

Safety and health



Safety

Commitment

Peñoles is committed to the health and safety of its people. Our activities require a responsible management of risk, so we focus on identifying and controlling it, with special attention to critical risks that could result in severe or fatal injuries. Through our High-Potential and Critical Risk Program, we are aiming at a record of zero damage.

Governance

Our sustainability policy establishes our commitment to safe operations based on a culture of prevention, hazard elimination and risk reduction, all with the close involvement of employees and third parties. The Central Committee on Environment, Safety and Health is responsible for

deciding how things are done in our organization. It sets safety and health standards, monitors compliance and evaluates performance in our operations. It also seeks out synergies and encourages adoption of best practices.

The managers of our operations, projects and explorations are responsible for complying with safety and health standards and procedures. The Assistant VP for Safety, Health and Environment leads the implementation of key initiatives to eliminate fatal accidents, such as critical control and high-potential programs, sharing responsibility with the vice presidents of operations, projects and explorations. Safety performance and the status of safety programs are reviewed in executive committees in which our CEO participates.

High-Potential Management Strategy - prevention of fatal accidents

We are continually and systematically working to reduce high-potential incidents and eliminate fatalities. Our strategy is to focus on managing these risks, across three dimensions that strengthen each other and are supported by visible leadership:

Critical risk management and controls

High-Potential Management Strategy



Our High-Potential and Critical Risk Program aspires to have **zero damage** in our operations.

In every business unit, we identify and prioritize risks that may result in serious or fatal injury. Using the bow-tie method, we identify the causes and consequences of these risks in order to design preventive and mitigating controls. This process involves leaders, superintendents, and cross-disciplinary teams of specialists, inspired by our model of cultural evolution.

Having designed the critical controls, we then make sure they are available at all times. To this end, we assign responsibilities and define critical barriers with the participation of onsite workers and supervisors. Our team of specialists conducts in-depth reviews of the maintenance of barriers, and their availability and functionality in the field.

Behavioral management: leadership

Identification processes and control definition involve leaders, superintendents, and cross-disciplinary teams of specialists.

Six steps for managing critical risks and controls



and safety culture

Peñoles aspires to foster and build a solid culture of risk prevention which will underlie all our initiatives to eliminate fatal accidents and prevent exposure to agents that may cause irreversible damage to people. The practice of visible leadership is fundamental for creating this safety culture, and it entails a series of attitudes and behaviors aligned with our cultural evolution and with a clear definition of mechanisms for accountability.

Our visible leadership practices are systematically carried out with the firm intention of grounding verification of critical controls in our risk prevention culture. To do this, we control and verify onsite implementation of this practice for every role in the organization. We also want the systematic presence of our leaders onsite to spark genuine interactions with our people. We make it clear to our leaders that they should be role models, showing their commitment, coherence, conviction and consistency in their actions. With these visible leadership practices, we want to involve our people by giving them the power and the confidence to halt any activity that has become unsafe due to the lack of critical controls.

The four phases of visible leadership practices for critical controls



Mixed safety and hygiene committees in our business units provide a standing mechanism for dialogue and for building trust with our unionized employees. In our 10th annual Safety Symposium, we introduced our policy on The Right to Say No as a preventive tool that empowers our people.

Our High-Potential Management Strategy includes communication plans to raise awareness and tie expected behaviors to our safety culture. We have also begun a review of incentives to align them with safety performance.

Success story – Workshops and monitoring of leadership practices



At Peñoles, we aspire to have efficient leaders who serve as an example and whose actions create a precedent that others follow out of conviction. This is achieved through visible onsite leadership.

Through workshops on high-potential management, we develop leadership skills for senior and middle management, advisors and supervisors from the company and contractors. We also develop key competencies in critical risks and controls, incident reporting, communication, accident investigation and learning, among others.

In May 2022, we began managing and measuring the results of these leadership practices each month in the workplaces where critical risk management has been deployed.

81 workshops and leadership practices
252 risk management and critical control workshops and verification tools
10,319 critical control checks as a visible leadership practice

Success story – The Value of Zero

The **Value of Zero** is a communication strategy aimed at building a zero-damage mentality to eliminate serious and fatal accidents and communicate to employees the value we place on human life, well-being and dignity. The issues covered by the campaign were as follows:



- **Critical risks**
- **Critical controls**
- **Critical control verification tools**
- **Leadership practices and leadership development**
- **Preventive reportability**
- **Road safety prevention through the following channels:**
 - **Peñoles/Fresnillo plc website**
 - **Institutional emails**
 - **WhatsApp groups**
 - **Screens in the workplace**

Success story – Alerts process and learning

The accident alert process is triggered by a repetition of events related to a single critical risk. Alerts draw attention to the appropriate critical controls during leadership practices in onsite visits.

The learning process seeks to avoid a repetition of high-potential incidents. Once the investigation into a high-potential incident is completed and validated, we prepare a lessons newsletter, simply and briefly describing what happened, where it happened, when it happened, why it happened and how to avoid it happening again. This system applies to all areas of operation.



Incident management

This dimension of our strategy focuses on reportability and incident management practices, by which we identify the causes of a high-potential incident, the critical risk associated with it and the controls that were absent or not applied. Based on these lessons, we can take preventive and corrective action to improve control of the risk and avoid repetition.

At the organizational level, incident management is carried out under an early alert system. This ensures that incidents are promptly communicated to all business units and that lessons are assimilated in the organization. By managing incidents, we focus on organization and direct efforts to prevent recurrence.

