# **Dear Occupational Safety, Health and Wellbeing** Professionals!

e all understand that wellbeing is the most valuable asset of mankind, and our primary focus should be on maintaining human safety and health by all possible means. A reliable method for maintaining it is to invest in the prevention of hazards. At the same time investing in prevention helps to avoid much higher costs caused by occupational accidents, diseases, and lost working time. Thus, prevention contributes to sustainable economic success of the organisations as well as the preservation of employability of workforce.

Accidents at work and occupational diseases are neither determined by fate nor unavoidable since they always have causes. By building a strong prevention culture, these causes can be eliminated and work related accidents, harm and occupational diseases can be prevented.

"Vision Zero" is a transformational approach to prevention that integrates the three dimensions of safety, health and well-being at all levels of work. The ISSA's Vision Zero concept is flexible and can be adjusted to the specific safety, health or wellbeing priorities for prevention in any given context. Thanks to this flexibility, Vision Zero is beneficial to any workplace, enterprise or industry in all regions of the world.

This calendar 2025 is unique in our world. It will give us the chance to learn from the past as it is giving historical reference to ill-fated accidents which took place on each day of the calendar. It shows us that accidents are happening every day since ages, and we should learn from the past so that our aim of achieving 'Vision Zero' is realized.

We must thank Dr. Avneesh Singh (International Coordinator VZ-RS; Former Director General, DGFASLI) for developing the concept and doing this tremendous work for helping to reach Vison Zero goals via learning from the past. No one did this work before.

In addition, we have to thank Karunesh Srivastava (Retd. Asst. Director, DGFASLI) for compiling and composing this unique calendar.

Best regards

**Prof. K-H Noetel** 

President

International Section of the ISSA on Prevention in the Construction Industry

## **DGUV** Deutsche Gesetzliche Unfallversicherung Spitzenverband



## **Vision Zero Rating System** www.vz-rsi.in



# VISION ZEROOD

Safety. Health. Wellbeing.

# CALENDAR 2025









Safety. Health. Wellbeing.

## **Vision Zero**

"Vision Zero" is the visualization of a world without occupational accidents and work-related diseases. Its highest priority is to prevent fatal and serious work accidents and occupational diseases. Vision Zero is the goal of a comprehensive culture of prevention. The prevention strategy firmly embedded with the goal of shaping the working and living environments in such a way that nobody is killed or so severely injured or ill for work reasons that they suffer permanent damage. However, in order for Vision Zero to become a reality, prevention work must always be realigned to this goal.

This broad and networked approach requires everyone in society to get involved. The basic maxims arelife is not negotiable; people make mistakes; tolerance limits are the physical load limits of humans; and, people have a basic right to a safe working environment. If life is not negotiable and people make mistakes, then it is ethically unacceptable to pay for a mistake with a loss of life or a serious injury.

Vision Zero is a strategic, comprehensive and qualitative approach where objectives are formulated and agreed upon. The goal of zero accidents might seem difficult, but it is the only ethically correct goal that we must work on in the future. Vision Zero provides a strategy to achieve this. Under Vision Zero, safety and health at work are values that organisations and society appreciate and strive for.

The International Social Security Association's (ISSA) Vision Zero is the first global campaign to prevent occupational accidents and diseases. To support employers and managers to continuously improve the safety and health conditions, ISSA has developed a practical management tool for developing a strong safety and health culture, structured around the 7 Golden Rules, namely, Take leadership - demonstrate commitment; Identify hazards - control risks; Define targets - develop programmes; Ensure a safe and healthy system - be well-organised; Ensure safety and health in machines, equipment and workplaces; Improve qualifications - develop competence; and, Invest in people - motivate by participation.

Vision Zero contributes to the 2030 Agenda for Sustainable Development, adopted by all 193 United Nations Member States. The agenda provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs). Vision Zero particularly contributes to SDG 8 (Decent Work and Economic Growth), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education) and SDG 17 (Partnerships for the Goals).

Improving safety and health at work not only has a positive impact on working conditions, but also on productivity, economic and social development (return on prevention). Since the launch of Vision Zero during the XXI World Congress on Safety and Health at Work 2017, more than 16,000 companies, people and partners have joined the campaign worldwide. In India, hundreds of organisations are committed to Vision Zero.

For further information-www.visionzero.global

# Vision Zero Rating System India (VZRS-I)

"Vision Zero" is a proactive transformational approach for prevention that integrates the three dimensions of safety, health and well-being at all levels of work. For assessing the occupational safety and health performance and motivating industrial organizations, the Vision Zero Rating System India (VZRS-I) - a comprehensive tool - has been developed by a team of experts from the ISSA (Construction), German Social Accident Insurance (DGUV), OSH Academy, India and German Embassy New Delhi.

