# COVID-19 cases at elementary and junior and senior high schools and the countermeasures based on this data

In Japan, the state of emergency declared by the government was lifted nationwide near the end of May, and school activities at almost all elementary and junior and senior high schools were resumed on June 1. Ministry of Education, Culture, Sports, Science and Technology (MEXT) aggregated and analyzed the data from cases of COVID-19 infections reported to MEXT by local education boards and schools during the period from June 1 to July 31. On August 6, MEXT notified education boards nationwide of the following summary of countermeasures to be taken.

#### 1. Status of COVID-19 infections at schools

MEXT has requested local education boards and schools to provide reports when students or teachers tested positive for COVID-19. During the period from June 1, when schools began to fully re-open, to July 31, 242 students, 51 teachers, and 29 pupils and teachers of kindergartens were reported to have been infected. The following gives a breakdown of the infection routes and the spread of COVID-19 in schools.

#### (1) COVID-19 infections of students

Over half of the infection routes, 57% (137 out of 242 students), were "household transmission", and in particular, for elementary school students, 70% (63 out of 90 students) were infected through this route.

On the other hand, a total of 11 students overall (5%) were reported as "in-school transmission", which were 4 cases. These 4 cases were at junior and senior high schools. In two cases of the four, the infected students engaged in the same club activities, and in the other two cases, the infected students were either in the same class or the same club.

"Unknown transmission" made up 24% (57 students) of the total cases.

For high school students, several cases were seen of infections spreading through activities and exchanges outside of school.

<table among="" covid-19="" infections="" of="" situation="" students=""></table>														
	infected				Transmission route determined									
Students		with symptoms		Household		In-school		Activities,		Students		route		
			(*2) transn		smission	transmission		exchanges		returned from		unknown		
								outs	iue ranniy,	01	13603			
Elementary schools	90	30	33%	63	70%	0	0%	9	10%	3	3%	15	17%	
Junior high schools	53	32	60%	31	58%	6	11%	5	9%	2	4%	9	17%	
High schools	97	57	59%	42	43%	5	5%	17	18%	1	1%	32	33%	
Schools for SNE (*1)	2	1	50%	1	50%	0	0%	0	0%	0	0%	1	50%	
Total	242	120	50%	137	57%	11	5%	31	13%	6	2%	57	24%	

(\*1)Schools for Special Needs Education (\*2)Number of "with severe symptoms": 0

Note: Regarding compulsory education schools and secondary education schools, the school stages are divided corresponding to elementary schools and junior high schools and senior high schools.

## (2) COVID-19 infections of teachers

# "Unknown transmission" accounted for 60% (35 out of 51 persons) of the total cases. No cases were reported as in-school transmissions.

				Transmission route determined									Transmission	
Teachers	infected	with s	symptoms (*2)	Hou tran	usehold smission	In- tran	school smission	Ac exc outs	ctivities, changes ide family,	St retu ov	udents rned from verseas	r un	oute known	
Elementary schools	21	17	81%	4	19%	0	0%	2	10%	0	0%	15	71%	
Junior high schools	7	6	86%	1	14%	0	0%	2	29%	0	0%	4	57%	
High schools	15	10	67%	1	7%	0	0%	4	27%	0	0%	10	67%	
Schools for SNE (*1)	8	7	88%	1	13%	0	0%	1	13%	0	0%	6	75%	
Total	51	40	78%	7	14%	0	0%	9	18%	0	0%	35	69%	

< Table Situation of COVID-19 Infections among Teachers >

(\*1)Schools for Special Needs Education (\*2)Number of "with severe symptoms": 0

Note: Regarding compulsory education schools and secondary education schools, the school stages are divided corresponding to elementary schools and junior high schools and senior high schools.

It should be noted that the identification of these infection routes is based on surveys by individual local governments, and among the cases of "unknown transmission", a number of cases were seen of several infected students and teachers belonging to the same class or engaged in the same club activities.

#### (3) COVID-19 infections of kindergarten-related persons

In regards to kindergartens, 16 children and 13 teachers were reported infected with COVID-19.