Skill-building

The foundations of our accident prevention lie in the training of our people. We provide training in high-potential risk management at all levels of the organization, through in-person and online workshops for all divisions of Peñoles and Fresnillo plc.

Our safety teams and business unit leaders receive training in the use of the bow-tie tool and the Incident Cause Analysis Method (ICAM), which are fundamental in critical risks and accident investigations, respectively.

Average hours of safety and health training

	Hours of training	Average hours of training
Non-unionized employees	19,947	5.55
Unionized employees	94,834	18.68
Contractors	16,719	3.04

Note: Information only for Peñoles.

More than **131,000 hours** of safety and health training.

Management system

Our safety strategy is supported by our Occupational Health and Safety Management System, which works according to a Plan-Do-Check-Act (PDCA) approach and a system of audits. We also have a system of regulatory compliance and assurance. [See page 61](#)

Synergy with Mexican authorities

Our units establish preventive measures consistent with the Occupational Health and Safety Self-Management Program (PASST), recommended by the Mexican Ministry of Labor and Social Planning. These efforts earned us Safe Enterprise recognition from that ministry.

Emergency preparedness and response

In all our operations, we have a standard set of requirements for emergency preparedness and response plans. We define the operational processes and engagement activities needed to manage emergencies with all stakeholders.

Our best safety practices

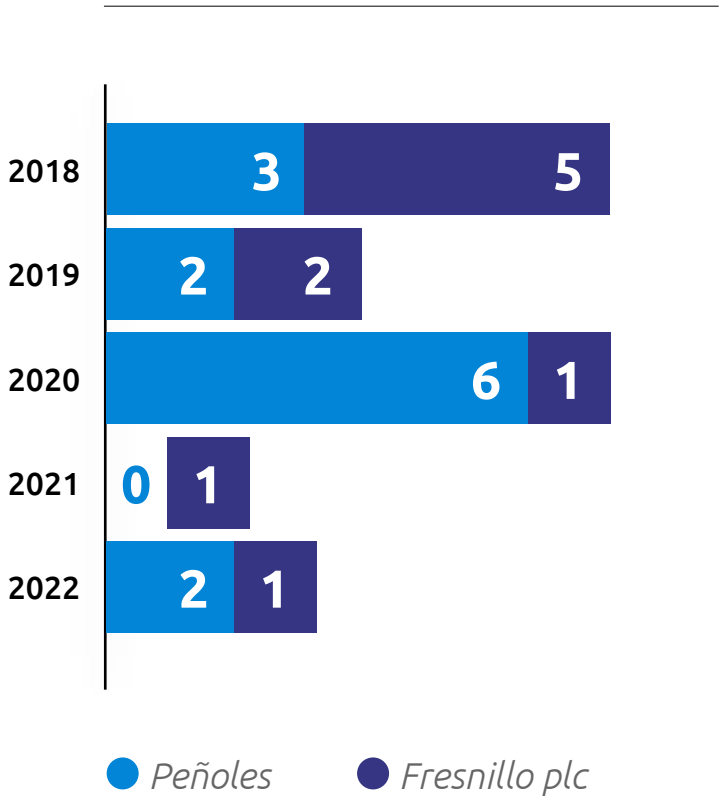
- Training center with simulators for operators of jumbos, scoop trams, low-profile trucks and drilling jumbos, as well as maintenance personnel at Peñoles’ Velardeña unit.
- Training centers at San Julián and Juanicipio for operators of low-profile trucks, long haul drilling equipment, jumbos and scoop trams.
- Micro-seismic monitoring system at Sabinas, San Julián and Saucito.
- Fatigue and sleepiness monitoring systems in low profile trucks at Velardeña and Fresnillo plc.
- Real-time monitoring system of personnel within the mine.
- Use of a drilling robot in vats and furnaces, to avoid exposing operating personnel and contractors in the Metals Division.
- Training camp for emergency brigade members and critical risk activities like work at heights, confined spaces, and fire risk in the Metals Division.
- GPS in utility vehicles in the Exploration Division.
- Backup cameras and proximity sensors for vehicles in the Exploration Division.
- Backup cameras and explosive loader equipment, crushers, tunnel scalers and telehandlers in the Mines Division.
- Automatic fire detection and suppression equipment in heavy duty equipment and explosives transport in the Mines Division.

