



Report of the State comptroller of Israel | January 2024

The Defense System

Occupational Health in the IDF – Follow-up Audit



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Background

Occupational health is a branch of science designed to protect people's health at work by preventing occupational risks. The occupational health branch combines two fields: occupational hygiene and occupational medicine. Occupational hygiene is concerned with risk assessment in workplaces and minimizing the exposure of workers to occupational risk factors. And occupational medicine is concerned with the prevention of medical harm that may be caused by occupational risk factors (due to exposure to chemical substances, physical processes, etc.), the diagnosis of occupational diseases and their treatment, and the return to the workplace of workers who were injured and recovered or who fell ill and recovered.

The High Command Directive (HCD) regarding the professional staff at the headquarters states that the Chief Medical Officer (CMO) is the professional supervisor in the IDF in preventive medicine – hygiene. The organization directive of the Chief Medical Officer Headquarters (CMH) states that it is the CMO's responsibility to determine the principles of preventive medicine in the IDF and to provide occupational medicine services to all IDF soldiers. In this directive, among other things, four roles of the Occupational Health Administration in the CMH were set: (a) serving as a professional advisor in soldiers' health and the prevention of morbidity from the exposure of soldiers to hazardous substances in workplaces; (b) formulating professional guidelines and policy in the IDF in the occupational health; (c) monitoring and controlling the implementation of the CMO's instructions on occupational health; (d) monitoring, risk surveying, supervising, controlling and approving chemical pollutants and physical pollutants¹, weapons and combat measures in the IDF.

1 Such as ionizing radiation and non-ionizing radiation.



Key Figures

**2.58
million**

women and men who died worldwide in 2021 from occupational² diseases

1,683

people who have had occupational diseases in Israel in 2018; About 46% of them suffered from occupational diseases in the field if audio

91%

the combat soldiers report rate in 2017–2020 of symptoms typical of exposure to noise due to the use of munitions in training activities or exercises, compared to 9% in operational activities

threefold

the soldiers' increased reports rate of symptoms typical of exposure to noise due to the use of munitions in 2017–2020 (from 232 to 700)

72%

the combat soldiers report rate of symptoms typical of exposure to noise due to the use of munitions in training without hearing protection aids or with inadequate use

136

the average annual number of soldiers recognized as disabled by the IDF due to hearing impairment in 2017–2021 – about a 10% increase compared to 2010–2015

**NIS 10.7
million**

the average annual expenditure of the Ministry of Defense on hearing aids for people with disabilities in 2017–2021 – 1.6 times compared to 2010–2015


48%

the noise monitoring reports rate that required corrections to be made (26 out of 54 reports) between April 2022 and February 2023

² Dr. Sami Saadi, Work Accidents and Occupational Diseases on the Rise Institute for Safety and Hygiene (September 2021) page 6.





Audit Actions

 From September 2022 to March 2023, the State Comptroller's Office conducted a follow-up audit on occupational health in the IDF³ (the previous audit). The follow-up audit examined the staffing of positions in the Occupational Health Administration and the effect on its activity in mapping risk factors, control, and supervision; Preservation of information and knowledge in the occupational health in the IDF and their management; Protecting the hearing of IDF soldiers; Hearing screening tests for soldiers and candidates for military service; Military directives for the intake of hazardous materials in the IDF and occupational environmental monitoring. The audit was carried out in the IDF – at the Chief Medical Officer Headquarters (CMH), particularly the Occupational Health Administration. Completion examinations were carried out in the IDF Personnel Division and the Ministry of Defense (MOD) in the Production and Procurement Directorate (Manhar) and the Disabled Rehabilitation Division.

Key Findings



 **Recognition of People with Disabilities in the IDF Due to Hearing Impairment and Payment for Hearing Aids** – the previous audit found that in 2010–2015, the average number of IDF soldiers recognized annually as People with Disabilities due to hearing impairment was 124. **The follow-up audit found** that in 2017–2021, the average number increased to 136 per year (an increase of about 10%). It was further found that in the years examined in the previous audit, the MOD paid an average of NIS 6.8 million per year for hearing aids for people with disabilities, while in the years examined in the follow-up audit, the MOD paid 1.6 times higher (NIS 10.7 million per year on average⁴).