< Table Situation o	f COVID-19	Infec	tions amo	ong pi	upils and t	eache	ers of Kin	derga	rtens >					
					Transmission route determined									
	infected	with symptoms (*)		Household transmission		In-school transmission		Activities, exchanges		Students returned from		route		
			()	tran	5111551011	tran	5111331011	outs	ide family,	0١	verseas	um	unknown	
pupils	16	6	38%	4	25%	6	38%	2	13%	0	0%	4	25%	
teachers	13	10	77%	0	0%	4	31%	4	31%	0	0%	5	38%	
(*)Number of "with	severe sym	ptom	s": 0	-										

#### (4) Current situation of PCR testing

PCR testing, which is conducted based on the Infectious Diseases Control Law<sup>1</sup> with the aim of making clear the status, trends, and causes of COVID-19 cases and preventing the spread of infection, is carried out targeting the following persons: 1) persons already tested positive for COVID-19, 2) persons having suspicious symptoms, and 3) persons reasonably suspected to be infected because of contact with infected persons, etc.

Of these categories, persons in category 3) are not only "close contacts"; PCR testing is also conducted when the public health center thinks there is a high risk of infection spreading within specific regions, groups, organizations. In fact, in some cases that infected persons found in schools, the public health center conducted PCR testing on dozens of people, including those not "close contacts".

#### 2. Morbidity rate by age group

According to aggregated data of COVID-19 in Japan until now, the morbidity rate for persons ten years or younger or in their teens is lower than that for other age groups, and it is supposed that the incidence rate and disease severity rate for these age groups are both low. This situation is greatly different from the trend for age levels easily infected by influenza, where the morbidity rate for those 15 or younger is the highest. However, there are still many unclear points regarding COVID-19, and continued caution is still necessary.

#### 3. Countermeasures based on the current COVID-19 situation in Japan

Increases in the number of newly reported cases of COVID-19 are currently seen in the Tokyo metropolitan area, the Kansai area, and some other areas. Based on the fact that household transmission is the most prevalent infection route for young students and that the cases of teachers are mainly "unknown," it has become increasingly important that persons do not bring the coronavirus into schools.

#### (1) Countermeasures against household transmission

Depending on the infection situation in the region, not only when students or teachers have cold-like symptoms, but also when their family members are suffering from a fever or other cold-like symptoms, school principals should ask those students and teachers not to attend schools in regions where the "unknown transmission" cases are increasing. For this, the understanding and cooperation of the parents are essential.

Moreover, it is especially important that for teachers a work environment should be created so that it is easy for them to take days off. Specifically, with the assumption of the possibility that a teacher will suddenly be unable to go to the school, the constant sharing of information on the contents of duties and the situation and progress of classes among teachers, and considering ways to divide teaching and other duties in case a teacher cannot attend school are effective ways for creating such an environment. Moreover, in the case a teacher has had close contact with an infected person or whose family members show cold-like symptoms, schools are requested to make an environment enabling teachers to handle duties through teleworking. MEXT is now compiling examples of such practices.

https://www.mext.go.jp/content/20200527-mxt\_kouhou01-000004520\_4.pdf

<sup>&</sup>lt;sup>1</sup> Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases

#### (2) Countermeasures regarding activities outside of school

It is also important to advance efforts to prevent both students and teachers from spreading COVID-19 outside of schools. Care should be taken to avoid gathering in groups in spaces that are poorly ventilated and crowded. Industry groups are preparing and announcing industry-specific guidelines (hereinafter, "industry-specific guidelines") to prevent the spread of COVID-19, and it is important to confirm the status of compliance with such industry-specific guidelines.

https://www.mext.go.jp/a\_menu/coronavirus/mext\_00028.html

Since the scope of children's activities widen as they grow older, in regards to personal activities and exchanges outside of school, particularly for high school students, guidance should be given on points students should pay particular attention to, including from the perspective of ascertaining whether the activities they participate in and the facilities and so on used are in compliance with the industry-specific guidelines. In addition, it will also be useful to provide this kind of information, where necessary, to the parents of students.

#### 4. Countermeasures to prevent the spread of COVID-19 within schools

As far as we can see from the cases seen up to now, even though school-related persons (students, teachers, etc.) have been infected, when schools take proper measures in accordance with the "New School Lifestyle —COVID-19 Infection Control Manuals and Guidelines for Schools," the risk of widely spreading of infection at schools can be reduced.

As they take countermeasures against COVID-19 depending on the situation of infection in the region, it will be important for schools to continue lessons, club activities, school events and other educational activities while ensuring a healthy learning environment for children.

Even though the level of vigilance may have to be raised depending on the COVID-19 situation in the region, schools should consider not only temporarily closures but also initiatives for continuing children's learning by actively studying the possibilities for dividing attendance for several days, online learning, and so on.