Safety performance

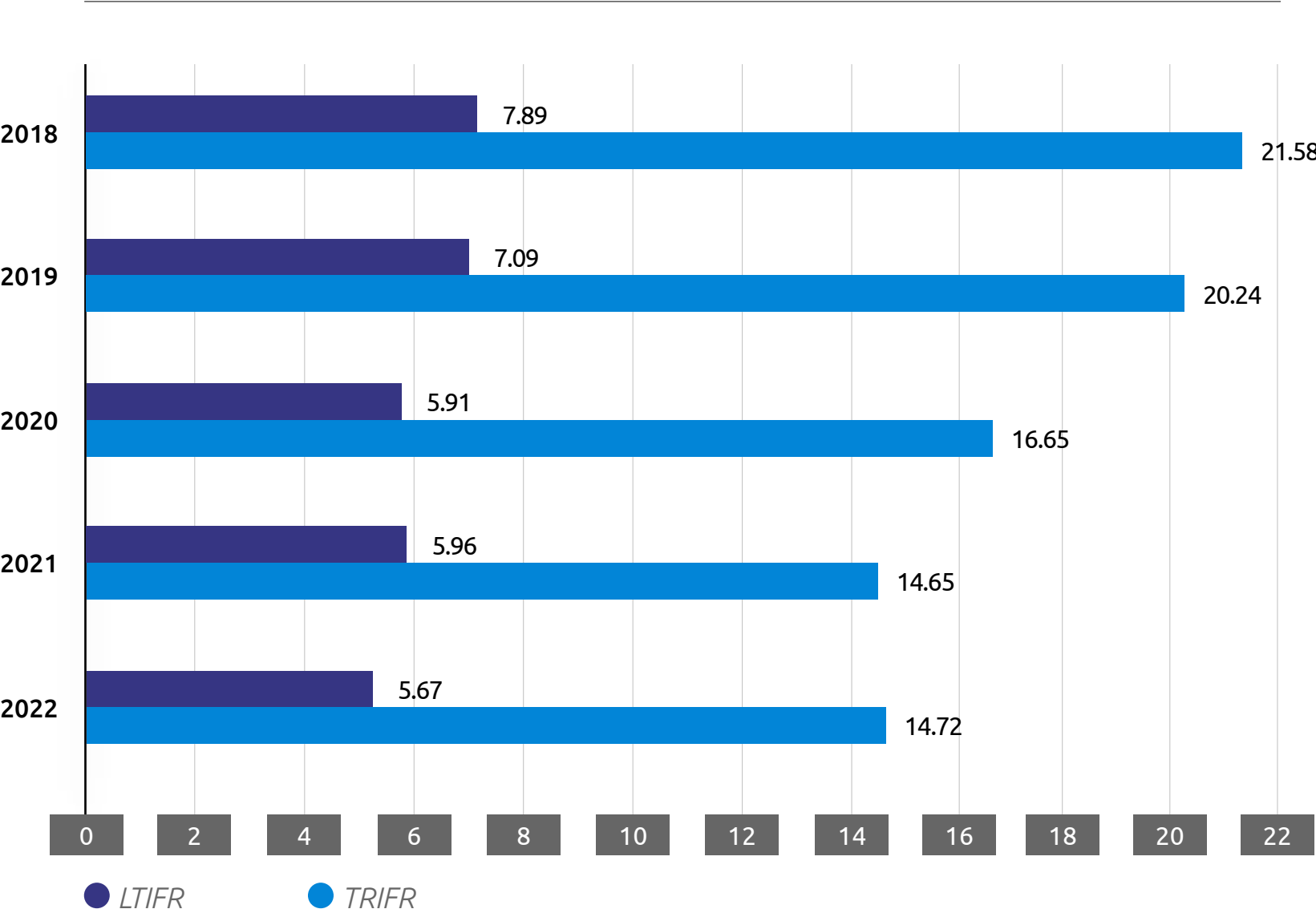
We deeply regret to report three fatal injuries in 2022 at our Fresnillo, Milpillas and Met-Mex units, and the death of one worker in the first quarter of 2023 as the result of an accident at Saucito. We took corrective action to minimize the

potential for recurrence of such incidents and conducted a detailed investigation and shared the lessons with all of the Peñoles and Fresnillo plc business units. These fatalities are a vivid reminder that we must never cease in our efforts to eradicate fatalities.

Fatalities



Lost time injury frequency rate (LTIFR) and total recordable injury frequency rate (TRIFR)



Lost time injuries: Number of lost time injuries per every 1,000,000 hours worked.
Recordable injuries: Number of fatalities + lost time injuries + restricted work injuries + injuries requiring medical treatment + first aid per 1,000,000 hours worked.

In 2022, we reviewed our criteria for qualifying and classifying accidents involving personal injury to align them with the criteria of the International Council on Mining and Metals (ICMM) and the Occupational Safety and Health Administration (OSHA). This reclassification involved eliminating injuries treated by first aid and not requiring medical treatment from the calculation of the lost time injury frequency rate (LTIFR). Fresnillo plc has applied this criteria since 2020.

Additionally, in the case of Fresnillo plc, we have included the Exploration Division and corporate offices in the calculation of both rates.

The following indicators will be our new baseline for future reporting.

Safety indicators

	TOTAL
Hours of risk exposure	85,560,784
Lost time injuries	474
Total recordable injuries	977
TRIFR	11.42
LTIFR	5.54