 **Staffing Positions in the Occupational Health Administration** – the previous audit found that only three positions were staffed out of the seven planned for the first phase (about 43%). **The follow-up audit found that the deficiency was rectified to a small extent:** all seven positions (100%) planned for the first phase were staffed. For the second phase, scheduled for 2019–2020, out of the eight positions planned for the deployed rank, only one position was determined for the Intelligence Division (about 13%) but was not staffed. The other seven positions (in the ICT Division, the Engineering


3 State Comptroller, **Annual Report 70B** (2020), "Occupational Health in the IDF", p. 2455.


4 These amounts do not include the pension paid to those recognized as IDF disabled persons.



and Construction Division in the MOD, the Technology and Logistics Division, the Northern Command, the Southern Command, the Central Command, and the Home Front Command) were not determined. Hence, as of the audit end date, seven positions are staffed out of eight that were determined and 15 that were planned.


 **The Effects of Understaffing on the Activities of the Occupational Health Administration in Mapping Risk Factors, Control, and Supervision** – the previous audit found that a complete mapping of occupational health risk factors was not conducted in the IDF units, and occupational health was addressed only in units where risk mapping had already been carried out in the past. Furthermore, the Chief Medical Officer Headquarters (CMH) did not monitor the implementation of its instructions for prohibiting the use of a facility, equipment, or material, and the Occupational Health Administration did not conduct any general headquarters audits in occupational health. **The follow-up audit found that the deficiency was rectified to a small extent:** starting in 2022, the Occupational Health Administration carries out general headquarters audits in IDF units and has conducted a risk assessment and publication of guidelines; however, as eight occupational health positions at the deployed rank are not staffed, no complete mapping and monitoring is conducted in all IDF units of all the risk factors that may affect the health of soldiers and civilians working for the IDF. Hence, the ability of the Occupational Health Administration to prevent morbidity, control and supervise the implementation of the guidelines, and rectify deficiencies is impaired.


 **Preservation of Information and Knowledge in Occupational Health in the IDF and Their Management** – the previous audit found that the MCH stopped the development of the information system in occupational health (OHS), and except for the development and partial implementation of the hygiene module, the system modules were neither developed nor implemented. Moreover, the IDF did not have a mechanism for sharing information and knowledge in occupational health, and that the MCH did not have a database on morbidity or morbidity claims for lateral learning. **The follow-up audit found that the deficiency was rectified to a small extent:** the MCH did not develop an integrative information system in occupational health, including an occupational medicine module and a monitoring and hygiene module. Hence, investigating and processing data-based information to study and draw conclusions is impossible. Thus, practitioners in occupational health in the IDF lack a supportive decision-making tool. It was further found that although there are mechanisms for sharing information and knowledge, there is no database on morbidity, no register of occupational diseases, no data on sick days, and the number of soldiers and civilian employees of the IDF who have had occupational diseases, no monitoring of the development of morbidity in occupational diseases and no cross-sectional study of the subject.

 **Protecting the Hearing of IDF Soldiers** – the previous audit found that IDF commanders do not meticulously comply with the Chief Medical Officer's instruction regarding hearing protection. **The follow-up audit found that the deficiency was**




rectified to a small extent: the CMH initiated training for commanders and military recruits regarding noise damage and the use of protective measures and uploaded tutorials on these topics to the IDF website. In addition, the CMH prepared an analysis of the data on noise exposure due to munitions and recommendations for action. However, it was found that in 2017–2020, the number of soldiers who complained of symptoms typical of noise exposure due to munitions increased threefold (from 232 to 700). It was further found that although during training, it is possible to actively protect soldiers from harmful noise through protective measures and the implementation of instructions and training, the number of reports of exposure to noise in training is ten times higher than the number of reports of exposure to noise in operational activity, similar to the one noted in the previous audit. Moreover, about 72% of the combat unit soldiers who complained of symptoms typical of exposure to noise due to the use of munitions reported that during training, they did not use protective measures at all or did not use them according to the instructions, and of these – 27% used improper protective measures in training. Hence, there is no adequate adherence to the CMO's instructions. This endangers the IDF soldiers' health, especially those undergoing training and certification.


