

# Korean labor law: Noise-induced Hearing Loss Recognized as an Industrial Accident

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## I. Introduction

I recently took on a case involving noise-induced hearing loss suffered by a civil servant. Although his application to have it recognized as work-related was initially rejected, upon request for a review of the decision, it was accepted. Noise-induced hearing loss is not well recognized as a work-related accident (industrial accident), as the requirements for such recognition are difficult to meet: for permanent recognition of hearing loss being work-related, the employee must have had significant exposure to high-pitched noises (at least 85 decibels) at the workplace for at least 3 years, with the hearing impairment a minimum of 40 decibels (dB) for both the left and right ear. Symptoms like this do not appear immediately after working at the first high-pitched workplace, but occur often after 10 to 20 years, so it is not easy to have such hearing loss recognized as an industrial accident, as it can be relegated easily to simply the result of age. However, recent precedents have relaxed the criteria for determining that noise-induced hearing loss is work-related and recognition of it as an industrial accident is becoming more common.<sup>1</sup>

According to Rep. Park Nam-chun's 2017 state audit press release,<sup>2</sup> "The Public Pension Agency does not recognize noise-induced hearing loss, which is the number one condition for firefighters as a result of their occupation. In the last 10 years (2007~2017), only 2 of the 9 firefighters who applied had their hearing loss accepted as workplace-related. Even for these two, the noise-induced hearing loss was recognized only because four explosives detonated simultaneously during training in 2008 and they were taken away in an ambulance. On the other hand, firefighters who have been continuously exposed to sirens and the noise of firefighting equipment while engaged in first aid, rescue, and firefighting were determined to be daydreaming about noise-induced hearing loss." Fortunately, however, the situation has been changing.<sup>3</sup>

Thanks to these relaxed standards for recognizing noise-induced hearing loss, the Public Pension Agency seems to have had its rejection revoked upon review

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<sup>1</sup> Park, Jeong-rae, "A plan to improve the criteria for recognizing noise-induced hearing loss as an occupational injury," *Monthly Occupational Health*, vol. 387, July 2020.

<sup>2</sup> Press release, National Assembly Audit by Rep. Park Nam-chun (Oct. 16, 2017).

<sup>3</sup> Gwangju District Court ruling on Mar. 27, 2019: 2017noo1966.

with the Civil Service Accident Compensation Committee. The main items related to the reexamination and the standards for recognizing noise-induced hearing loss as an occupational injury will be reviewed herein.

## **II. Noise-induced Hearing Loss of a Maritime Police Officer**

### **1. Summary of the case**

An executive (employee) belonging to the Korea Coast Guard applied to the Public Pension Agency for recognition of his noise-induced hearing loss as an occupational injury when he retired in January 2021, but was rejected. The reason for the rejection was because he was unable to prove a significant causal relationship between the condition and the work because he had been working in an office job without significant noise for the past 17 years. He had, however, worked for 13 years (between 1984 and 2004) in the machinery room of a marine patrol boat, and had not worn any ear protection, where he suffered partial loss of his hearing. Accordingly, this labor attorney received the statements of six colleagues who had worked together with him before 2004, and filed a request for review with related shipboard work data and similar judgments. The Committee then reversed the initial rejection.

### **2. Details of the request to the Committee for review<sup>4</sup>**

The employee was hired in 1985 and retired in 2020. We divide this career into four stages.

#### **Stage 1: Initial damage to hearing (1985~2004)**

The employee was hired in 1985 and served with the Coast Guard until 2004. Of this 19-year period, he spent 13 years and 5 months working in ships. As an engineer in charge of the engine room, his main task was to ensure the engine of the patrol boat was performing for its tasks at all times. When seeking to identify why the engine might be acting up, the safety rules required the use of a stethoscope, but in reality at the time, identification was done with only a screwdriver. The average noise level of the machine room was 110 dB—a level that is accepted as likely damaging to hearing.

#### **Stage 2: Onset of hearing impairment symptoms (2005~2013)**

When the employee was about to be promoted from lieutenant to superintendent, preparations for the related exams and interviews for

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<sup>4</sup> Jung, BongSoo, "Request for review submitted to the Civil Service Accident Compensation and Pension Commission," Aug. 20, 2021.

promotion precluded finding the time to even think about treating symptoms for anything, including loss of hearing.

**Stage 3:** Progression of hearing loss (2014 ~ 2018)

The Sewol Ferry incident, a national disaster, occurred not long after the employee was appointed head of the information department at the main office in January 2014. On April 17, 2014, the day after the Sewol ferry disaster occurred, he went down to Paengmok port as he was in charge of reporting information to the person in charge of handling the accident. In the process, he was subjected to violence, vandalism, and threats from bereaved family members, returning to the office only after 49 days. The employee was under particular stress as the Korea Coast Guard was in the process of dissolution, and he was constantly stressed by prosecutorial investigations related to its handling of the Sewol ferry sinking and hearings and investigations, etc. from the National Assembly. Accordingly, his health deteriorated significantly.

