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Prevention measure for COVID-19
Who would be more susceptible to an infectious disease? Person A was vaccinated but lives surrounded by people not vaccinated; Person B was not inoculated but lives surrounded by many people inoculated. The answer is Person A.

If lots of people already had the antibody, the virus would not freely move around and stop spreading soon. Thanks to the mechanism, people not vaccinated can be also prevented from the infection. We call this “herd immunity.”

The concept was first applied in the 1930s, and now attracts attention again as the infected number of COVID-19 has exceeded 340,000 (as of March 23) around the globe. Society is liable for our health and its debts. In a book entitled “On Immunity,” the author Eula Biss introduces the concept “herd immunity” and states that “immunity is a garden we tend together.”

Safety can also be a garden we tend together. However, safety is not always secured even if each worker takes care of it. As industrial techniques have been sophisticated and more complicated, one accident is intertwined with many direct and indirect elements. Dangers do not originate from individuals, but from “structural issues.” We need to focus on creating a safe environments in a structural manner, rather than making individuals care for. Safety is the area that our society tends and shares together.
A viral antibody comes from vaccines taken at hospitals. Hospitals contributing to creating a safe community already exist. The Occupational Safety & Health Act of Korea was completely revised in 28 years, and enforced since January 16 of this year. The amended Act was proposed to prevent accidents as is the case of the deceased Yong-kyun Kim who was exposed to danger as a subcontracting worker. The revised Act has not only widened the coverage of subjects to legal protection and entities of occupational accidents, but also reinforced preventive obligations. Hence, the foundation has been laid out to cover safety blind spots. The Act has opened the ways for every worker to enjoy his/her rights to be safe and healthy.

It is time to take actions. In this regard, KOSHA is playing as a vaccine to implement patrol projects. Vaccination is a technique, which debilitates a certain disease and activates the immune system. Then, it may prevent more severe diseases. The patrol project is to find out risk factors and strengthen safety immunity. For instance, we unexpectedly inspect any hazards on industrial sites to prevent lethal incidents such as a fall or a trap. Regarding serious accidents, a myriad of issues were interwoven with structural elements. The project aims to closely observe any hazards, analyze the root causes and direct the sites to correct them.

Some people may feel reluctant to getting vaccines due to side effects. Likewise, some concerns also arise from negative impacts on businesses as the government reinforces the safety inspection. Nevertheless, such concerns are alleviated by findings of inspections from 1996 to 2006, for which California Occupational Safety & Health Administration in the US randomly inspected facilities. In 2012, David Levine and other researchers published the paper entitled “Randomized Government Safety Inspections Reduce Worker Injuries with No Detectable Job Loss” in the journal Science. Indeed, the government’s inspections contributed to decreasing worker injuries by 9.4%, but have not noticeably affected employment and sales for companies. The study may reflect diverse time or environments, but it is a meaningful precedent for the communal safety.
The confirmed cases in Korea have already exceeded 9,000. Each individual should wash hands thoroughly and wear masks to block infection routes. KOSHA has supplied Personal Protective Equipments and protective clothing to Daegu and Northern Gyeongsang Province, designated as special disaster areas. In addition, we will provide funds for nation-wide call centers with vulnerable working environments to install partitions. Thanks to the power of communal immunity, the number of those who have been recovered outpaced that of confirmed patients. KOSHA is working as a vaccine to strengthen immunity not only for the coronavirus but also for general safety. We look forward to overcoming the pandemic before long and tending workplace safety together.
Combating COVID-19 requires Accurate Information and Right Practices

March 23, 2020

Doo-yong Park
President
Korea Occupational Safety and Health Agency

The confirmed cases of COVID-19 around the world have exceeded 190,000 and the death toll reached over 7,800 (as of late March). Consequently, the World Health Organization (WHO) declared the virus as a pandemic.

The Greek term “Pandemic” is a combination of “Pan” meaning all and “Demic” referring to people. Pandemic is the highest grade of warning against infectious diseases by the WHO.

This is the third time in the history that the organization declares a pandemic. As COVID-19 has expanded to every corner of the world, the WHO declared a “pandemic” during this outbreak.

In South Korea, the confirmed patients and the deaths are also reaching superior to 8,000 and 80, respectively. A major cause emerged from a group infection by a religious sect, resulting in significant community contagion. Moreover, about 80 workers – at a call center in Guro district, Seoul – were infected due to the working environment vulnerable to infection.

If you stay surrounded by many people at multi-purpose facilities or closed spaces, such as internet cafés, religious events or nursing homes, it is prone to be highly exposed to infectious conditions. Schools, which are also immensely vulnerable to group infection, will be open in April as a preventive measure.
The report by the UN Conference on Trade and Development forecasts that the global export will drop by 59 trillion won due to the pandemic. In terms of the export decline, Korea is ranked the fourth by four trillion won, following Europe and the United States. The novel coronavirus is substantially impacting not only Korean society and economy but also the whole world. Amid this outbreak, incorrect information is arising from anxiety and fear, causing secondary harmful effects. For instance, KCs masks (industrial) were used instead of KF masks (healthcare), and methanol was even misused.

