（As of October 2020）
10 things to know about the COVID-19 as of right NOW

Number of patients and pathogenicity of COVID-19

1. How many are confirmed as COVID-19 positive in Japan?
2. Among those confirmed as COVID-19 positive, how many are in a critical state or have died?
3. Among those confirmed as COVID-19 positive, what are the risk factors for increased severity or death?
4. Are there more COVID-19 cases in Japan than other countries?

Infectivity of COVID-19

5. How long is a COVID-19 positive individual infectious towards others?
6. Among those confirmed as COVID-19 positive, how many infect others?
7. What precautions should we take to prevent the spread of COVID-19?

Testing and Treatment for COVID-19

8. What tests are used to diagnose COVID-19?
9. How do you treat COVID-19?
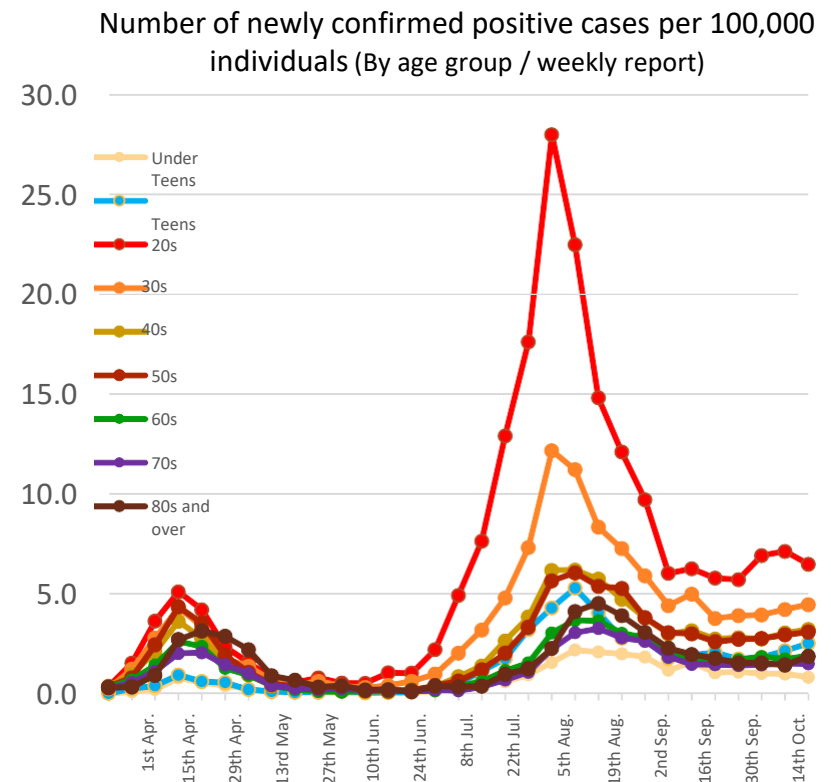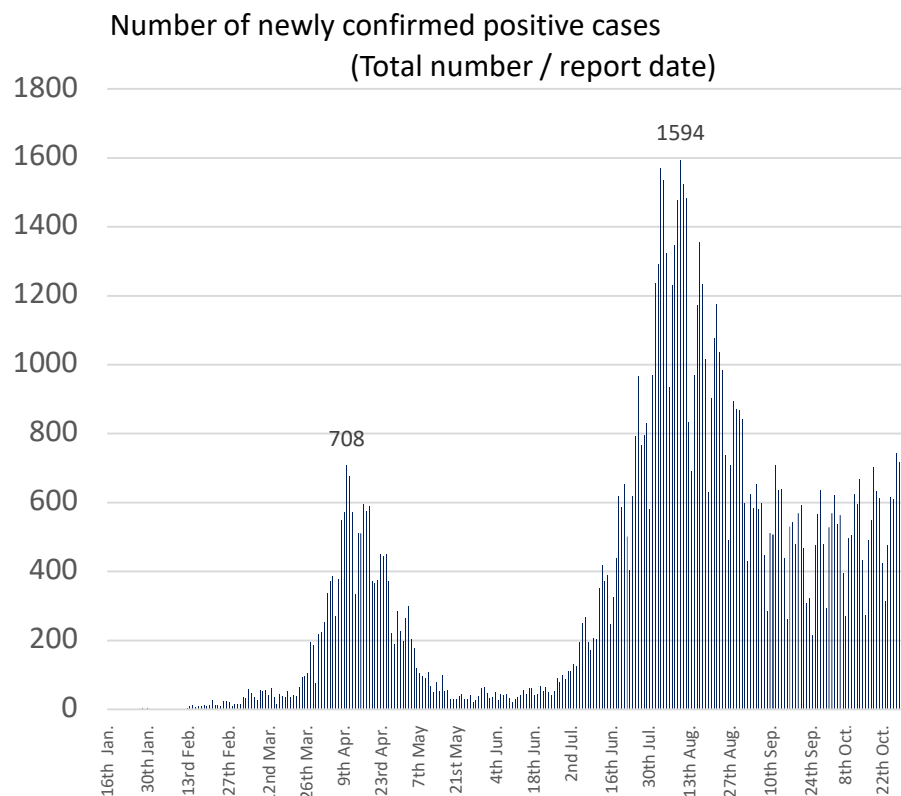10. Is there a COVID-19 vaccine?