 **Hearing Screening Tests for Soldiers** – the previous audit found that combat soldiers are not defined as working with harmful noise and, therefore, are not required to undergo hearing screening tests. **The follow-up audit found that the deficiency was rectified to a small extent:** in the CMH's professional assessment, combat soldiers should not be defined as working with harmful noise. However, during the follow-up audit in February 2023, the CMH began conducting strategic work to examine the equipment abroad for the independent performance of hearing screening tests for soldiers. However, as of the end of the follow-up audit, the strategic work was not finished, and according to the head of the Occupational Health Administration, it is being delayed due to information security and data synchronization. These issues are being reviewed with the manufacturers and the IDF officials.

 **Hearing Screening Tests for Military Service Candidates** – the previous audit found that in the first summons in the recruitment process, except for candidates designated for unique positions, the rest of the candidates do not undergo a hearing test of any kind. In February 2019, the deputy commander of the Meitav Unit in the Personnel Directorate approved a pilot for hearing screening tests at the recruiting office in Be'er Sheva. As of the end of the previous audit, the CMH was prepared to carry out the pilot. **The follow-up audit found that the deficiency was rectified to a small extent:** the pilot above was not carried out due to a lack of coordination between the CMH and the Personnel Division. Moreover, an analysis of the hearing screening tests and hearing test results conducted among 3,823 candidates from the Navy, the Intelligence Corps, and the Aerospace Corps raised that the rate of tests requiring an impairment score resulting in a lower medical profile and disqualifying from service in field units (medical profile 72 and below) was an average of 0.71% (0.13% were assigned a medical profile of 64 and 0.58% were assigned a medical profile of 72). This is compared to the findings



of another pilot, conducted in September 2016 at the Tel Hashomer recruiting office, among 200 candidates for military service who underwent a hearing screening test, where it was found that the rate of those who failed the test and were required to undergo a comprehensive audiological examination⁵ was 8%. These findings raise doubts about the extent to which the results of hearing screening tests and hearing tests conducted amongst about 3,823 candidates constitute a representative sample of all strata of the candidates' population in the IDF, and it is indefinite whether there is no need for a hearing screening test for all candidates for military service.

 **Military Directives for the Intake of Hazardous Materials in the IDF** – the previous audit found that, contrary to the Technology and Logistics Division's directive, the professional authorities in the branches, commands, and divisions do not provide the Occupational Health Administration with information about hazardous materials before their intake in the IDF. The Administration does not approve using hazardous materials or rejects the use thereof. The previous audit also found that the directive initiated by the Administration in 2014 to set an approval procedure for hazardous materials in the IDF and to prevent adverse effects to health and morbidity due to exposure to hazardous materials did not come into effect. It was further raised that the procurement processes allowed the entry of hazardous materials, which affects occupational health risk, due to the lack of involvement of the professional elements in the Administration in the various stages of procurement. **The follow-up audit found that the deficiency was rectified to a small extent:** there was no staff work for the establishment of the Hazardous Materials Administration, an integrating factor in occupational health, environmental health, environmental protection, safety, and procurement, optimally supervising the entry of materials in general and hazardous materials in particular for use by the IDF, and therefore a relevant directive did not enter into force. The follow-up audit also found that although the Occupational Health Administration is integrated into the cataloging process at the procurement stage, according to the plan, it will not be authorized to approve hazardous materials or disqualify the use thereof for occupational health reasons. Furthermore, according to the Occupational Health Administration, these changes to the catalog system are under development, and their implementation is expected to be carried out at the end of April 2023. Still, that date has since passed, and now the date of their implementation depends on the priorities of the developing parties. Given the above, the supervision of the procurement of ammunition is partial and may endanger the health of IDF soldiers.

 **The Monitoring Reports** – monitoring measures the levels of exposure to risk factors in the work environment that may affect health, assessing the levels of exposure and monitoring them. The CMO's directives require monitoring the level of hazardous materials in the air and monitoring of noise levels (noise monitoring) in the relevant places. External providers perform the monitoring. The monitoring reports they submit

5 A branch of science that studies hearing, balance and related disorders.



are supposed to suppliers qualified and reliable information about the level of exposure of the employees to the risk factors in the work environment. For the deviations to be handled in the work stations and work processes where deviation was found, the stations should be accurately described, processes, and workers examined. The previous audit indicated deficiencies in the monitoring reports: inaccuracies were found in the reports, there were delays in the sending of the reports to the units, and the CMH did not ensure that the recommendations of the monitoring suppliers and their instructions to the unit commanders regarding the rectifying of the deficiencies were clear and feasible. **The follow-up audit found that the deficiency was rectified to a small extent:** the Occupational Health Administration follows up on the monitoring reports, but the follow-up is incomplete. Furthermore, according to the analysis of noise monitoring reports data, in 48% of the reports whose data the Administration entered, corrections were required, and about 12% of the reports were submitted to the Administration over three months after the monitoring was carried out and therefore reached the units after over three months.