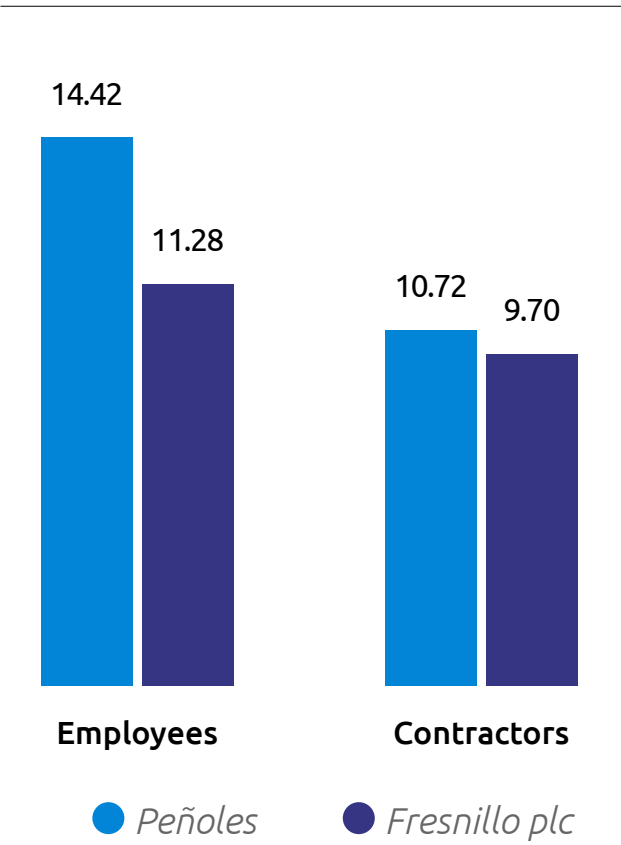
Peñoles

	TOTAL	Employees	Contractors
Hours of risk exposure	36,154,184	21,980,327	14,173,857
Lost time injuries	204	142	62
Total recordable injuries	469	317	152
TRIFR	12.97	14.42	10.72
LTIFR	5.64	6.46	4.37

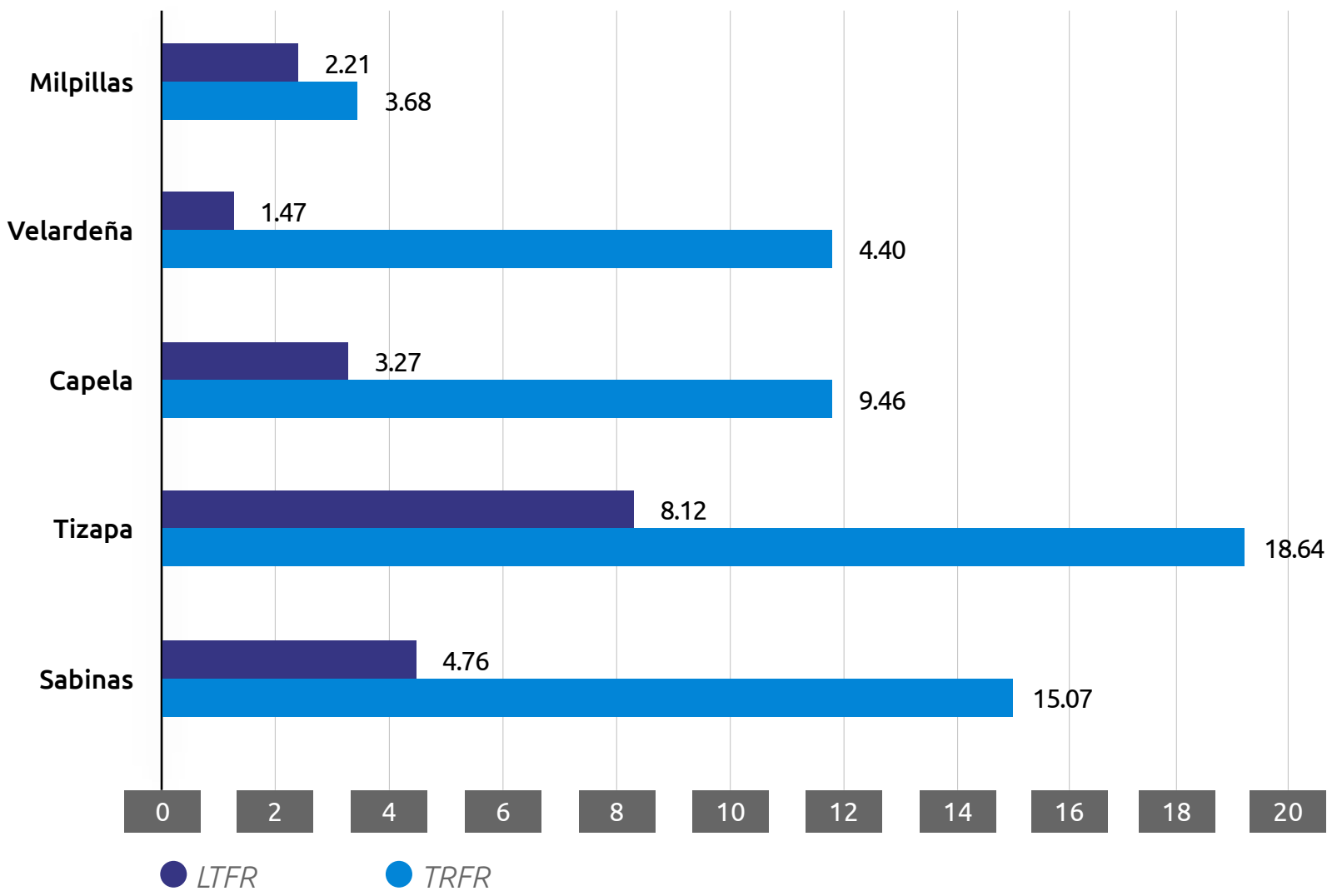
Fresnillo plc

	TOTAL	Employees	Contractors
Hours of risk exposure	49,406,600	18,178,200	31,228,400
Lost time injuries	270	120	150
Total recordable injuries	508	205	303
TRIFR	10.28	11.28	9.70
LTIFR	5.46	6.60	4.80