Q How many are confirmed as COVID-19 positive in Japan so far?

A To date, there have approximately been 96,000 COVID-19 positive cases in Japan, accounting for around 0.08% of the total population.

   By age group, people in their 20s have the most cases, accounting for about 0.2% of the population in the 20-29 age group.

* Some people do not show symptoms even if they are infected and do not go to a medical institution, so this does not necessarily represent all COVID-19 positive cases.

* As of October 27, 2020.

Number of newly confirmed positive cases
(Total number / report date)

1800
1600
1400
1200
1000
800
600
400
200
0

1594

708

16th Jan. 30th Jan. 13rd Feb. 27th Feb. 12th Mar. 26th Mar. 9th Apr. 23rd Apr. 7th May 21st May 4th Jun. 18th Jun. 2nd Jul. 16th Jun. 30th Jul. 13th Aug. 27th Aug. 10th Sep. 24th Sep. 8th Oct. 22th Oct.

Number of newly confirmed positive cases per 100,000 individuals (By age group / weekly report)

30.0
25.0
20.0
15.0
10.0
5.0
0.0

Under Teens
Teens
20s
30s
40s
50s
60s
70s
80s and over

1st Apr. 15th Apr. 29th Apr. 13rd May 27th May 10th Jun. 24th Jun. 8th Jul. 22th Jul. 5th Aug. 19th Aug. 2nd Sep. 16th Sep. 30th Sep. 14th Oct.

Source: Created from materials published by the Ministry of Health, Labor and Welfare

2

Q Among those confirmed as COVID-19 positive, how many are in a critical state or have died?

A: Of those confirmed as COVID-19 positive, the numbers of the severe cases and deaths vary with age as the older generation tends to have higher severity and mortality rates, while the younger generation tends to have lower rates.

The overall severity and mortality rates are lower than before; the breakdown of confirmed cases after June is as follows:

・Cases with severe symptoms: approx. 1.6% (0.3% under 50s, 8.5% over 60s)

・Death cases: approx. 1.0% (0.06% under 50s, 5.7% over 60s)

* The "percentage of people who become severe" is the rate of cases confirmed as COVID-19 positive (including asymptomatic cases) that have been treated in the intensive care unit or treated with a respirator, or have died.