Engagement in Monitoring Noise – the previous audit found that for over a year, from March 2017 to May 2018, there was no engagement between the MOD and the supplier performing noise monitoring in the IDF. **The follow-up audit found that the deficiency was fully rectified:** the Production and Procurement Directorate has an agreement with a supplier to perform noise monitoring. This agreement is in effect until August 2024.

Key Recommendations







It is recommended that the Planning Directorate set the workforce headcount standards and their staffing, particularly the occupational health sections in the branches, commands, and divisions, given the failure to set seven positions out of the eight that were planned for the deployed rank and out of the 15 that were determined in total for the Occupational Health Administration, and given the failure to staff the one position determined for the Intelligence Division.





It is recommended that the Chief Medical Officer Headquarters, particularly the Occupational Health Administration, map and monitor all IDF units for all the risk factors that may affect the health of IDF soldiers and civilian workers employed by the IDF. Thus, the Occupational Health Administration can base its activities on complete information describing the processes and activities carried out in the IDF units and identify the risks to which the soldiers and civilian workers are exposed, to reduce their risk of occupational diseases.



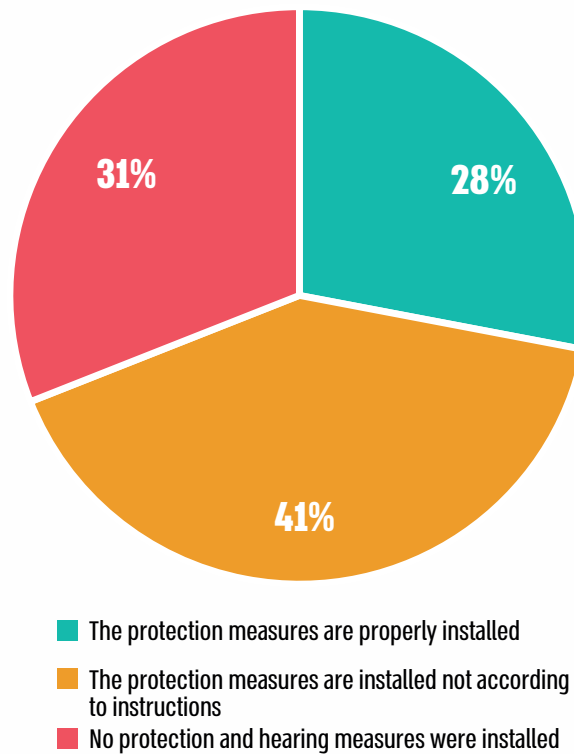
-  It is recommended that the CMH, the ICT Division, the Technology, and Logistics Division, and the Aerospace Arm develop an integrated information system in occupational health, enabling research, processing, and inclusion of information and data to provide a comprehensive situational report and support in decision-making, including in occupational diseases in the IDF. Furthermore, the CMH should expand the information and knowledge-sharing mechanism, including all occupational health areas, and enable optimal learning.
-  It is recommended that the CMH examine the causes for the sharp increase in the number of hearing loss reports: Do commanders fulfill their responsibilities and follow professional instructions in noise damage prevention? Do the tutorials on noise damage include all the relevant emphases? Whether training is provided to all commanders and recruits? Do the soldiers use the "Risk factors at the ranges tutorial" and the "Noise tutorial"? According to the findings of this examination, the CMH should guide the relevant parties in addressing and assisting in formulating policies to reduce the noise damage caused to soldiers due to the use of munitions.
-  It is recommended that the Occupational Health Administration at the CMH complete the staff work on using technologies and equipment for independently conducting hearing screening tests for soldiers and examining the possible methods of action and their implications. After completing the staff work, it is recommended that the Administration present its findings to the CMH for decision-making. The exposure of combat soldiers to the use of harmful noise could endanger their health, impair their operational competence, and expose the MOD to claims for recognition of disability. Therefore, the divisions and branches of the IDF should ensure that commanders exercise their responsibility to prevent injury to soldiers due to exposure to harmful noise.
-  It is recommended that the CMH, in collaboration with the Personnel Division, examine whether the data of hearing screening tests conducted among 3,823 candidates for military service from the Navy, the Intelligence Corps, and the Aerospace Corps are a representative sample of the entire population of candidates in the State of Israel. Suppose it is found that the sample is not representative. In that case, it is recommended that another sample be taken from the entire population of candidates and, based on its results, decide on the need for a hearing screening test for all candidates. Furthermore, it is recommended that the IDF check the cost of conducting hearing screening tests for all candidates compared to the cost of claims submitted to the Rehabilitation Division for hearing loss, given the findings of the previous audit by which there is an under-reporting of the hearing status of all the candidates, and given the position of the Disabled Rehabilitation Division regarding the great importance of conducting hearing tests for the candidates for military service. These tests enable the detection of hearing impairment before enlistment, reducing the damage to soldiers and reducing the scope of claims submitted to the Disabled Rehabilitation Division and their cost (the cost of the hearing aids alone amounts to approximately NIS 10.7 million per year).