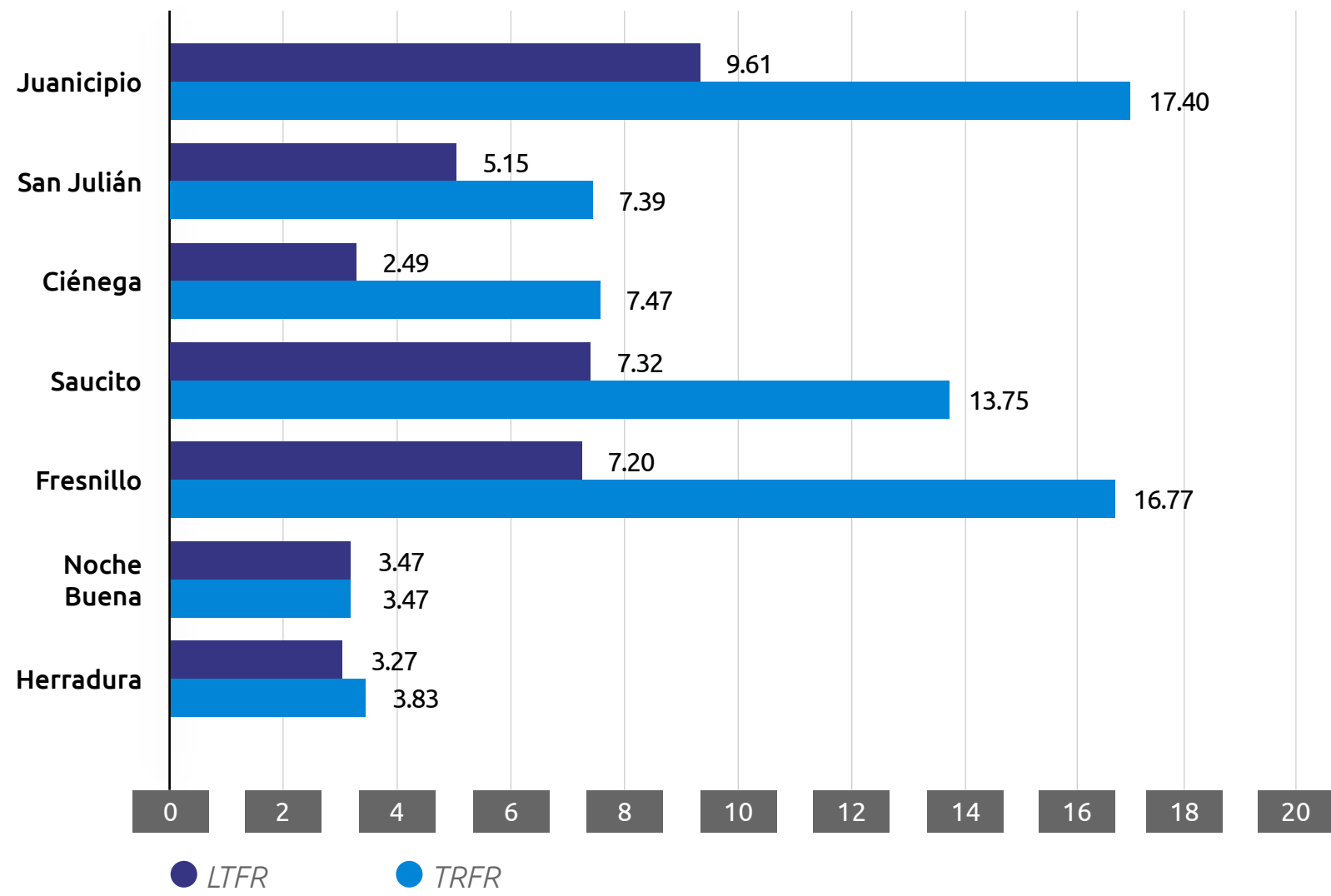
TRIFR employees and contractors



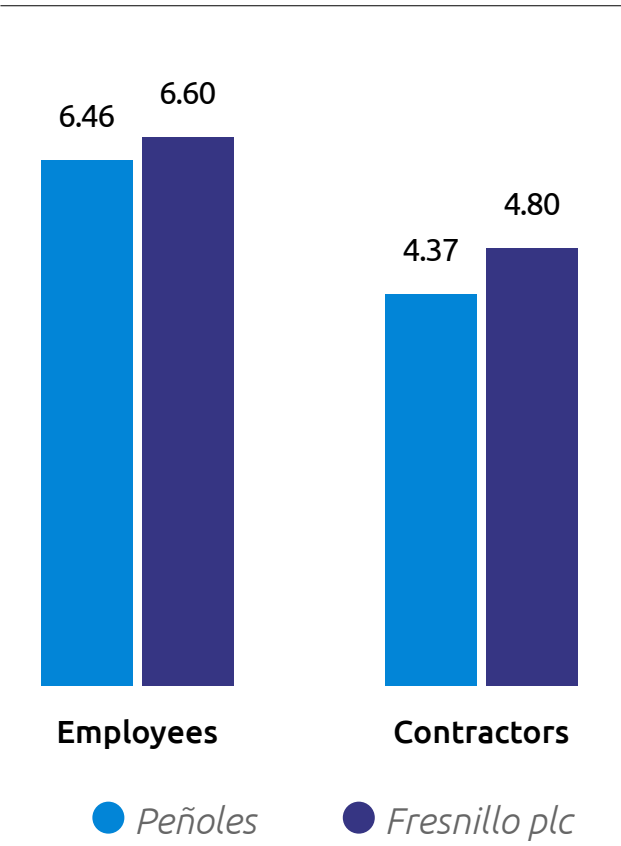
Peñoles Mines Division



Fresnillo plc Mines Division



LTIFR employees and contractors



Recordable injuries: Number of fatalities + lost time injuries + restricted work injuries + injuries requiring medical treatment per 1,000,000 hours worked.
Lost time injuries: Number of lost-time injuries per 1,000,000 hours worked.