Diagnosis　　　　　**Fever, cough, etc.**　　　　　**Severe**　　　　　**Death**

0.3% under 50s
8.5% over 60s

0.06% Under 50s
5.7% Over 60s
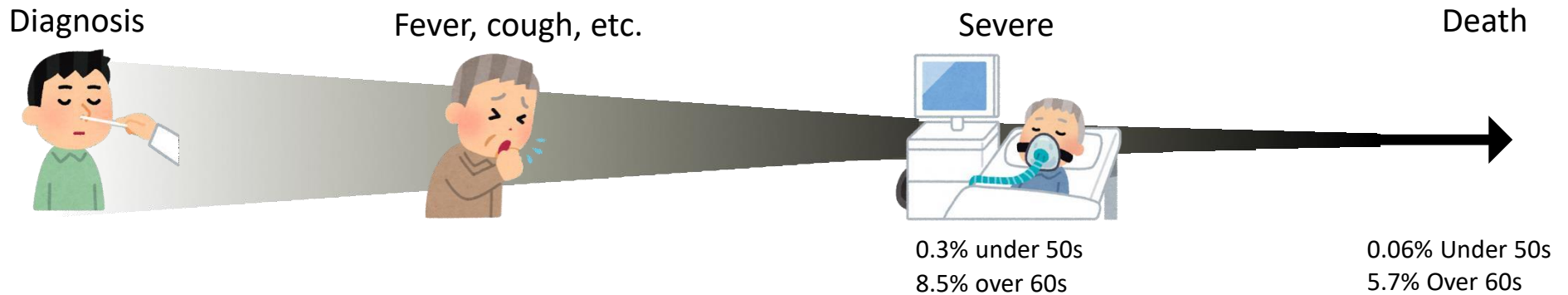
Severe Cases from COVID-19 (%)

Month / Age	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-	計
Jun.–Aug.	0.09	0.00	0.03	0.09	0.54	1.47	3.85	8.40	14.50	16.64	1.62
Jan.–Apr.	0.69	0.90	0.80	1.52	3.43	6.40	15.25	26.20	34.72	36.24	9.80

Number of Deaths from COVID-19 (%)

Month / Age	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-	計
Jun.–Aug.	0.00	0.00	0.01	0.01	0.10	0.29	1.24	4.65	12.00	16.09	0.96
Jan.–Apr.	0.00	0.00	0.00	0.36	0.61	1.18	5.49	17.05	30.72	34.50	5.62

Source: Created from the 11th Advisory Board Material (Material submitted by Professor Nishiura, Kyoto University) on October 22, 2020

Q . Among those confirmed as COVID-19 positive, what are the risk factors for increased severity or death?

A: Among those confirmed as COVID-19 positive, the elderly and those with preexisting medical conditions are more likely to increase in severity.

Underlying diseases that increase the risk of severity include: Chronic obstructive pulmonary disease (COPD), Chronic kidney disease, Diabetes, Hypertension, Cardiovascular disease, and Obesity.

In addition, although it is not clear whether pregnant women and smoking history are likely to become severe, it is important to be cautious.

Severity rate (likelihood of increased severity) of each age group compared to those in their 30s

Age	Under Teens	Teens	20s	30s	40s	50s	60s	70s	80s	90s and Over
Severity rate	0.5 times	0.2 times	0.3 times	Baseline	4 times	10 times	25 times	47 times	71 times	78 times

* The "severity rate" is the rate of COVID-19 positive individuals (including asymptomatic cases) that have been treated in the intensive care unit or treated with a respirator, or have died.

Underlying diseases at risk of increased severity

Chronic kidney disease

Chronic obstructive pulmonary disease (COPD)