The aim of the VZRS-I is to motivate and support manufacturing industries and construction sites for developing a **'Pro OSH Culture'** for achieving Vision Zero i.e., Zero Harm, Zero Accident, Zero Loss leading to higher productivity and profitability. The VZRS-I consists of two web-based tools viz., Compliance Assessment Questionnaire© (CAQ) and Vision Zero Rating Questionnaire© (VZ-RQ).

The CAQ is designed to assess compliance with the applicable rules and regulation under the Factories Act, 1948, and the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. This simple, no-cost tool helps in identifying the gaps in health and safety practices in an organisation. Submitted questionnaires are assessed and analysed by a team of experts and, if required, tailor-made solutions are provided free of charge.

After qualifying the CAQ, organisations are encouraged to attempt VZ-RQ which assesses an organization's practice of 'Vision Zero- 7 Golden Rules', essential for workers' wellbeing and enhancing OSH standards beyond the legislative and statutory requirements. The submitted VZ-RQ passes through a four-step evaluation process, viz., Step-1: Administrative Scrutiny, Step-2: Technical Scrutiny, Step-3: Technical Assessment, and Step-4: Final assessment by an accrediting committee. On successful completion of the VZRS-I accreditation process, the Vision Zero Rating is awarded in a Presentation Ceremony.

#### **Advantages of VZRS-I**

- Improvement of workers' wellbeing and enhancement of OSH standards beyond the legislative and statutory requirements.
- Development of self-sustainable and long lasting 'Pro OSH Culture' in an organisation.
- Round the year support on issues pertaining to OSH System and appraisal of technical advancements for continuous improvements.
- Improvement of brand image and overall rating of the industry at international level, leading to sustainable business growth.

For further information /participation-www.vz-rsi.in











Safety. Health. Wellbeing.



In the year 1978, Air India flight a Boeing 747 aircraft named "Emperor Ashoka" crashed merely 3 km off the coast of Bandra. All the 190 passengers, 20 cabin crew and 3 cockpit crew died.

claimed the lives of 50 people.

## **Boston Molasses Disaster,**

In the year 1919, a tank holding molasses exploded, releasing about 2.3 million gallons of molasses, which End. The disaster killed 21 people and injured many more.

#### **Guadalajara Train Disaster,** Guadalaiara. Mexico

killed over 600 people. The tragedy remains the deadliest railway accident in North American history.

## Train Collision, Osaka,

In the year 1940, three trains on the Nishinari Line; present Sakurajima Line, in Osaka, Japan, collide and

## 02 Sago Mine Disaster, **West Virginia. USA**

In the year 2006, a methane gas explosion caused death of 12 miners. Investigations revealed safety lapses, inadequate ventilation, and faulty communication systems leading to calls for stricter regulations.

## **Nelson Mine Disaster.** Ústecký kraj, Czechia

In the year 1934, the explosion of coal dust in underground mine Nelson III began the tragedy. Non-compliance with the basic safety rules has been with the basic safety rules has been the cause of the death 142 of miners.

# Sukkur. Pakistan

In the year 1990, Bahauddin Zakaria Express collided with a stationary 67-car freight train. The collision resulting 307 deaths and 700 injuries. This makes it the deadliest rail accident in the country's history.

#### Sukkur Rail Disaster. Bandung, Indonesia

injuring 42.

## Train Accident, Cicalengka,

In the year 2024, a train collision between the local Bandung Raya train and the Turangga train in Indonesia killed four people and injuring 42

#### Cavite Bus Crash, Indang, **Cavite, Philippines**

In the year 1967, two Catholic pilgrimage buses collided on a mountainous road near a reinforced timber. Subsequently, they plunged off a cliff, killing more than 80 people. off a cliff, killing more than 80 people.

#### **Changsha Rail Disaster,** Changsha, China

January 2025

In the year 1918, a train carrying retreating troops was ordered to dispatch and crashed into an oncoming train resulting 300 deaths.

## Whiddy Island Disaster,

In the year 1979, oil tanker Betelgeuse exploded in Bantry Bay, during an operation to discharge its cargo of oil. The explosion and resulting fire

#### Vega de Tera Disaster, Ribadelago, Spain

In the year 1959, the flood was caused by the failure of a dam, releasing water from the Vega de Tera reservoir. A total of 144 of the 664 residents in Ribadelago were killed.

#### **Pemberton Mill Collapse, Massachusetts. USA**

In the year 1860, the Pemberton Mill collapsed trapping hundreds of workers inside. The collapse was followed by a fire killing 145 workers. The disaster was caused by structural failure due to poor design.