Health

Commitment

Because the health and well-being of our people and communities matter to us, we have occupational safety and health programs to identify the risks they face on the job so we can take steps to eliminate or control them. These are underpinned by comprehensive well-being initiatives that support the spiritual, emotional, intellectual and physical health of our people, ultimately ensuring our company’s development, productivity and competitiveness. The Health Weeks we organized with Fundación UNAM (FUNAM), our participation in vaccination campaigns and sports activities, are all telling signs of our commitment to the health and wellness of our communities.

Managing the risk of COVID-19 remained one of our priorities during the year, through a robust strategy that prioritized vaccination and a sanitary protocol that included detection testing and diagnostics, travel and contingency protocols, medical follow-up, contact tracing, and hygiene measures established by official health institutions.



The health programs with FUNAM, our collaboration in vaccination efforts and sports activities are the hallmark of our commitment to promoting health.

High-Potential Strategy

Our High Potential Management Strategy in occupational health will be launched in 2023, aiming at a zero-damage record for the health of our people by anticipating, recognizing, assessing and controlling health risks. The strategy consists of three dimensions:

High-Potential Management Strategy



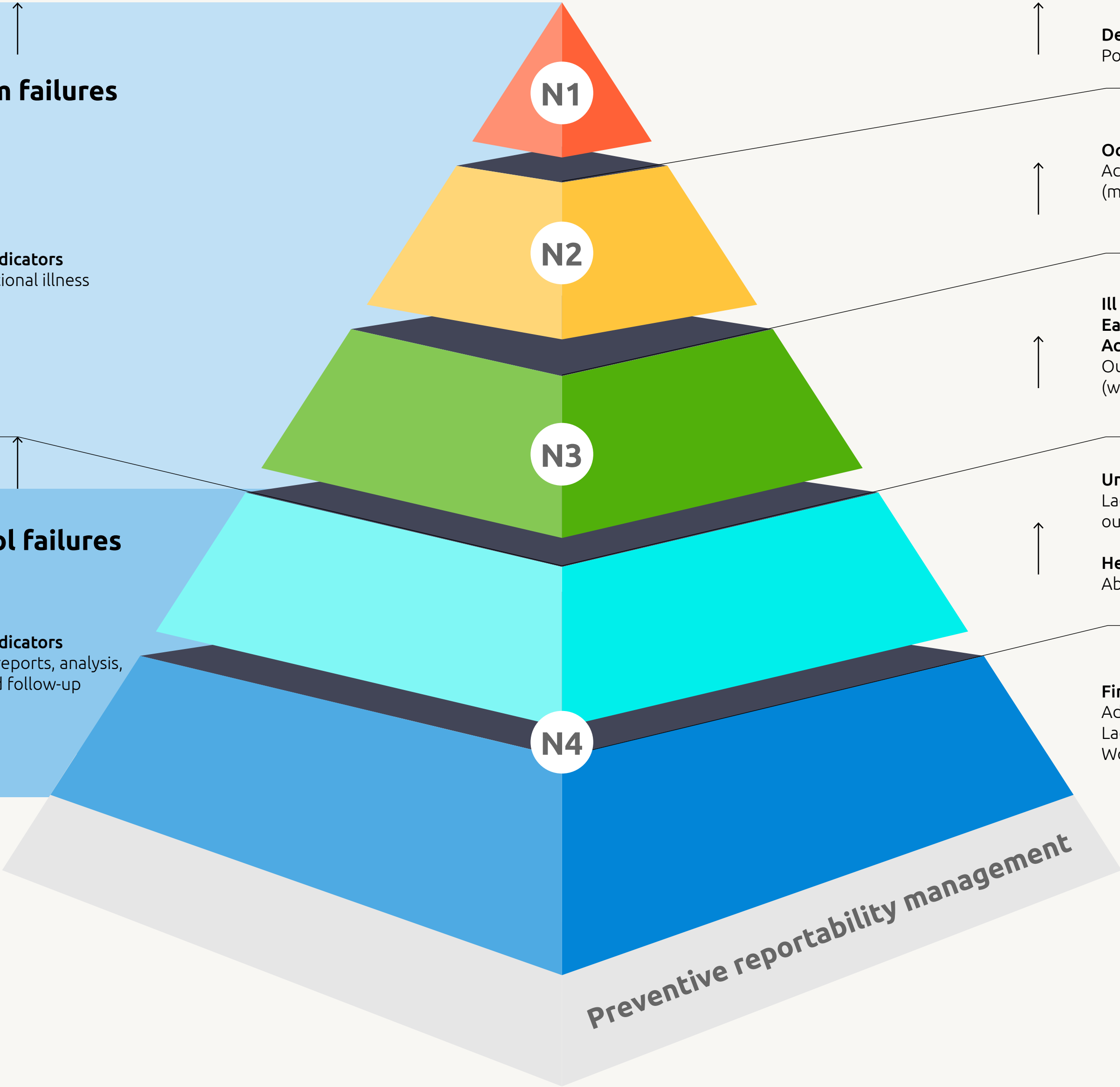
New model for managing health risks

System failures

Lagging indicators
All occupational illness

Control failures

Leading indicators
Near miss reports, analysis, actions and follow-up



Death
Possible death due to occupational illness

Occupational illness
According to IMSS criteria
(measurable disability)

