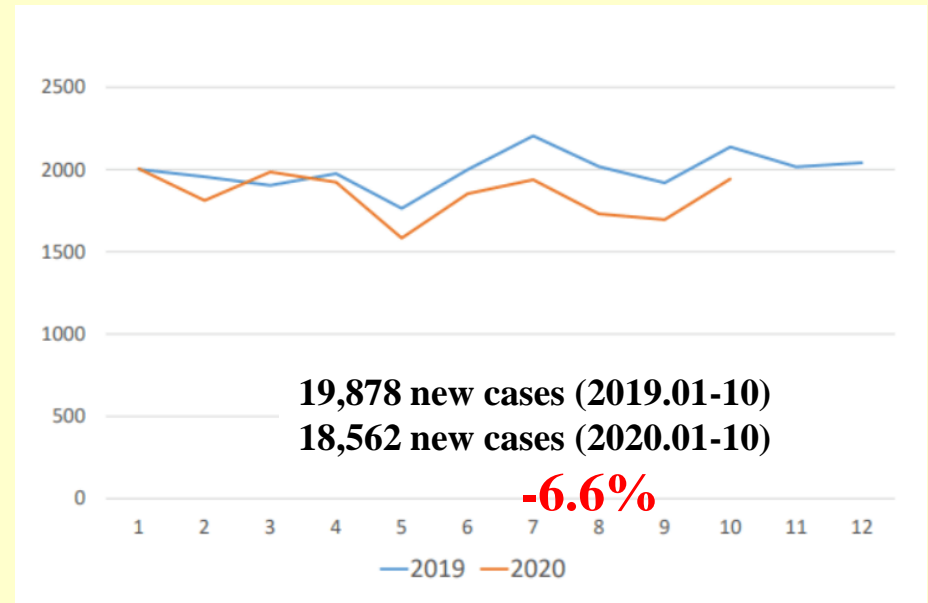
不要不急 (Unnecessary non-urgent)?

Number of Cancer Screening of 5 major cancers (Japan Cancer Society)

Thousand



Newly treated lung cancer patient in 118 cancer centers



Japan Lung Cancer Society

Other health related effects

- Domestic violence
- Deterioration of ADL
- Depression and mental health
- Suicide

Most of them are likely to be short-term changes, careful monitoring will be needed.

Effects of Vaccination

Age group

		0-49	50-59	60-69	70-79	80+	60+	total
Wave	1st 4/8~ 5/8	0.1%	0.5%	3.2%	10.2%	17.0%	10.2%	3.4%
	2nd 7/26~ 8/22	0.0%	0.2%	1.3%	4.1%	11.6%	5.2%	0.9%
	3rd 1/3~ 1/30	0.0%	0.1%	0.8%	3.5%	11.3%	5.2%	1.3%
	4th 4/25~ 5/22	0.0%	0.3%	1.2%	4.7%	12.6%	5.5%	1.2%
	5th 7/25~ 8/21	0.0%	0.2%	0.5%	1.9%	5.7%	1.8%	0.2%