#### **Westboro Station Bus Crash, Ontario**. Canada

In the year 2019, an OC Transpo double-decker bus crashed on approach to Westboro Station by swerving and striking the bus shelter at the station, killing three people on board, as well as injuring 23 others.

#### Hajj Stampede, Mina, Mecca. Saudi Arabia

In the year 2006, thousands of pilgrims rushing to finish a symbolic stoning ritual before sunset during the annual pilgrimage tripped over luggage, causing a stampede which killed 363 and injured hundreds more.

## Air Florida Flight 90 Crash, Washington, USA

In the year 1982, Air Florida Flight 90 crashed into the 14th Street Bridge in Washington, D.C., shortly after takeoff during a snowstorm, killing 74 and injured 5 people.

#### **Black Vein Colliery Explosion, Wales Risca. Wales**

In the year 1846, 150 men were working in different sides of the mine. In an accident 35 were killed, 4 burned, 30 suffocated and 1 was hit by a carriage at the bottom of the

## **Boston**. USA

flooded the streets of Boston's North

#### **Hartley Colliery Disaster,** Northumberland, England

In the year 1862, a beam supporting the steam engine broke and fell into the shaft, trapping 199 men underground. Five men were killed instantly, and the remaining 199 were found dead six days later.

#### **Nuclear Catastrophe at Palomares. Spain**

In 1966, a US Air Force B-52 collided with its refuelling plane, killing seven airmen and dropping four hydrogen bombs. Explosives detonated scattering radioactive plutonium over the farming town of Palomares.

### **Argentine Grand Prix Race Accident. Argentina**

In the year 1953, during the World Championship race, one of the spectators wandered onto the track, and, in order to avoid hitting him Farina ultimately lost control and crashed into the growd killing 13

crashed into the crowd killing 13

## Silvertown Explosion, Silvertown, London

In the year 1917, the blast occurred at the munitions factory location that was manufacturing explosives. Approximately 50 tonnes of TNT (trinitrotoluene) exploded, killing 73 people and injuring 400 more.

#### **Collapse of Wooden** Bleachers, Sinceleio, Colombia

In the year 1980, bleachers at a stadium in Sincelejo, Colombia, collapsed resulting in the deaths of 222 spectators. The collapse was the result of overcrowding and poor construction.

#### **Fire at Serum Institute of** India. Pune. India

In the year 2021, a major fire broke out at the world's largest vaccine manufacturing unit claiming five lives. The incident brought attention to fire safety measures in the pharmaceutical and biotech industries.

In the year 1915, The Guadalajara train disaster occurred in Mexico

### La Espuela Coal Mine Disaster. Coahuila, Mexico

In the year 2002, disaster occurred and caused the death of 13 miners. The disaster was caused by flooding of the shaft. Without the ability to flee, the miners drowned in minutes.

**Baia Mare Cyanide Spill,** 

# Vereshchyovka Train Disaster,

In the year 1944, a heavily loaded freight train had crossed the bridge, weakening its supports. As the passenger train crossed the bridge the supports gave way, causing derailment killing 600 to 700 people.

#### Brumadinho Dam Collapse, Minas Gerais. Brazil

In the year 2019, collapse of a tailings dam at an iron ore mine killed 270 workers. This disaster brought international attention to the dangers of tailings dams and mining waste dam at an iron ore mine killed 270 management.

## Bhuj Earthquake, Gujarat,

In the year 2001, a catastrophic earthquake measuring 7.7 on the Richter scale hit Kutch region. It claimed around 20,000 lives, injured 150,000 people, and left nearly a million homeless.

#### **Lagos Armoury Explosion,** Lagos, Nigeria

In the year 2002, a fire created by the debris explosion takes place and burnt down a large section of Northern Lagos. The explosion and its aftermath killed at least 1,100 people and displaced over 20,000.

#### **Space Shuttle Challenger** Disaster. USA

In the year 1986 the Space Shuttle Challenger exploded shortly after launch, killing all seven astronauts on board. Investigations revealed technical failures and engineering flaws leading to better safety

In the year 2000, a dam at a gold mining company busted releasing over 100,000 cubic meters of water explode while approaching station. A total of 181 people were killed in the accident. contaminated with cvanide into Somes River. The spill affected Hungary, Yugoslavia, and Bulgaria killing aquatic life.

# **Explosion at Pemex HQ.**

In the year 2013, an explosion occurred in the basement of Pemex oil company of Mexico, killing 37 people and injuring over 120. The people and injuring over 120. The explosion was caused by a gas leak in the building's basement.

I	V	O	T	Ε	:	_











Safety. Health. Wellbeing.



In the year 2008, an unlicensed fireworks factory exploded accidentally, leaving at least 22 people dead and more than 100 injured. After the incident the building was also collapsed.