As the virus expands, we may see some cases where people put on KCs masks rather than KF masks. The KCs masks are to block harmful substances like dust originating within worksites. In particular, if you wear the industrial masks with air valves attached, viruses may go through the valves as you exhale. We should use proper type of masks to prevent the infectious disease.

On March 7, a family living in Namyangju of Gyeonggi Province used methanol to disinfect the inside of the house. A woman and her two children suffered from stomachache, vomiting and visual disturbance because of acute poisoning, and were treated in an emergency room. In Iran, a wrong folk remedy has spreaded that methanol is effective against COVID-19. Unfortunately, this led to about 40 deaths. Being an industrial alcohol, methanol causes eye blindness and death in case of severe poisoning. Back in 2016, four workers had been constantly exposed to methanol steam and went blind. The incidents prove the lethal consequences brought by methanol. The damaged worked at a facility manufacturing parts of mobile phone in Bucheon.

Luckily, the confirmed cases for the past days have decreased to a two-digit number. The number of those who have been recovered is higher than the daily confirmed cases. Here also comes good news that developed countries appreciate South Korea’s remarkable quarantine system as well as citizen’s proactive commitments in preventing the virus and propagation.
The KOSHA is also actively taking parts in prevention and treatment against today’s virus. In order to limit the proliferation of COVID-19, our institution has supplied 1.52 million masks to small construction sites with high vulnerability of infection prevention, manufacturing worksites with less than 50 employees as well as facilities with foreign workers. We also plan to provide up to 20 million won for call centers, which are susceptible to infectious diseases, to facilitate establishment of temporary partitions or purchase of air purifiers. Furthermore, Personal Protective Equipments and protective clothing for quarantine measures were also delivered to a special disaster area, Daegu.

The most fundamental in addressing risks is to take correct practices in company with accurate information. Without the vaccine developed, it is crucial to wear a proper type of masks, wash hands thoroughly and keep social distancing. It is the very time to take true citizenship, with which all take care of one another and participates in efforts to go back to our normal life as fast as possible.
Emergency aid kits for workers in Daegu and Gyeongbuk regions

KOSHA provided 240 aid kits and 3,400 protective clothing

KOSHA provided Daegu/Gyeongbuk with personal protective equipments in order to combat COVID-19 pandemic.

✚ KOSHA provided 240 emergency aid kits (Level D) and 3,400 impermeability protective clothing.

✚ The Level D Kit provided by KOSHA consisted of a disposable full-body suit; a pair of overshoes, goggles, and sterilized gloves; and mask (KF94).

Daegu and Gyeongsangbuk-do are regions where immediate response measures to tackle COVID-19 pandemic requires. As Gyeongsan-si, following the Daegu and Cheongdo-gun, was designated as ‘Special pandemic control area’ on the March 5th. ※Gyeongsan-si and Cheongdo-gun belong to Gyeongsangbuk-do

✚ In this regard, KOSHA delivered the kit and clothing on the March 10th.

President Doo-yong Park mentioned “COVID-19 pandemic is a disastrous situation at the national level and it is important to believe that we could tackle COVID-19 only if we get together”, “In order to prevent the propagation of the disease and end it, we would not spare no efforts by providing human and material resources we could” added he.
KOSHA helps Ulsan community to tackle COVID-19

Provide quarantine activities and sanitizers to 235 public facilities in outskirts of Ulsan

KOSHA supported Ulsan through communicable disease control in order to tackle COVID-19.

KOSHA had conducted quarantine activities in the area* where confirmed case occurred focusing on public facilities such as senior community centers, social welfare centers, children care centers for 4 weeks from the March 18th to April 11th. * Subject area : Southern-west area of Ulju-gun, Ulsan

The quarantine activities were conducted targeting 235 public facilities in the outskirts of Ulsan including 57 child care centers.

The quarantine conducted once a week so that KOSHA expected higher effectiveness of COVID-19 prevention by repeating the quarantine activities 2 or 3 times.

In line with the quarantine activities, KOSHA provided sanitizers with the facilities in order to helping people protect themselves from the infection.

This project was collaborated with the Ulju-gun Office (Governor Sun-ho Lee) and Elephant Factory (Representative Chae-jin Lee) a social enterprises specialized in quarantine and sterilization.

A KOSHA staff mentioned “We hope this would be of help for the outskirt areas of Ulsan in this national disastrous situation”, “KOSHA will do our utmost to contribute developing Ulsan community” added he.
KOSHA pleaded with the public to pay close attention not to cause additional damages based on incorrect information concerning COVID-19.