Ill health systems
Early occupational ill health
Acute/slight occupational ill health
Outbreaks of ill health
(without permanent disability)

Uncontrolled work environment
Lack of engineering control of exposure
outside of regulatory limits

Health impacts
Abnormal results in lab testing

First signs of uncontrolled environment
Adverse exposure trends
Lack of administrative or OIH control
Worker grievances / CHS

Health monitoring

We identified the most significant health risks in our business units, which include exposure to dust, gases and noise, and evaluated them in order to decide on measures to control them. Our High-Potential Strategy includes preventive monitoring to avoid occupational illness. In 2023, we will be reviewing our standards to focus on controlling potential risks.

We also monitored both the physiological and psychological condition of our employees through medical exams at the time of hiring as well as with regular checkups, occupational health checks and gynecological exams. These evaluations enable us to offer preventive intervention, primarily in occupational health, but we also continued to encourage healthy lifestyles to prevent chronic degenerative diseases.

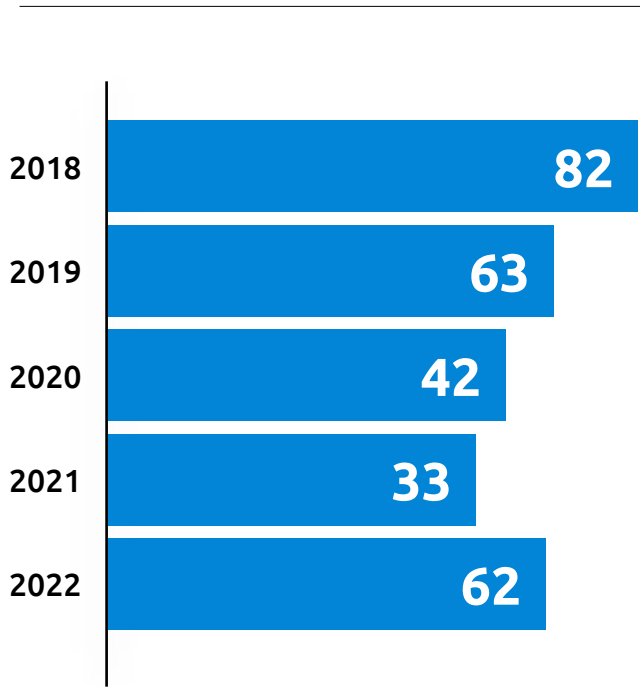
Industrial hygiene and ergonomic studies

We conducted industrial hygiene and ergonomic studies in our workplaces, using the results to guide our health monitoring programs. When we identify an activity that presents an ergonomic risk, we review our procedures to establish controls and change the way the job in question is done.

Occupational illness

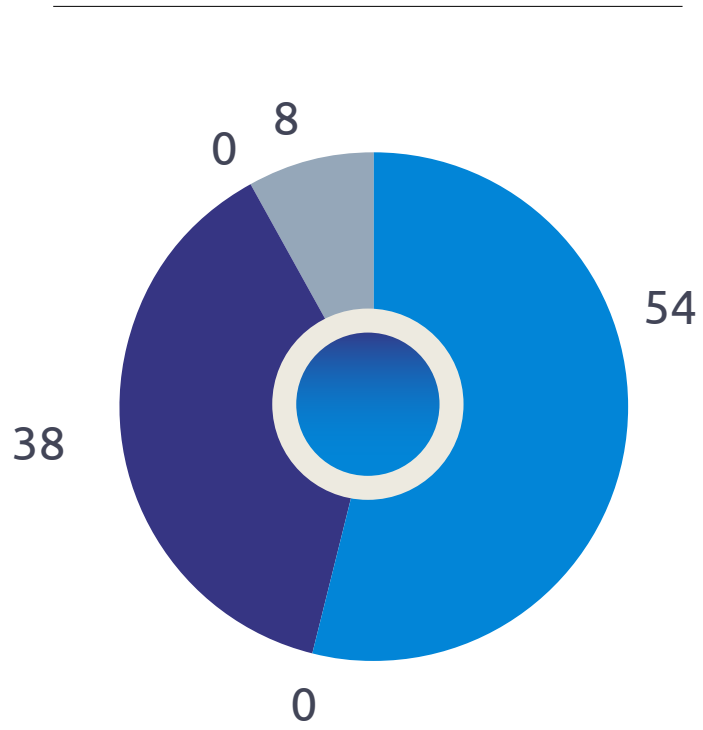
The most frequently recorded occupational illnesses in the company are hypoacusis—hearing loss—and silicosis—respiratory disease—as well as musculoskeletal disorders and the after effects of work-related accidents, all of which are monitored and treated. Monitoring lead as an occupational health standard is highly important in our processes and we have a strategic hygiene and medical monitoring program according to our zero-damage approach, which has enabled us to prevent and control exposure. **In the past five years, we recorded no occupational illnesses resulting from high levels of lead in blood.**

Occupational illnesses
(Number)



All occupational illnesses mentioned refer to employees. We had no fatalities due to work-related illnesses.