02 Daallo Airlines Flight 159 bombing, Somalia

In the year 2016, an explosion occurred on board the aircraft 20 minutes after it took off from Mogadishu. The aircraft was able to return to the airport safely with one fatality (likely the bomber).

**Thiokol Chemical Plant Explosion, Georgia, USA** 

In the year 1971, the Thiokol-Woodbine Explosion killed 29 people and seriously injured 50.

**Chicago Loop Derailment,** Chicago, Illinois, USA

In the year 1977 Chicago loop derailment occurred killing 11 people and injuring at least 268 as the cars fell onto the street below. fell onto the street below.

Calabrian Earthquakes, **Oppido Mamertina. Italy** 

In the year 1783, there were sequence of five strong earthquakes. This earthquake, with an estimated magnitude of 7.0 damaged 180 villages, with more than 25,000 casualties.

**Roland Mill Dust Explosion, Bremen, West Germany** 

In the year 1979, the Roland Mill was destroyed by a flour dust explosion, killing 14 and injuring 17.

**Georgia Sugar Refinery Explosion, Georgia, USA** 

February 2025

In the year 2008, a devastating explosion occurred at the sugar refinery, killing 14 workers. The explosion was caused by the accumulation of combustible sugar dust which ignited a massive fire.

**Karaiskakis Stadium** Disaster, Piraeus, Greece

In the year 1981, an incident occurred after the conclusion of a football match between Olympiacos and AEK Athens. A total of 21 people died while rushing out of the stadium to celebrate the 6-0 victory.

Japan Air Lines Crash, Tokyo, Japan

In the year 1982 a domestic scheduled passenger flight from Fukuoka to Tokyo in Japan crashed on approach to Haneda Airport in Tokyo Bay, resulting in 24 fatalities.

Flight Accident, **Cork Airport, Ireland** 

In the year 2011, the Fairchild aircraft flying the route with ten passengers and two crew on board crashed on its third attempt to land at Cork Airport in forgation and itions. Six poorle foggy conditions. Six people, including both pilots, died.

**Carnival Tragedy, Valletta,** 

In the year 1823, a human crush occurred in Valletta, Malta and the tragedy took place at the Convent of the Minori Osservanti, where around 110 boys were killed.

Colgan Air Crash, **New York. USA** 

In the year 2009, aircraft, entered an aerodynamic stall from which it did not recover and crashed into a house in New York killing all 49 passengers and crew on board.

**Antoung Movie Theater Fire,** Nantong, China

In the year 1937, a fire at a movie theatre in Antung, Manchukuo (now part of China) killed 658 people, many of whom were New Year's celebrants.

Sunjiawan Mine Disaster, **Fuxin, Liaoning, China** 

In the year 2005, a mine disaster that occurred in the north-eastern part of the China. At least 214 coal miners were killed, making it the worst mining disaster in China.

**Ocean Ranger Accident, Newfoundland. Canada** 

In the year 1982, the mobile offshore oil rig Ocean Ranger was struck by a rogue wave off the coast of Newfoundland, Canada and sank with the loss of all 84 crew.

Fire in Paint Factory Delhi,

In the year 2024, a massive fire broke out at a paint factory in Delhi. The fire reportedly began due to the ignition of flammable chemicals. At least 11 workers were killed and several others were injured.

Biak Earthquake, Biak Island, Indonesia

In the year 1996, Irian Jaya earthquake with a moment magnitude of 8.2 on the New Guinea Trench generated tsunami of 7.7 m. The disaster killed 108 people, 423 injured and 58 missing.

ExxonMobil Torrance Refinery **Explosion. California. USA** 

In the year 2015, a massive explosion rocked the ExxonMobil refinery in Torrance, injuring four workers and causing extensive damage to the

Iran Ilyushin II-76 Crash, Kerman. Iran

In the year 2003, an II-76 crashed in mountainous terrain near Kerman in Iran. There were no survivors among the 275 occupants on board the aircraft.

**O'Connor Plating Works Disaster. Los Angeles** 

In the year 1947, a large accidental explosion at the O'Connor Plating Works in Los Angeles killed 17 people and injured more than one hundred.

**Garyville Refinery**, **Garvville.** Louisiana

> In the year 2022, a refinery, which has a refining capacity of 578,000 barrels of crude oil a day, reported a massive explosion which led to the release of an large amount of Hydrogen Fluoride and Chlorine.

**Walnut Grove Dam Failure,** Arizona. USA

In the year 1890, a dam collapsed, sending 4 billion gallons of water downstream. The resulting flood destroyed everything in its path and killed as many as 100 people.