#### (1) Temporary school closures

If a student is found to be infected by COVID-19, a temporary school closure is carried out by determining the number of days and scope necessary for identifying the students who had close contact with the infected student(s) and conducting testing. (If no time is necessary for identifying the students who had close contact with the infected student, or no students were found to have had close contact with the student, a temporary school closure may not be necessary.) As long as there is no high likelihood that COVID-19 will spread throughout the entire school, a temporary school closure to deal with the infection is basically unnecessary, and it is important to ensure as much as possible learning opportunities for the students.

At present, the most common examples seen are that after an infected student is discovered, the school temporarily close for 1-3 days, after which the school will re-open.



\*Saturdays and Sundays not included in number of days

Reference: Examples of School Closures after Discovery of Infected Student (actual examples)

#### Example 1

One elementary student testing positive (exhibits symptoms, infection route unclear)  $\rightarrow$  Entire school temporarily closed for 3 days from the following day. Around 40 persons connected to the school underwent PCR testing (all tested negative).  $\rightarrow$  School re-opened from fourth day.

Example 2

One high school student testing positive (no symptoms, in-family infection)

 $\rightarrow$  Entire school temporarily closed for 1 day the following day. Three persons connected to the school underwent PCR testing (all tested negative).

 $\rightarrow$  School re-opened from the second day.

Example 3

One elementary student testing positive (no symptoms, in-family infection)

 $\rightarrow$  Since the local public health center determined that no persons in the school had close contact epidemiologically with the infected student, the school was not temporarily closed. Necessary areas in the school were disinfected, and the school resumed its activities.

### (2) Points requiring attention particularly for junior and senior high schools

As mentioned above, a number of cases have been reported at junior and senior high schools of from one to several persons being infected by COVID-19. At first, thorough guidance should be given to students about basic countermeasures like washing hands and making sure rooms are well ventilated, and schools should re-inspect whether they are carrying out the anti-COVID-19 measures based on the pandemic situation in their region. Moreover, since as students grow older, they will increasingly act without the direct supervision of teachers even in school and will act more independently, it will be important to give these students

guidance so that they themselves will pay attention to the management of their own hygiene and safe practices.

Moreover, it may take long time to identify all "close contacts" and complete PCR testing all of them since in some cases the infection spread also to their family members. Therefore, it is particularly important to make preparations for ensuring students' learning opportunities, including the utilization of ICT for learning.

#### (3) Disinfecting inside schools

Disinfection of schools is an effective means of killing and reducing COVID-19, but it is difficult to kill all the virus with disinfectants in school life. Because of that, rather than counting on the efficacy of temporary disinfection, it is more important to maintain clean spaces by regular cleaning, boost children's immunity through a healthy daily life, and accustom them to thoroughly washing their hands.

Referencing the "Points for Daily Cleaning and Disinfecting" shown below, schools should focus on daily cleaning activities to incorporate the effects of disinfecting.

This means that as part of the daily school cleaning activities, it is permissible for even students, depending on their stage of development, to use household cleaners and disinfectants that are effective for combating COVID-19. It will also be possible to carry out these activities with the cooperation of the community, including school support staff and community school support networks.

In addition to the above, separately carrying out disinfecting procedures apart from normal cleaning activities is basically unnecessary as long as no cases of COVID-19 appear, but if they do appear, it will be important to conduct the disinfecting activities as much as possible by utilizing outside persons or professional services rather than teachers in order to reduce the burden on teachers.

Based on the fact that it is difficult to kill completely the novel coronavirus by disinfectants, school establishers and principals **must place importance on ensuring that basic countermeasures against COVID-19 like handwashing, coughing etiquette, and boosting children's immune systems** are carried out. Use the following "Points for Cleaning and Disinfecting" as reference and **take sufficient care to avoid excessive disinfecting**.

#### "Points for Cleaning and Disinfecting"

- Floors can be treated by normal cleaning; special disinfecting is not necessary.
- Special disinfecting is not necessary for desks and chairs, but from the viewpoint of keeping a good, hygienic environment, wiping them with a household cleaner as part of the cleaning activities is possible.
- Places and surfaces that many students and others often touch (door knobs, handrails, electric switches, etc.) should be cleaned with damp cloths once a day and then wiped with cloths or paper towels soaked in a disinfectant. Cleaning them by wiping them with a household cleaner can be done instead of this, as the same way of cleaning desks and chairs.
- Restrooms and washrooms can be cleaned through normal cleaning using household cleaners, and special disinfecting is not necessary.
- For items for common use like equipment, tools, cleaning implements, etc., students should be told to wash their hands before and after they use them each time without needing to use disinfectants.