-  It is recommended that the Planning Directorate and the Technology and Logistics Division establish the Hazardous Materials Administration, which includes occupational health, environmental health, environmental protection, safety, and procurement. It is further recommended that the Technology and Logistics Division examine how the Occupational Health Administration is integrated into the intake processes of hazardous materials in the IDF, including in the procurement processes, to comply with its directive. Hence, those with professional authority in the branches, commands, and divisions will transfer to the Administration all the information in their possession for the approval of hazardous materials for unlimited use or subject to certain limitations or the disqualification of use thereof.
-  It is recommended that the Occupational Health Administration carry out complete follow-up processes of the monitoring reports, particularly entering all the required values. It is further recommended that the administration ensure that the monitoring suppliers submit their reports as required and in close proximity to the performance of the monitoring so that their transfer to the units can be made as soon as possible. In cooperation with the Occupational Health Administration, it is also recommended that the Production and Procurement Directorate monitor compliance with the agreement signed with the monitoring suppliers in the maximum time to transfer the monitoring reports to the Administration .



Installation of Hearing Protection Measures in Combat Units Training, 2017–2020⁶



According to data from the Occupational Health Administration, processed by the Office of the State Comptroller.

⁶ The data was obtained from questioning soldiers before the examination began.



The Rectification Extent of the Key Deficiencies Noted in the Previous Report

The Audit Chapter	The Deficiency Noted in the Previous Audit	The Rectification Extent of Deficiencies Noted in the Follow-up Audit			
		Not Rectified	Slightly Rectified	Significantly Rectified	Fully Rectified
Staffing positions in the Occupational Health Administration	Three out of seven positions were staffed (about 43%).				
The effects of understaffing on the activities of the Occupational Health Administration in the aspects of risk factor mapping, control, and supervision	A complete mapping of occupational health risk factors was not conducted in the IDF units, and occupational health care only took place in units where risk mapping had already been carried out in the past. Furthermore, the Chief Medical Officer Headquarters (CMH) did not monitor the implementation of its instructions for prohibiting the use of a facility, equipment, or material, and the Occupational Health Administration did not conduct any general headquarters audits in occupational health.				



The Audit Chapter	The Deficiency Noted in the Previous Audit	The Rectification Extent of Deficiencies Noted in the Follow-up Audit			
		Not Rectified	Slightly Rectified	Significantly Rectified	Fully Rectified
Preservation of information and knowledge in occupational health in the IDF and their management	The CMH stopped the development of the information system in occupational health (OHS), and except for the development and partial implementation of the hygiene module, the system modules were neither developed nor implemented. Furthermore, the IDF did not have a mechanism for sharing information and knowledge in occupational health, and the CMH did not have a database regarding morbidity or morbidity claims for lateral learning.				
Protecting the hearing of IDF soldiers	The commanders do not carefully follow the CMO's instructions regarding hearing protection.				
Hearing screening tests for combat soldiers	Combat soldiers are not defined as working with harmful noise and are not required to undergo hearing screening tests.				
Hearing screening tests for candidates for military service	In the first summons recruitment process, except for candidates designated for unique positions, the rest of the candidates do not undergo a hearing test of any kind.				