**Stage 4:** Confirmation of hearing loss (2018 ~ 2020)

In July 2018, the employee felt great inconvenience in his daily life due to his hearing loss, and went for a checkup at the Police General Hospital. A hearing test confirmed a 46.25 dB loss of hearing (moderate hearing loss) on the left side and a 31.25 dB loss (mild hearing loss) on the right. To reconfirm, in October 2018, he had another hearing test at Seoul Samsung Hospital. Sensory nerve deafness was measured at 48 dB (moderate hearing loss) on the left and 41 dB (mild hearing loss) on the right. Prolonged exposure to loud noise was considered to be the cause. To reconfirm the diagnosis from Samsung Hospital, in December 2020, he went for another test at Gangneung Asan Hospital. While there, the employee was diagnosed with moderate (45 dB) sensory nerve deafness on the left and mild (30.8 dB) on the right. According to the doctor, it was a mix of noise-induced hearing loss from a history of noise exposure and age-related hearing loss, so hearing rehabilitation and use of a hearing aid would be necessary.

**3. Details of reversal by the Committee<sup>5</sup>**

(1) Confirmation of facts

Combining the experience of working in the engine room of a ship, the period of exposure to noise on patrol boats, noise measurements, and the doctor's note, the following facts can be considered: First, the employee worked in the engine room for 13 years and 5 months. As confirmed by the statements of colleagues,

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<sup>5</sup> Decision of the Civil Service Accident Compensation and Pension Committee, Feb. 11, 2022, 22-01-433.

without hearing protection such as earplugs, they were exposed to engine noise while working and impact noise from firearms during training. Second, according to the ship noise research report, the noise in the engine room of the ship was an average of 110 dB, far exceeding the 85 dB likely to cause hearing loss. Third, two medical institutions diagnosed him with “sensory nerve deafness,” caused by past noise exposure.

(2) New decision by the Committee

“According to Article 4 (1) of the Civil Service Accident Compensation Act, an occupational illness/injury is a condition that occurs in connection with the performance of official duties and is defined as having a significant causal relationship with public service. Looking at the record of one case submitted to this committee at the time of the original disposition and request for examination, along with the employee's claim, the employee worked in the engine room inside patrol boats. It is claimed that the hearing loss was caused and aggravated by the occupation. Accordingly, if we comprehensively review the employee's medical history, medical certificate, and medical record, the employee's history of exposure to noise can be recognized. The results of the hearing test show that the right side does not fall within the noise-induced hearing loss range, but the left side is a medical opinion that noise-induced hearing loss can be recognized. If so, the rejection of official medical care given to the employee for his left side hearing on May 24, 2021 is cancelled.”

#### **4. Implications**

When looking at the history behind recognition of the noise-induced hearing loss as workplace-related, the following two things are important. First, the fact-checking and obtaining of statements from six co-workers. These statements expressed that the machinery room in the Coast Guard craft generated 85 decibels or higher in noise, that during training they were constantly exposed to the high-pitched noise of gunfire or explosions, and worked without earplugs. Second, the employee was diagnosed with noise-induced hearing loss only in 2020—16 years after his field service in a patrol boat ended in 2004, after which he began working in an office without high noise levels. The related statute of limitations also begins when a person is confirmed as having a permanent disability at a hospital within the healing time stipulated in Article 5 of the Industrial Accident Compensation Insurance Act rather than three years from

the time of leaving the noisy workplace.<sup>6</sup>

### **III. Criteria for Recognizing Hearing Loss as an Industrial Accident**

#### **1. The concept of noise-induced hearing loss**

Noise-induced hearing loss refers to sensory nerve deafness caused by high-intensity noise that damages the sound-sensing organ, the cochlea. Noise below 75 dB usually does not result in hearing loss, but continuous exposure above 85 dB may. Hearing loss is a risk when a person is exposed for 15 minutes to 100 dB or more without hearing protection and 1 minute or more at 110 dB regularly.<sup>7</sup>

#### **2. Relevant laws**

In Article 37 of the Industrial Accident Compensation Insurance Act, “occupational accident” refers to a worker’s injury or illness with a significant causal relationship to the workplace. The causal relationship must be proven by the party making the claim. However, a causal relationship does not necessarily have to be clearly proven medically or scientifically, and when one between work and illness or injury is recognized in consideration of a variety of circumstances, it must be considered that evidence exists.<sup>8</sup> In judging whether an illness or injury is related to one’s public service, the presence or absence of a causal relationship should be judged based on the health and physical condition of the specific employee, not the average.<sup>9</sup>