This plea was stemmed from the acute intoxication incident suffered by local residents at Namyangju, Gyeonggi-do after using methanol (industrial alcohol) as preventive measures against COVID-19 on March 7th.

Since substances harmful to human bodies, such as methanol, are prone to cause health hazards upon inadequate applications, extra cautions are essentially required.

It was presumed that this particular case of wrongful use was caused because the vapor of high-concentration methanol remained at indoors after methanol was sprayed for disinfection of the indoor with insufficient ventilation while they were not fully aware of the harmfulness of the substance.

KOSHA posted a guideline not to use methanol as disinfectant at workplaces through its official website and SNS, and informs all workplaces handling methanol of the risk warnings.

Consequently, KOSHA issued a danger alert for acute intoxication amid the outbreak of methanol cases.

Eun-a Kim, a Director of OSHRI, KOSHA and a specialist of occupational and environmental medicine, said, “Unfortunate incidents have occurred in recent days due to unidentified and incorrect information related to COVID-19.” And she added, “I urge everyone not to employ unproven substances or information, and it is also necessary to practice safe use of legitimate information offered by the government or official organizations.”
Amended Occupational Safety and Health Act to enhance understanding via video

KOSHA unveils NURI–JIP through Apps

KOSHA produces and distributes a video program summarizing the amended Occupational Safety and Health Act to be implemented this year.

This new video is developed based on key details of the wholly amended Occupational Safety and Health Act as well as its subordinate statutes, including its enforcement decree, enforcement rule and standards on occupational safety and health.

✚ ✚ The video contains major details of △ expansion of subjects into legal protection, △ expansion of principals of responsibility, △ limitations on subcontracts of harmful/dangerous works and △ enhanced disciplinary actions against business owners.
✚ ✚ This video can be downloaded through NURI–JIP* of KOSHA, and it is also available through APP (Crisis-free Safety & Health) and Youtube.

* NURI–JIP of KOSHA (www.kosha.or.kr) : Information > Archives of Safety & Health > View All

KOSHA has also developed and is currently distributing the “10–Minute Safety & Health Training” program allowing worksites to instantly verify risk factors in advance and provide training programs.

✚ ✚ This 10–Minute Safety & Health Training Program implemented through the APP of the KOSHA is a system that enables on–site managers and workers conducting training programs and managing their performances through mobile platforms.
✚ ✚ No documents are required to be filled out, and the program above mentioned will be recognized as regular training hours under the Occupational Safety and Health Act.

A staff of KOSHA said, “In order for the Occupational Safety and Health Act amended for the first time in 28 years to effectively work, it is important for everyone at the worksites to fully acquainted with its details.”
✚ ✚ “We have high expectation that this video on the newly amended Occupational Safety and Health Act would lead owners and workers to a better understanding of the amended act,” the staff said.
OSHRI Study Summaries Released

Upgraded Confined Space Instrument

Occupational Safety & Health Research Institute (OSHRI) has disclosed the 2019 Study Summaries to lay the foundation for implementing occupational accident prevention policies and to respond to various issues related to workplace safety and health.

OSHRI, which annually publishes their research, conducted 75 studies in 5 OSH fields* last year.

*5 fields: OSH policy research, occupational safety, occupational health, working environment, chemical hazards in workplace

The government-funded institute has developed a gas detector capable of measuring oxygen, carbon monoxide and hydrogen sulfide simultaneously through its representative work last year: "Development of Gas Detector for Confined Space Using State-of-the-Art Sensor Technology."

The price of the newly-developed detector can be reduced by half compared to a hydrogen sulfide detector or an industrial CO detector using sensors currently in the market.

OSHRI is planning to apply for a patent and a utility model registration, and will review for commercialization and mass production.

- The related technology will be included in the OSHRI’s biannual publication, "Research to Practice Report (R2P)."

[Figure] The newly developed sensor and wearable device

This article was written by OSHRI
In addition, OSHRI released various research on (i) health problems of school cafeteria workers; (ii) safety management of broadcasting and film production crews as well as daycare center teachers; (iii) mental health checkup including depression during health examination for the life transition period; and (iv) harmful substance measurement of recycled electronic goods.

Out of 79 research conducted in 2018, 19 studies were published on SCI-grade journals and 41 were reflected in the OSH policy improvement.

The research can be found on the OSHRI website* (http://kosha.or.kr/oshri), and the official information disclosure system “ALIO (http://www.alio.go.kr).”

* Full text is presented in Korean but the abstracts of the research are provided in English.

“Jae-cheol Ko, the Director General of OSHRI, said, “As the OSH environment changes, there has been growing demand on the OSH policy research and practical research to prevent occupational accidents. We will prepare scientific grounds to establish policies and aggressively respond to new risks and hazards by conducting OSH research in a preemptive manner.”
Coronavirus Disease 2019

Prevention measures for COVID−19