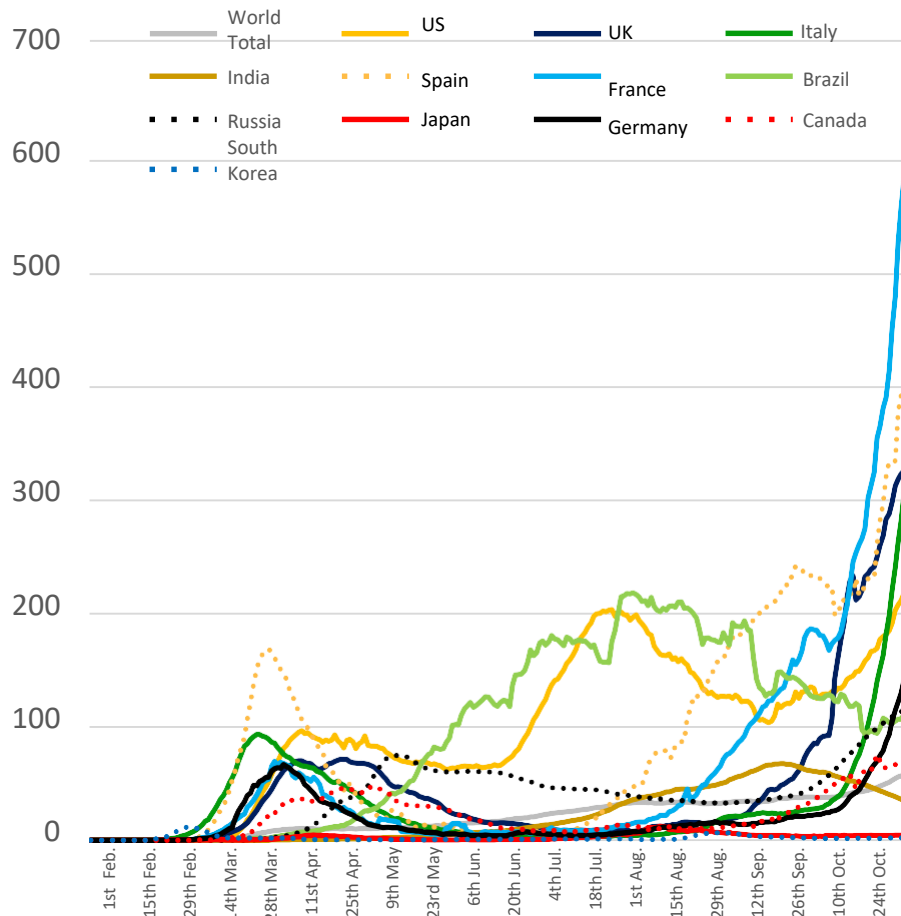Diabetes

Hypertension

Cardiovascular disease

Obesity (Over BMI 30)

- It is not clear whether pregnancy or smoking history contributes to the risk of increased severity, but caution is advised.
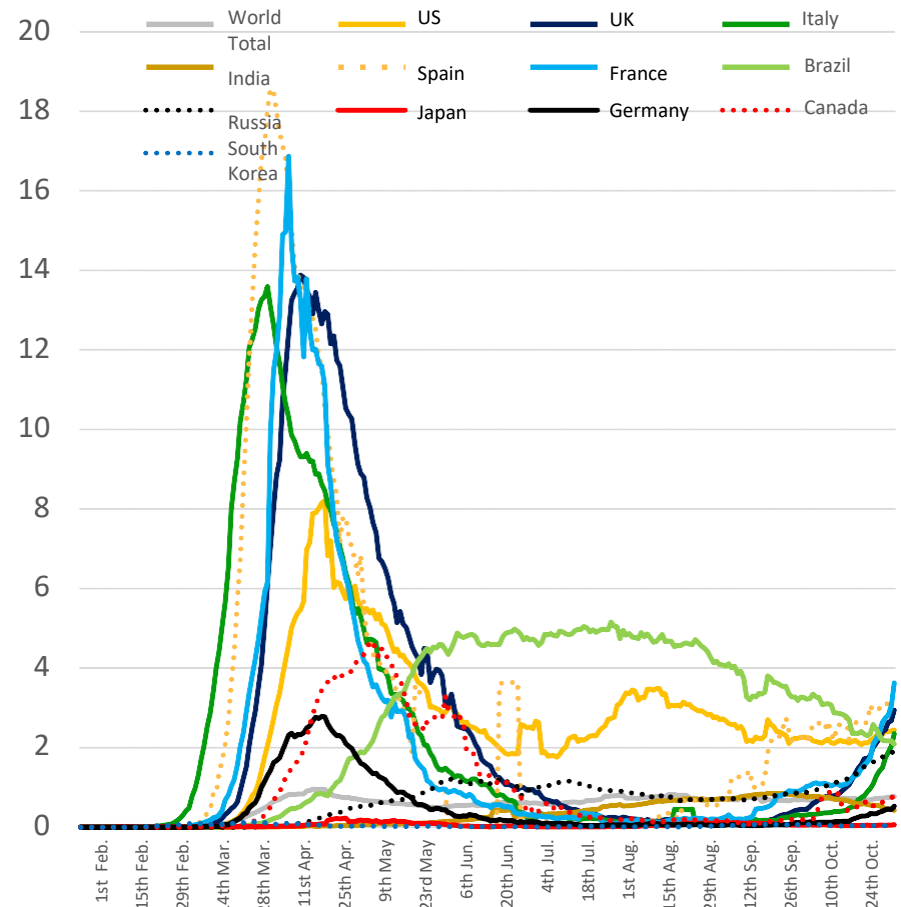
Q Are there more COVID-19 cases in Japan than other countries?