Vaccination in Japan began

In Feb, 2020 for 4.8 million healthcare workers

In April, 2020 for 36 million elderly people aged ≥ 65 years

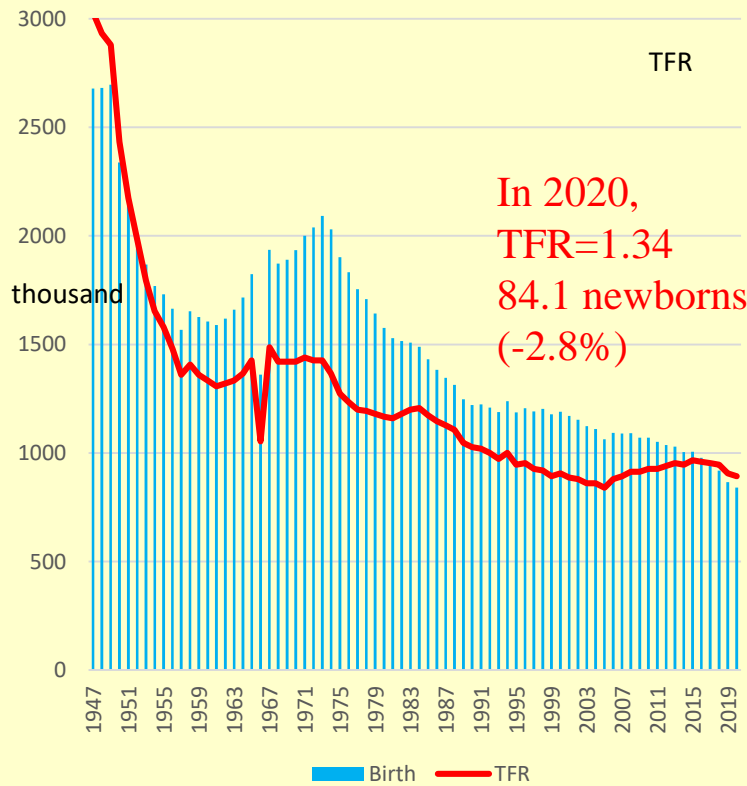
In July, younger people

Effective in preventing aggravation and reducing mortality

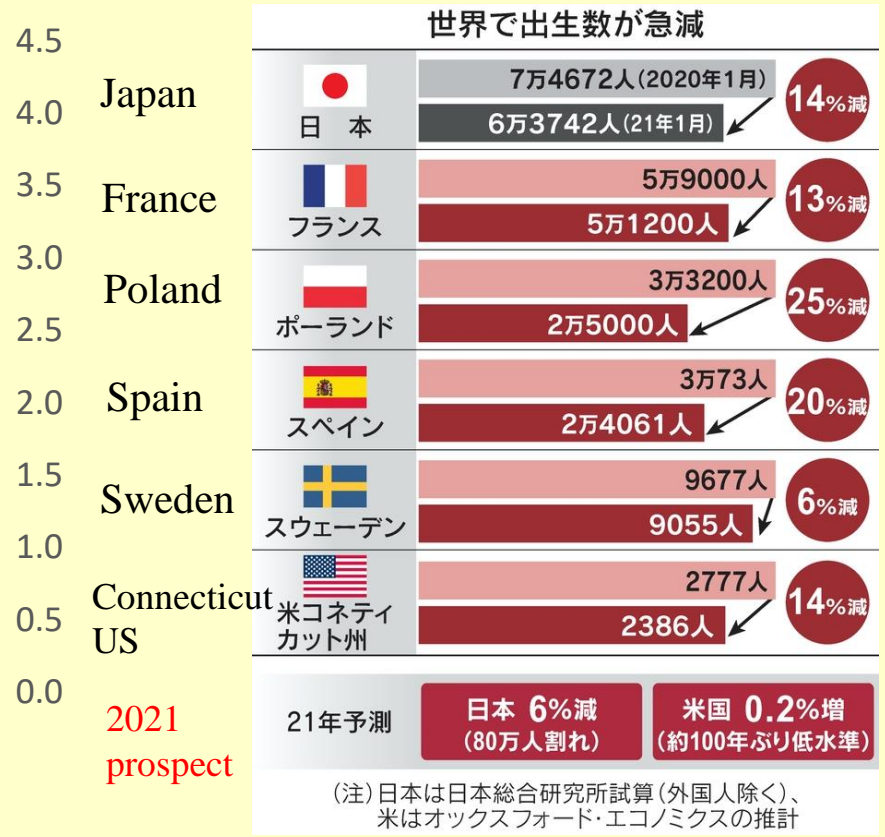
Preventing infection and expiration of effectiveness are unknown

Childbearing

Total Fertility Rate and Number of Birth



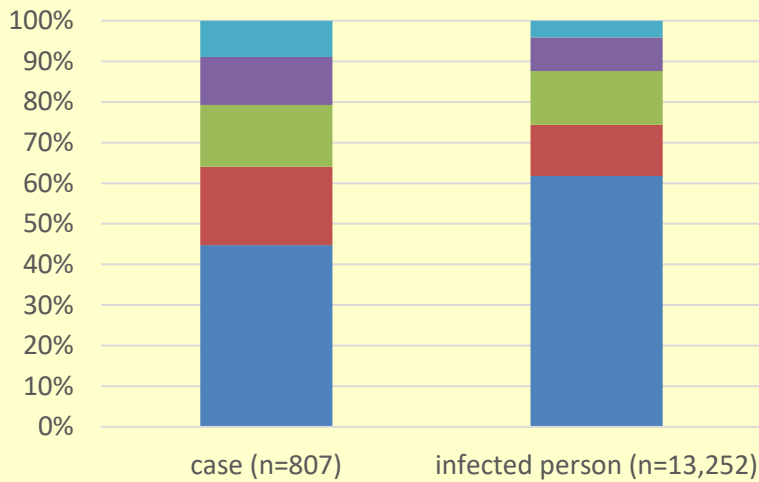
Birthrates tumble worldwide, clouding post-pandemic prospects (*Nikkei*)



How to Protect the Elderly

Sapporo, 3rd wave

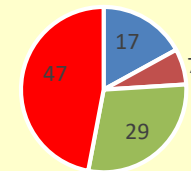
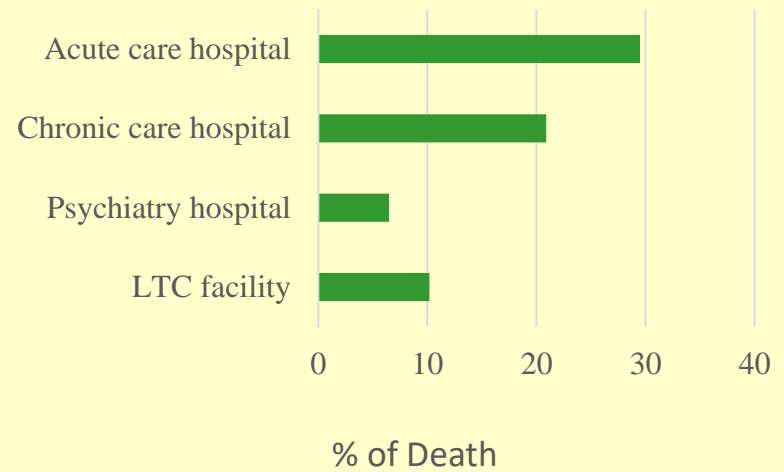
Clusters in Dec, 2020



- Others (7.5)
- Offices (11.6)
- Schools (14.3)
- Restaurants (10.7)
- Medical/LTC facilities (22.7)

(): average number of infected persons per case

Case Fatality Rate (%)



- LTC facility
- Psychiatry hospital
- Chronic care hospital
- Acute care hospital

Damage Control in Aged Society

- Eradication of COVID19 is difficult and a way to *coexist* needs to be sought
- High proportion of vulnerable people who are likely use LTC services
- LTC facilities lack resources for infection control
- Support for LTC facilities is necessary by medical specialists
- Support for LTC facilities by medical specialists will be institutionalized in the next revision of the *regional medical plan*.

Health Policy will Change?

- Social security resources are likely to shift from welfare for the elderly to measures against the *declining* birthrate.
- Hospital/LTC facility design will take measures against infectious diseases into consideration.
- Medical care (including medical equipment and drug supply) is treated as a national security issue.
- Introduction of IT technologies in medical care and society will be accelerated.

謝謝,大家
ありがとうございます
Thank you very much