Atlas Air Accident. Texas, USA

In the year 2019, the Boeing 767-375ER crashed into Trinity Bay during approach into Houston, killing the two crew members and a single passenger on board.

**Gasoline Pipeline Explosion, Cubatao, Brazil** 

In the year 1984 a gasoline pipeline exploded in the favela of Vila Sao Jose killing at least 508 people. Only 86 bodies were recovered after a gasoline-fed blaze exploded into a giant fireball

Multiple-vehicle collision, **Pakistan** 

In the year 2023 at least 13 people were killed and more than 20 injured as a result of a collision between a passenger bus, van and jeep on the M5 motorway in Rahim Yar Khan.

**Happy Valley Race Course** Fire, Hong Kong

In the year 1918, in the Happy Valley Race course located at Happy Valley, British Hong Kong. The catastrophe caused the loss of 614 lives.

**Explosion of a Dynamite** Depot, Caju, Rio, Brazil

In the year 1925, the explosion of 38 tons of dynamite killed as many as 50 people.

Tempi Train Crash, Thessaly, Greece

In the year 2023, a passenger train from Athens to the northern city of Thessaloniki collided head-on with a freight train. At least 57 people were killed and 80 others were injured.

NOTE:











Safety. Health. Wellbeing.





In the year 1924, a plant for processing ammonium nitrate in Edison, New Jersey, exploded, killing 24 people, injuring 100 and destroying several buildings.

**102** Yellow River Dragstrip, Georgia, USA

In the year 1969, a worst auto-racing disaster occurred in US History. Out of control dragster went off track & through chain-link fence killing 12 and injuring many others.

**Bethnal Green Tube Station Panic, London** 

In the year 1943, 173 people were crushed and asphyxiated to death as they attempted to gain refuge in Bethnal Green's underground from an expected German attack.

**Natchitoches Explosion.** Louisiana. USA

In the year 1965, A 32-inch gas transmission pipeline belonging to the Tennessee Gas Pipeline exploded killing 17 people. At least 9 others were injured, and 7 homes were were injured, and 7 homes were

Príncipe de Asturias Accident,

In the year 1916, while trying to approach the port of Santos in dense fog, the ship ran aground opening a huge hole in her hull. Ship sank in five minutes, killing at least 445 of the 588 people aboard.

**Ammunition Warehouse Explosion, Mexico** 

that jumped into the gunpowder deposit caused big explosion in a Andrée Ot in the gunpowder deposit caused big explosion in a second particular deposits and the second particular deposits and Andrés Chalchicomula, Mexico killing about 1,400 to 2,280 people.

**Devonport Incident,** Plymouth, UK

March 2025

In 1972, one of the most infamous pharmaceutical disasters occurred. Gram-negative organisms in the bottles resulted in four patients dying from massive endotoxic shock.

Kalihar Train Accident, Bihar. India

In the year 1961, a passenger train and freight train collided near Kalihar in Bihar, killing 11 and injuring 37.

**Burnden Park Disaster,** Lancashire. England

In the year 1946, a crowd crush that occurred at Burnden Park football stadium. The crush resulted in the deaths of 33 people and injuries to hundreds of Bolton fans.

**Courrières Mine Disaster,** 

In the year 1906, this coal dust explosion is the worst mining disaster in European history, killing 1,099 miners. It exposed the dangers of coal mining and the inadequate safety

**Great Sheffield Flood. South Yorkshire** 

In the year 1864, the Dale Dyke Dam collapsed while filling for the first time. At least 240 people died and 5000 properties were flooded. It was the greatest disaster in terms of loss of

**Dasharath Stadium Disaster,** 

In the year 1988, disaster occurred during a football match. A total of 93 people were killed and 100 more were injured in a stampede.

**Laurel Mine Explosion,** Virginia, USA

In the year 1884, a horrible deadly explosion in one of the Pocahontas coalfields. The blast was so powerful it had knocked houses. There was no loss of lives outside the mine. but inside 112 miners died.

El Virilla Train Accident. **Costa Rica** 

In the year 1926, accident occurred in Costa Rica, when an overcrowded train carrying mostly farmers and labourers derailed while crossing a bridge killing 385 and injuring 93

**Collapse of Hotel New** World, Singapore

In 1986, Hotel New World was a six-story building in Singapore, which suddenly collapsed. 33 people died and 17 people were rescued. A gas explosion was thought to be a possible cause.

**Amoco Oil Spillage, France** 

In the year 1978, the Amoco Cadiz, a VLCC owned by the company Amoco sank resulting in the spilling of 68,684,000 US gallons of crude oil. This is the largest oil spill from an oil tanker in history.