A The numbers of confirmed cases and deaths in Japan per population have been lower than the world's average, and countries with the highest number of confirmed cases.

Number of confirmed cases per million

Legend: World Total, US, UK, Italy, India, Spain, France, Brazil, Russia, Japan, Germany, Canada, South Korea

Number of deaths per million

Legend: World Total, US, UK, Italy, India, Spain, France, Brazil, Russia, Japan, Germany, Canada, South Korea

Source: Created based on data from Our World in Data (used on October 29, 2020)

Q　How long is a COVID-19 positive individual infectious towards others?

A: A person infected with COVID-19 can start infecting others from 2 days before the onset of symptoms, until approximately 7 to 10 days after the onset of symptoms.
In addition, viral shedding is particularly high before and after the onset of symptoms.
Thus, those confirmed as COVID-19 positive must work hard to prevent transmission by refraining from going out for unnecessary reasons, regardless of the presence or lack thereof symptoms.

* From the 3rd edition of the medical guide for COVID-19

Q Among those confirmed as COVID-19 positive, how many infect others?

A: Less than 20% of those confirmed as COVID-19 positive infect others, meaning the majority overall are not infecting others. Therefore, if we can prevent COVID-19 positive individuals from infecting others such as by not wearing proper protection (e.g. masks) in the Three-C environments (closed spaces, crowded places, close-contact settings), the spread of COVID-19 can be suppressed.
If you are an individual that has been confirmed as COVID-19 positive, it is important to act in an appropriate manner so that you can prevent others from becoming infected; please refrain from going outdoors for unnecessary and non-urgent reasons when feeling ill, and always wear a mask when interacting with others.

* It is known that wearing a mask reduces the amount of viral load inhaled when in close proximity to those already infected with COVID-19. (chances of becoming infected is reduced by 60-80% when an infected person is wearing a cloth mask, and reduced 20-40% when a non-infected person is wearing it in proximity to an infected individual). Ueki, H., Furusawa, Y., Iwatsuki-Horimoto, K., Imai, M., Kabata, H., Nishi

Q What precautions should we take to prevent the spread of COVID-19?

A: The routes of transmission are generally through droplets or through direct contact with a COVID-19 positive individual. Therefore the risk of infection increases in a 3Cs (closed spaces、crowded places、close-contact settings) environment.

Situations such as social gatherings, eating and drinking with a large group of people or remaining in an eating or drinking area (e.g. restaurant setting) for a long time, having conversations without masks, living in a small communal area, and changing seating arrangements, may increase the risk of infection and should be avoided.

"Five scenarios" with a higher risk of infection

Scene① Eating and drinking at social gatherings

- The effects of alcohol uplifts the atmosphere, reducing one's attention span and it decreases one's hearing ability, leading to people becoming louder as they begin to raise their voices.
- When a large number of people stay for a long time, especially in smaller spaces separated by dividers (thin walls, Japanese sliding doors, etc.), the risk of infection increases.
- In addition, sharing glass and chopsticks increases the risk of infection.

