

Supplementary Material 1. Survey on the outbreak at a high school in Gangbuk-gu Seoul

This is a survey conducted by the Korea Centers for Disease Control and Prevention to analyze the risk factors for infection following the COVID-19 outbreak at a high school in Gangbuk-gu.

In accordance with Article 18 of the Act on the Prevention and Control of Infectious Diseases (Epidemiological Survey), this survey will be conducted among high school students in their third year.

Your statements will be used in accordance with Articles 15 (Collection and Use of Personal Information) and 17 (Provision of Personal Information) of the Personal Information Protection Act, and Article 76 (2) of the Act on the Prevention and Control of Infectious Diseases (Request for Information and Confirmation of Information), and will not be used for purposes other than infectious disease-related purposes, and will be destroyed without delay upon completion of the above infection factor analysis work. You have the right to refuse consent to the collection of personal information and will not be penalized for refusal.

Thank you for agreeing and participating in this survey, and we ask for your honest answers.

[Time required: 5 minutes or less].

※ Consent to collect and use personal information

① Yes ② No

[General characteristics]

1. Select your grade and class.

① 3-1 ② 3-2 ③ 3-3 ④ 3-4 ⑤ 3-5 ⑥ 3-6 ⑦ 3-7 ⑧ 3-8 ⑨ 3-9 ⑩ 3-10 ⑪ 3-11

2. Have you ever been infected with COVID-19?

① Yes ② No

[Personal behavioral patterns]

1. What is your level of mask use in your classroom?

① Always ② Often ③ Sometimes ④ Never

2. When do you take off your masks in the classroom?

① Eating food ② Drinking water ③ Talking to friends ④ Making presentations ⑤ Not applicable

3. How often do you sanitize hands in the classroom?

① Always ② Often ③ Sometimes ④ Never

[Personal behavior patterns in mobile classes]

1. Did you have a mobile class?

① Yes ② No

2. How often do you sanitize your hands when you go to a mobile class?

① Always ② Often ③ Sometimes ④ Never

3. What is the level of mask-wearing when you go to mobile classes?

- ① Always ② Often ③ Sometimes ④ Never

4. When do you take off your mask while attending a mobile class?

- ① Eating food ② Drinking water ③ Talking to friends ④ Making presentations ⑤ Not applicable

[Personal behavior patterns during breaks]

1. Where do you spend your break time?

- ① My classroom ② Go somewhere other than my classroom

2. What do you typically do during your breaks?

- ① Take a break in a seat ② Talk to friends ③ Physical activity (exercise) ④ Eating (snacks, water, drinks, etc.)

3. What is your level of mask-wearing during breaks?

- ① Always ② Often ③ Sometimes ④ Never

4. When do you take off your mask during breaks?

- ① Eating food ② Drinking water ③ Talking to friends ④ Physical activity (exercise) ⑤ Use the restroom ⑥ Not applicable

[Personal behavior patterns in self-study room]

1. Do you study at the self-study room?

- ① Yes ② No

2. Which of the two self-study rooms do you use?

- ① Rear building (1st floor tutorial room) ② Annex (playground)

3. During the week, how many times do you use the self-study room?

- ① 1 time ② 2 times ③ 3 times ④ 4 times ⑤ 5 or more times

4. On average, how many hours in a day do you spend in the self-study room?

- ① Within 1 hour ② 1 to 2 hours ③ 2 to 3 hours ④ 3 hours or more

5. What is the level of hand sanitization in the self-study room?

- ① Always ② Often ③ Sometimes ④ Never

6. What is the level of mask-wearing in the self-study room?

- ① Always ② Often ③ Sometimes ④ Never

7. When do you take off your mask in the self-study room?

- ① Eating food ② Drinking water ③ Talking to friends ④ Physical activity (exercise) ⑤ Use the restroom ⑥ Not applicable

8. What activities do you do in the self-study room?

- ① Self-study ② Talk to friends sometime

9. Do you wear a mask while self-studying in your seat?

① Yes ② No

10. Have you ever studied by a window to prevent drowsiness in a self-study room?

① Yes ② No

※ What do you think is the cause of infection in your school? Please feel free to write your personal opinion (e.g., not wearing a mask, not measuring fever, etc.). It would be helpful if you could write specific locations.

Thank you for taking the time to respond to our question.