Kanungu Church Fire, Kanungu, Uganda

In the year 2000, followers of the religious movement died in a fire and a series of poisonings and killings. 530 members were killed and several **New London School Explosion. Texas. USA** 

In the year 1937, the New London School explosion occurred when a natural gas leak caused an explosion and destroyed the London School. The disaster killed more than 300 students and teachers.

Linfen Bus Accident, Linfen, China

In the year 2024, a bus crashed into a tunnel wall on the Hohhot–Beihai Expressway in Linfen, Shanxi, killing 14 people and injuring 37 others.

**Grover Shoe Factory,** Massachusetts, USA

In the year 1905, a boiler explosion in the Grover Shoe Factory resulting building collapse and fire killed 58 people and injured 150 in Brockton, Massachusetts.

**Chemical Explosion,** Jiangsu Province. China

In the year 2019 in Xiangshui County, Jiangsu Province, China. The huge explosion resulted in the death of 78 people and the injury of 617.

**Lyme Bay Canoeing Disaster, United Kingdom** 

disaster occurred. 4 teenagers died.
The incident led to the passa. Activity Centres (Young Persons' Safety) Act 1995.

**Chemical Plant Explosion. Texas City. USA** 

In the year 2005, a massive explosion occurred at the BP Texas City Refinery in Texas City, Texas. The explosion killed 15 workers and explosion killed 15 workers and injured over 170 others.

**Exxon Valdez Oil Spill.** California, USA

In the year 1989, an oil tanker hit Prince William Sound's Bligh Reef, dumping 41 million litres of crude oil into the sea. It is considered to be one of the most devastating humancaused environmental disaster.

**Triangle Shirtwaist Factory** Fire, USA

In the year 1911 a fire in a garment factory killed 146 workers because the doors were locked and there were inadequate fire escapes. This led to significant reforms in fire safety

**Brunner Mine Disaster, New Zealand** 

In the year 1896, an explosion deep in the Brunner Mine, in the West Coast region of New Zealand, killed all 65 miners below ground.

**Tenerife Airport Disaster, Canary Islands, Spain** 

In the year 1977 the deadliest aviation collision of two Boeing 747s on the runway killed 583 people. This led to changes in communication protocols and emergency procedures for air traffic control.

Three Mile Island Accident, Pennsylvania. USA

In the year 1979, mechanical failures in the non-nuclear secondary system. followed by the loss of coolant, resulting in a partial meltdown. Up to 13 million curies of radioactive gases were released.

Porto Boat Bridge Disaster, Porto. Portugal

In the year 1809, the Ponte das Barcas disaster killed at least 4,000 civilians. The bridge collapsed during the First Battle of Porto, when thousands of civilians were trying to escape by crossing the bridge.

30 Airplane accident, California. USA

In the year 2024, a Daher TBM 700 (960), N960LP, was substantially damaged when it was involved in an accident in Truckee, California, The pilot and passenger were fatally

**Explosion at IOC Depot,** Kochi. India

In the year 1984, an explosion occurred at the Indian Oil Corporation depot in Kochi, Kerala. The explosion killed around 4 workers and caused widespread destruction in the surrounding area.

NOTE:

**DGUV Deutsche Gesetzliche** Unfallversicherung

Spitzenverband







INTERNATIONAL SOCIAL SECURITY ASSOCIATION

Section on Prevention in the Construction Industry

Safety. Health. Wellbeing.





In the year 1873, the RMS Atlantic smashed at full speed into the rocky shores and was wrecked, resulting in the deaths of around 550 people. It was second worst ever disaster, the other being Titanic.

14 Passengers and 7 crew members

Hillsborough Disaster,

Sheffield, England

In the year 1989, a fatal crowd crush

happened at a football match in

England, resulted with a total of 97

**Guadalaiara Explosions.** 

In the year 1992, a leak of gasoline

into the sewer system caused 12

explosions in downtown Guadalajara,

Mexico killing 206 to 252 people and

Guadalaiara, Mexico

fatalities and 766 injuries.

iniuring 1.800.

died in the accident.

**South African Airways Accident, Rome, Italy** 

**SS Charles Henderson** In the year 1954, the flight crashed at around 19:07 UTC, killing all on board.

In the year 1945, on berth 14, in the centre of the dock system, the Charles Henderson, with 2000 tons of 1000 lb and 500 lb bombs exploded

## **Explosion, New Orleans**

maintenance restart.

102 Tesoro Anacortes Refinery

In the year 2010, seven workers received fatal burns in an explosion and ensuing fire when a heat

and ensuing fire when a heat

exchanger violently ruptured after a

Disaster, Washington, USA

and destroyed due to an ammunition explosion.