Scene② Eating and drinking with a large group of people for a long time

- Eating and drinking for a long time, eating and drinking with entertainment, and late-night pub/bar-crawl increase the risk of infection compared to short meals.
- When eating and drinking with a large number of people, for example, 5 or more people, the risk of infection increases as people start talking out loudly, causing the droplets to fly around, creating a higher chance of an infection.

Scene③ Socializing without a mask

- Increased risk of infection by droplet infection or microdroplet infection by talking at close range without a mask
- An example of an infection that has occurred in a social event without a mask has been confirmed at events such as daytime karaoke.
- It is important to be cautious even in the car when getting on a car or bus

Scene④ Communal living space in a small area

- Living in a small communal space increases the risk of infection because the closed space is shared for a long time.
- Cases of suspected infection in common share spaces such as dormitory rooms and toilets have been reported.

Scene⑤ Moving Locations

- When moving locations, for example, when you are on a break at work, your risk of infection may increase due to relaxation and changes in the environment
- It has been believed that infections occur in break rooms, smoking areas, and changing rooms.

Q   What Tests are Used to Diagnose COVID-19?

A   Tests for diagnosing COVID-19 include PCR tests, antigen quantitative tests, antigen qualitative tests, and etc. Each of these tests detect if a virus is present in the subject's body and/or is infected with the virus.
  With the development of new test methods, it is now possible to use saliva and nasal swabs as well as nasopharyngeal swabs, depending on the type of test or the type of symptoms the individual is experiencing.
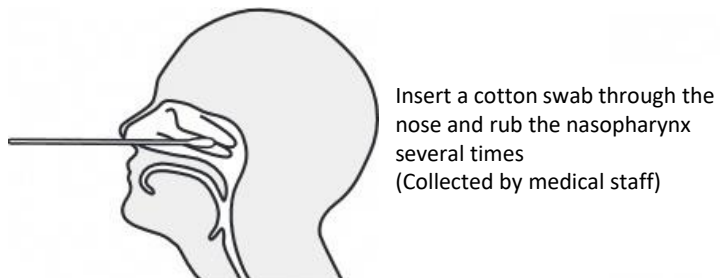 The antibody test confirms whether the individual has been infected with COVID-19 in the past, thus it does not confirm whether the individual currently has COVID-19 or not.

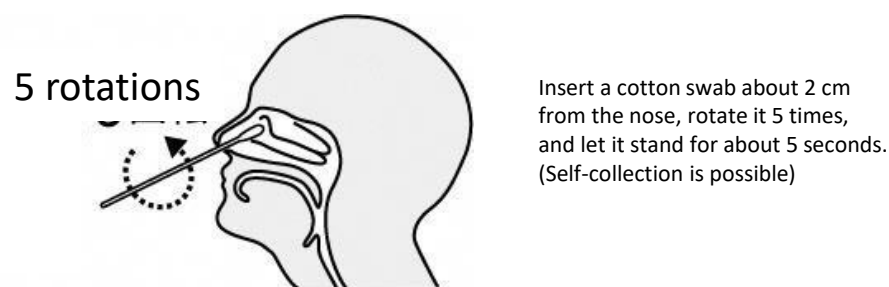| Person to be inspected		PCR test （including LAMP）			Antigen test （quantitative）			Antigen test （qualitative）		
		Nasopharynx	Nasal cavity	Saliva	Nasopharynx	Nasal cavity	Saliva	Nasopharynx	Nasal cavity	Saliva
People with symptoms	Within 9 days of onset	O	O	O	O	O	O	O ※1	O ※1	×
	After 10 days from onset	O	O	×	O	O	×	△※2	△※2	×
People without symptoms		O	×	O	O	×	O	×	×	×

* 1 Used within 2 to 9 days after onset * 2 If negative, perform nasopharyngeal PCR test, etc.

Example of sample collection
(For antigen qualitative test, nasopharyngeal swab and nasal swab)

Insert a cotton swab through the nose and rub the nasopharynx several times (Collected by medical staff)

5 rotations

Insert a cotton swab about 2 cm from the nose, rotate it 5 times, and let it stand for about 5 seconds. (Self-collection is possible)

Nasopharyngeal swab collection

Nasopharyngeal swab collection

The figure is provided by Denka Co., Ltd.