According to Paragraph 7 of Article 34 [Attached Table 3] of the Enforcement Decree to the Industrial Accident Compensation Insurance Act, for hearing loss to be considered noise-induced, exposure to continuous sounds of 85 decibels or more for at least 3 years must have occurred, and the resulting hearing loss in one ear must be 40 decibels or more. In addition, all of the following requirements must be satisfied: 1) There should be no obvious damage to the eardrum or middle ear or change due to other causes; 2) As a result of a pure tone hearing test, there should be no clear difference between the airway hearing threshold and the bone conduction hearing threshold, while the hearing impairment should be greater in the high range than in the low range; 3) The hearing loss shall not be attributable to otitis media, drug addiction, febrile

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<sup>6</sup> Supreme Court ruling on Sep. 4, 2014: 2014du7374, which provided the precedent for the previous Korean Labor Welfare Agency regulation, “Standards for handling noise-induced hearing loss” (Jan. 14, 2016).

<sup>7</sup> Korean Society of Audiology ([www.audiosoc.or.kr](http://www.audiosoc.or.kr))

<sup>8</sup> Supreme Court ruling on Jun, 11, 2015: 2011doo32898.

<sup>9</sup> Supreme Court ruling on Apr. 24, 2014: 2014doo250.

disease, Meniere's syndrome, syphilis, head trauma, sudden hearing loss, hereditary hearing loss, genetic hearing loss, age, or catastrophic explosions.

In recent court rulings, when both work-related and non-work-related factors are involved, recognition as an occupational injury tends to be given if the hearing loss caused by non-work-related factors (age, etc.) is accelerated by the exposure to noise. Therefore, even if the hearing loss is due to a mixture of work and non-work causes, it can be recognized as an occupational injury if the noise exposure level meets the criteria for recognition of occupational injury and not hearing loss due to obvious non-operational causes. In addition, even if the hearing loss in one ear is less than 40 dB, or the noise exposure was not for at least 3 years at 85 dB or more, if there is a causal relationship to noise-induced hearing loss, it is recognized as an occupational injury. However, if the hearing loss in both ears is less than 40 dB or the noise exposure level is less than 80 dB during the noise exposure period, occupational injury is not recognized.<sup>10</sup>

### **3. Recent court judgments**

(1) Noise-induced hearing loss claimed 25 years after leaving the workplace and 8 years after retirement<sup>11</sup>

The plaintiff retired on August 21, 2008 after serving as a civil servant for the Korea Coast Guard. It was not until August 2016 (when the plaintiff was 66 years old), or about 25 years since the plaintiff finished working in a maritime patrol boat on January 1, 1991, that he was diagnosed with hearing loss, and that it was caused by the natural progression of aging. It is difficult to deny that work influenced the hearing loss. However, while the plaintiff was continuously exposed to a significant level of noise while working on a maritime patrol boat, noise-induced hearing loss occurred, which exacerbated the natural hearing loss from aging. Therefore, it can be said that the plaintiff's official duties had a significant causal relationship to the personal injury in this case.

**2) Noise-induced hearing loss claimed 23 years after retirement from a noisy workplace<sup>12</sup>**

The plaintiff operated an excavator in Mine A from October 19, 1980 to February 28, 1986 (about 5 years and 4 months). He was first diagnosed with sensory

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<sup>10</sup> Industrial Accident Compensation Bureau, Labor Welfare Corporation, "Improvement of standards for handling noise-induced hearing loss," Feb. 2020, pp 4-5.

<sup>11</sup> Seoul Administrative Court ruling on Sep. 19, 2018: 2017goodan22308.

<sup>12</sup> Seoul High Court ruling on Mar. 6, 2018: 2017noo81733.

nerve deafness in 2009 (at age 72), 23 years after his retirement. Regarding the claim that “hearing loss in both ears occurred due to continuous exposure to noise while working in the mine,” the lower court stated that it was ruling against the plaintiff, citing that his situation was similar to the average degree of hearing loss over the age of 70 for those who had never been exposed to noise but showed symptoms of hearing loss. However, the court of appeal pointed out that the coal mine where the plaintiff had been engaged in excavation work was a workplace where workers were exposed to continuous noise levels of 85 dB or more for 3 years or more. The court ruled that the plaintiff's sensorineural hearing loss was caused by noise from working in the coal mine for a considerable period of time, and the natural age-related hearing loss had been exacerbated by the noise. It then overturned the lower court's rejection of disability benefits.

## **VI. Conclusion**

Hearing loss after retirement has generally been deemed by the courts as related to aging, since it appears long after the employee has left the noisy workplace, making it difficult to recognize it as an occupational injury. Recently, however, even if the hearing loss aggravates the occurrence or progression of age-related hearing loss, it can be recognized as an industrial accident, expanding the scope of compensation for workers afflicted by such loss. This is a desirable direction, but also reinforces the need for employers to take preemptive action to protect workers at workplaces with a noise level of 85 dB or higher. Industrial accidents not only cause financial damage to the company, but employers too may be punished if they fail to meet their safety obligations in the future.