**Texas City Disaster, USA** 

In the year 1947, a ship loaded with ammonium nitrate exploded, causing

a chain reaction of explosions and 4.5 metre tidal wave. Between 400 and 600 people were killed, with as many as 4,000 injured.

#### **Rhythm Club Fire, Natchez,** Mississippi, USA

In the year 1940, a fire in a dance hall occurred and killed 209 people and severely injured many more.

In the year 1802, the dam collapsed in Lorca killing 608 people and destroyed 1,800 houses and 40,000 trees.

#### **Hualien Earthquake. Hualien City, Taiwan**

In the year 2024, a 7.4 magnitude earthquake struck near Hualien City. The quake caused significant damage resulting in at least 18 fatalities and over 1,100 injuries.

Ojhri Camp Explosion,

Rawalpindi. Pakistan

In the year 1988, a military storage having 10,000 tons of arms and ammunition was exploded, killing more than 90 people another 1100

**West Fertilizer Plant** 

**Explosion. Texas. USA** 

In the year 2013, a massive explosion

occurred at the fertilizer plant. The

explosion ignited ammonium nitrate

stored at the site. The explosion killed

15 people injuring hundreds more.

Rana Plaza Collapse,

In the year 2013, the collapse of a

garment factory building in Dhaka,

Bangladesh, killed 1,134 workers and

injured over 2,000 others. This

incident sparked global reforms

focusing on worker safety.

Dhaka, Bangladesh

#### Kangra Earthquake, Himachal Pradesh, India

In the year 1905, the Kangra earthquake occurred in Himachal Pradesh. The earthquake measured 7.8 on the surface-wave magnitude 7.8 on the surface-wave magnitude scale and killed more than 20.000

## **Ellis Park Stadium Disaster,** Johannesburg, South Africa

In the year 2001, a crowd crush occurred in Ellis Park Stadium, Johannesburg and took the lives of 43

**Qinghe Special Steel Corp.** Disaster, China

In the year 2007, thirty-two people were killed and six were injured when a ladle used to transport molten steel separated from an overhead rail in the Qinghe Special Steel factory in Tieling, Liaoning, China,

#### Pepsi Fruit Juice Flood, Lebedvan, Russia

In the year 2017, it was a flood of 176,000 barrels of fruit and vegetable juices into the streets of Lebedyan. Russia, and the Don River, caused by the collapse of a PepsiCo warehouse.

**Philippines** 

Pripyat, Ukraine

safety standards.

In the year 1986, a nuclear reactor

explosion released large amounts of

radioactive particles. The disaster

caused widespread health and

environmental damage and led to

international changes in nuclear

In the year 1908, a fire occurred in Chelsea, Massachusetts. 19 people were killed, 15,000 were left homeless, and 350 acres were burned in the fire. About eight schools and a dozen churches were also burnt

Disaster, Virginia, USA

In the year 2010, an explosion in a coal mine killed 29 miners. The accident led to investigations that found numerous safety violations.

and it highlighted the need for stricter

enforcement of mine safety laws.

**Great Chelsea Fire,** 

**Chelsea. Massachusetts** 

found numerous safety violations,

# Air Philippines Flight Crash,

In the year 2000, a domestic flight operated by Air Philippines crashed in Samal, Davao del Norte, Philippins, while on approach to the airport, killing all 124 passengers and 7 grown. killing all 124 passengers and 7 crew members.

# **Chernobyl Nuclear Disaster,**

In the year 1922, a methane explosion occurred at the Aurelia Mine in Lupeni, Romania, killing 82 miners, and leaving 62 widows and 124 orphans.

Romania

#### L'Aquila Earthquake, Abruzzo. Italy

In the year 2009, an earthquake occurred in the region of Abruzzo, in central Italy. It was rated 5.8 or 5.9 on central Italy. It was rated 5.8 or 5.9 on the Richter scale. In all, more than 300 people died, 1500 injured and an estimated 60.000 were left homeless.

# **Myanmar Ferry Capsize**,

**April 2025** 

In the year 2017, a ferry boat capsized and killed at least 20 people and over a dozen missing.

#### **Lapua Cartridge Factory Explosion. Finland**

In the year 1976, an explosion in a munitions factory in Lapua, Finland, kills 40 workers and injured 60 people.

**Mexico Chemical Plant** 

Coatzacoalcos, forcing 2,000

residents to leave their homes. 15

people killed and 136 were hurt in the

Lupeni Mine Disaster,

**Explosion. Mexico** 

In the year 2016, the blast occurred at a plant in the south-eastern city of

#### Mumbai Dock Yard Fire. Mumbai. India

In the year 1944, a ship exploded at the Mumbai dockyard. Many civilians and support staff members also lost their lives in this catastrophe. Hence, on April 14, National Fire Service Day is observed in India.