Q How Do You Treat COVID-19?

A: For mild cases, typically there is a follow-up checkup and treatment for symptoms such as antipyretics (e.g. pain killers) when necessary, as mild cases tend to subside.

If respiratory failure is observed, oxygen administration, steroids (a drug that suppresses inflammation), and antivirals* 1 may be administered. If symptoms do not improve, intensive care with a respirator, etc. may be performed * 2.

As a result of these treatments, the death rate of those hospitalized for COVID-19 has decreased.

If you experience symptoms such as a fever or cough, first consult your local medical institution.

* 1 Remdesivir is an antiviral drug approved for the treatment of COVID-19 in Japan. (As of October 29)
* 2 The percentage of those who require intensive care or die is about 1.6% (0.3% for those in their 50s or younger, 8.5% for those in their 60s or older).

From the 3rd edition of the medical guide for COVID-19, Partial modification

Status of drug treatment and mortality rate for hospitalized cases (COVID-19 registry research analysis results * 4)
○ Cases hospitalized after June tend to have the following tendencies compared to cases hospitalized before June.
・ Increased administration rate of remdesivir and steroids, which are indicated for COVID-19, especially in cases of severe illness at the time of hospitalization.
・ The rate of death after hospitalization decreased in all age groups in both mild / moderate and severe cases at hospitalization.

Mild / moderate cases on hospitalization

		Cases hospitalized before June 5	Cases hospitalized after June 6
Status of drug treatment	Remdesivir※6	0.2%	7.0%
	steroid drug (Expect for Ciclesonide)	4.3%	6.2%
Percentage of deaths after hospitalization (by age)	0−29	0.0%	0.0%
	30−49	0.2%	0.0%
	50−69	1.1%	0.0%
	70−	10.6%	5.8%
	All ages	2.6%	0.5%

Severe cases on hospitalization ※5

		Cases hospitalized before June 5	Cases hospitalized after June 6
Status of drug treatment	Remdesivir	0.9%	21.0%
	steroid drug (Expect for Ciclesonide)	23.1%	39.7%
Percentage of deaths after hospitalization (by age)	0−29	5.6%	0.0%
	30−49	2.2%	0.0%
	50−69	10.9%	1.4%
	70−	31.2%	20.8%
	All ages	19.4%	10.1%

* 4 In the welfare and labor science research "Registry research on COVID-19" (Principal Investigator: Takao Oomagari), we analyzed inpatient cases registered in the registry by September 4.
* 5 If any of oxygen administration, ventilator management, SpO2 94% or less, and respiratory rate 24 times / minute or more is applicable at the time of admission, it is classified as severe at admission.
* 6 For Remdesivir, the percentage of patients who received drugs for the purpose of treating COVID-19, not the percentage of all cases.

◯ About the development status for COVID-19 vaccines
　A: Currently, a large amount of studies are being vigorously conducted in Japan and overseas with the aim of early commercialization of vaccines for the COVID-19. Development is progressing at a faster pace than usual, and some have already begun clinical trials.

◯ About the effectiveness of the COVID-19 vaccine
　A: In general, vaccines are effective in preventing the onset and aggravation of infectious diseases.
　It is not yet known whether the vaccine for COVID-19 under development can actually prevent the onset or aggravation of COVID-19.

◯ About the safety of the COVID-19 vaccine
　A: Although health hazards due to side effects from vaccines are extremely rare, there is no guarantee that side effects would not occur.
　Currently, clinical trials are trying to confirm the type of side effects that may occur due to the COVID-19 vaccine.
　 It has been reported that overseas vaccines that are planned to be supplied to Japan *, have had some adverse events such as pain at the vaccination site, headache, malaise, and muscle pain; however this list includes symptoms that have no causal relationship with the vaccination.

* Vaccines under development by Pfizer, AstraZeneca, and Novabacs