Breakdown of occupational illnesses
(%)



- Respiratory (silicosis, pulmonary fibrosis, pneumoconiosis)
- High lead levels in blood
- Hearing loss
- Musculoskeletal disorders
- Accident after-effects



COVID-19 pandemic

Early in the year there was a resurgence of COVID-19 in the form of the omicron variant, and Peñoles responded by introducing a sanitary protocol to prevent contagion, with detection tests and vaccines. We worked together with authorities to vaccinate our people and communities, setting up vaccination centers on company premises. By the close of the year, more than 80% of our employees were fully vaccinated. We also continued to support communities through donations of materials like hygiene kits and personal protection equipment for local hospitals.

As the pandemic evolved, we tracked epidemiological indicators to manage the risk of contagion individually in our workplaces, and used digital data for follow-up and contact tracing. We maintained close communication with the organization’s Crisis and Interdisciplinary Health Committees, which updated and applied protocols in line with those of official health institutions.

The experiences and lessons of these first two years of the pandemic enabled us to generate more effective strategies for the overall well-being of our employees. The work of our safety and health teams was a crucial support in ensuring the continuation and sustainability of our operations.

Certifications

All Peñoles and Fresnillo plc workplaces have both the COVID-19 Sanitary Safety and the Safe and Healthy Workplace distinctions from the IMSS. Additionally, six workplaces have ISO 45001 certification: two Peñoles mines and four Fresnillo plc units, as well as one workplace in the Metals and Chemicals division.

Mental health

Mental health care is another priority goal, and we provide preventive attention to mental disorders and illnesses attributed to occupational factors by promoting holistic health, emotional containment, rehabilitation and detection of job stress.

These were some of our mental health prevention activities in 2022:

- Workshops on emotional health risk in various of the organization's workplaces.
- Online talks on the following topics:
The importance of self-esteem and empowerment for women, How emotions influence physical illness, and Anti-stress first aid kit.
- Individual psychological counseling via video call for people who have COVID, have lost a family member due to the illness, or report suffering from stress, anxiety or depression as a result of lockdowns. In these cases, post-traumatic stress (PTS) and job stress protocols are followed.

Success story – Good practices in occupational health - fatigue prevention

Detecting fatigue and sleepiness in people who drive cargo and personnel transport vehicles is considered a best industry practice. We introduced this practice into the Herradura and Noche Buena units, at Fresnillo plc, and at Peñoles' El Roble (Velardeña) mine. The fatigue alert system monitors driver behavior and analyzes their reactions. If the system detects a deviation from the normal driving pattern, the detector will set off auditory and visual signals to alert the driver that they need to stop and rest. If this abnormal pattern continues, it will notify the medical service to conduct a physical check of the employee and, if necessary, have someone else take their place.



At the Herradura mine, we conduct a medical check of drivers who transport personnel from the city of Caborca to the mine before each trip begins. With this standard, we hope to reduce accidents involving personnel transport outside and inside the mining units attributed to fatigue or sleepiness.

Success story – Psychological support

Our psychological counseling area conducts most of its activities by virtual media. More than **90%** of patients attend five sessions, which show how useful and beneficial the treatment is. **70%** of participants reported a reduction in risk factors in the final evaluation.

Counseling was offered in various forms:

- Individual psychological counseling by video call.
- Group anti-stress workshop by video call.
- Group workshop on emotional health risks, by video call.
- Emotional support for people suffering from anxiety or depression after having COVID.
- Psychological evaluation and counseling for four employees whose responses in the NOM-035 questionnaire indicated the presence of severe post-traumatic stress (PTS) and for one person suffering from job stress.

Success story – Communication campaigns

We stepped up efforts to communicate on topics like prevention, early detection and tracking of the most prevalent pathologies through corporate communication and video conferencing platforms. As information about the pandemic became more widely available, we updated and included video chats by experts who gave advice on contagion and health protection. The health issues that were discussed in the Learn About it Live program were designed to keep workers informed about the company's actions to deal with the pandemic. For example, we broadcast the Take it to the Heart program about breast cancer, which reached **341 people** who linked in to hear the talks.

The result of these good mental health practices applied during the year was an 86% reduction in the risk of job stress. Exit survey responses also indicated a 98% satisfaction rating for the quality of the service.

Healthy lifestyles

Obviously, the pandemic posed numerous challenge to the health of our people: isolation exacerbated problems like overweight and sedentarism and affected mental health in various ways. Recognizing this problem, we offered programs to encourage lifestyle changes in our workforce.



Success story – Healthy dining rooms

As the pandemic continued, we reinforced the measures established in official sanitary and workplace protocols for the use of dining rooms, preventing the risk of contagion. As part of the 2022 Healthy Dining Rooms Program, the heads of medical services carried out monthly internal evaluations in the work centers that have outsourced employee dining rooms, in addition to semi-annual virtual audits conducted by the Corporate Occupational Health Department, in keeping with NOM-251-SSA1-2009 standard: “Hygiene practices for processing food, beverages or dietary supplements.” The personnel in charge of the dining rooms were also trained in the hygienic handling of food and knowledge of the standard.

Surveys of outgoing diners were conducted regarding food, facilities, service and staff. The survey, which was applied to a sample of diners at the work centers, considered the following variables: friendliness, personal treatment, efficiency, trust, speed of service, hygiene and dress. Out of a total of 100%, the sample was weighted as follows: 30% facilities and equipment; 30% processes and personnel; 20% diners; and 20% contractor training. In the end, the survey showed that more than 90% of diners were satisfied with the service.