The Audit Chapter	The Deficiency Noted in the Previous Audit	The Rectification Extent of Deficiencies Noted in the Follow-up Audit			
		Not Rectified	Slightly Rectified	Significantly Rectified	Fully Rectified
Military directives for the intake of hazardous materials in the IDF	Contrary to the Technology and Logistics Division's directive, the professional authorities in the branches, commands, and divisions do not provide the Occupational Health Administration with information about hazardous materials before their intake in the IDF, and the Administration does not approve the use of hazardous materials or rejects use thereof. The directive initiated by the Administration in 2014 to establish a procedure for approving hazardous materials in the IDF and preventing adverse health and morbidity effects due to exposure to hazardous materials did not come into effect. The procurement processes allowed the entry of hazardous materials with occupational health risks.				
Engagement to carry out noise monitoring	For over a year, from March 2017 to May 2018, there was no contract between the Ministry of Defense and the supplier for noise monitoring in the IDF.				



The Audit Chapter	The Deficiency Noted in the Previous Audit	The Rectification Extent of Deficiencies Noted in the Follow-up Audit			
		Not Rectified	Slightly Rectified	Significantly Rectified	Fully Rectified
The monitoring reports	Deficiencies were raised regarding the monitoring reports: inaccuracies were found in the reports; There were delays in sending the reports to the units; The CMH did not ensure that the recommendations of the monitoring suppliers and their instructions to the unit commanders regarding the correction of the deficiencies were clear and enforceable.				





Summary

Occupational health maintains a person's health at work. The IDF is responsible for protecting the good health of its soldiers and the civilians it employs because, among other things, their state of health affects their competence and the IDF's alertness and readiness. Furthermore, occupational morbidity has economic effects both on the individual and on the national level, such as an effect on rehabilitation costs, medical care, and payments for those recognized as IDF's persons with disabilities.

The follow-up audit found that most of the deficiencies raised in the previous audit were rectified to a small extent or not at all: the staffing of the positions in the Occupational Health Administration was not completed. Seven of the 15 positions for the designated occupational health officials have not yet been approved (about 47%), and the gap is mainly in the deployed rank (seven out of eight positions have not been approved, and one position has been approved but not staffed); Due to the failure to staff the eight occupational health department head positions at the deployed rank, no complete mapping and monitoring in all IDF units is conducted of all the risk factors that may affect the health of soldiers and civilian employees and the Occupational Health Administration cannot monitor the implementation of the guidelines. In preserving information and knowledge in occupational health in the IDF and their management, it was found that the Chief Medical Officer Headquarters still does not have an information system to manage all the work processes. This system is supposed to support decision-making. Regarding the protection of the hearing of the IDF soldiers, there is no meticulous adherence to the Chief Medical Officer's directives – it was found that in 2017–2020, the number of reports by soldiers of symptoms typical of exposure to noise due to the use of munitions has tripled (from 232 to 700). About 72% of the soldiers in combat units reported that during training, they did not use protective measures or did not use them according to the instructions. In comparison, 27% used improper means of protection during training. This failure to observe instructions endangers the health of IDF soldiers in general and in the training and certification frameworks in particular. Regarding hearing screening tests for soldiers, during the follow-up audit, the CMH began to examine the equipment that exists abroad, but this examination has not yet been completed. Hearing screening tests for candidates for military service are not carried out, nor was a pilot conducted. The Occupational Health Administration is not authorized to approve hazardous materials for use or disqualify the use thereof for occupational health reasons. The Occupational Health Administration's follow-up and control of the monitoring reports is incomplete. One deficiency has been fully rectified: the Production and Procurement Directorate has an agreement with a supplier to perform noise monitoring. This agreement is in effect until August 2024.

It is recommended that the IDF rectify the deficiencies noted in the follow-up audit to mitigate the health damage and reduce the morbidity among the soldiers and civilians working for the IDF due to exposure to hazardous materials. It is essential to establish the deployed rank in the Occupational Health Administration, thus enabling the Administration to fulfill its mission and prevent injury following exposure to noise due to the use of munitions.