#### **Ohio Penitentiary Fire,** Columbus, Ohio, USA

In the year 1930, a major fire in North American prison killing 322 inmates and hospitalized another 230. The fire started when a candle ignited oily rags on a roof in the prison's six-story West Block.

#### **Eccles Mine Disaster, West Virginia**. USA

In the year 2014, a mine disaster occurred due to explosion of coalseam methane. The explosion took the lives of at least 180 men and boys. seam methane. The explosion took

### Rongjiawan Train Disaster, **Hunan**. China

In the year 1997, a northbound passenger train ploughed into a train stopped in a station in central China, stopped in a station in central China, tossing 13 cars off the tracks, killing 58 people and injuring more than 90. tossing 13 cars off the tracks, killing

#### **Puentes Dam Collapse,** Lorca, Spain

## NOTE:

**DGUV Deutsche Gesetzliche** Unfallversicherung Spitzenverband







Safety. Health. Wellbeing.



In the year 1966, a 450,000 cubic metre mudslide swept away the village of Sgorigrad in northern Bulgaria, killing hundreds of people and causing incalculable material and environmental destruction.

Great Mill Disaster, Minnesota, USA

In the year 1878, Six flour mills in Minneapolis were destroyed by a flour dust explosion and subsequent fire coming from the Washburn A Mill, killing 18.

Train Accident, Nalgonda, AP, India

In the year 1994, at least 35 people were killed when the Narayanadri Express collided with a tractor in Nalgonda district of Andhra Pradesh.

04 PEPCON Disaster, Nevada, USA

In the year 1988, a fire followed by several explosions occurred at the PEPCON chemical plant in Henderson. The disaster caused two fatalities, 372 injuries, and \$100 million of damage.

Shell Oil Refinery Explosion, Norco, Louisiana

In the year 1988. Hydrocarbon gas escaped from a corroded pipe in a catalytic cracker and was ignited. 2,800 residents from nearby neighbourhoods. 7 workers were killed and 42 injured.

Hindenburg Disaster, New Jersey, USA

In the year 1937, an airship accident occurred in New Jersey. It caught fire and was destroyed during its attempt to dock. The accident caused 35 fatalities.

Vizag Gas Leak, Visakhapatnam, India

May 2025

In the year 2020, a styrene gas leak from the LG Polymers plant in Visakhapatnam killed 11 people and caused severe health problems for over 1,000 residents.

# Aurangabad Railway Accident, India

In the year 2020, an empty goods train ran over and killed 16 migrant workers sleeping on or by the tracks near Aurangabad, Maharashtra, India. One additional worker sleeping nearby was injured

Westray Mine Disaster,
Nova Scotia. Canada

In the year 1992, a methane explosion killed 26 miners. The disaster highlighted a lack of safety protocols and corporate negligence. It led to the Westray Bill in Canada.

Kader Toy Factory Fire,
Thailand

In the year 1993, a fire broke out in the largest toy factory. The fire claimed the lives of 188 workers and injured over 469 others. The incident led to stricter regulations in Thailand's industrial sector.

Haunted Castle, New Jersey, USA

In the year 1984, a fire caused by a cigarette lighter igniting the flammable foam-rubber walls of the facility resulting deaths of 8 people.

Sichuan Earthquake, China

In the year 2008, a massive 7.9-magnitude earthquake struck Wenchuan County in Sichuan, causing death of 87,000 and 370,000 injuries to the people. Over 5 million people were left homeless.

Kentex Slipper Factory Fire, Philippines

In the year 2015, a fire engulfed a shoe factory in Valenzuela, killing 72 workers who were trapped inside. The tragedy revealed the poor working conditions and lack of fire exits.

Carrollton Bus Collision, Kentucky, USA

In the year 1988, a head-on collision resulting in catastrophic fire of bus. In total 27 people died and 34 were Injured in the accident.

# Cleveland Clinic fire, Ohio, USA

In the year 1929, a major structure fire occurred. Flammable nitrocellulose X-ray film ignited in a basement, emitting a poisonous yellowish-brown gas. 123 persons died and 92 were injured.

Mill River Dam Collapse, Massachusetts, USA

In the year 1874, the first major manmade dam disaster occurred in Massachusetts. The flood killed 139 people, including 43 children, and destroyed four mill villages.

Pamir Airways Accident, Kabul, Afghanistan

In the year 2010, the flight operated by an Antonov An-24 crashed into terrain shortly before it was scheduled to land in Kabul, killing all 39 passengers and 5 crew.

Bath School Disaster, Michigan, USA

In the year 1927, the deadliest school massacre an explosion by a angry school board member, who rigged the Bath School with dynamite. 45 people were killed, and over 58 were injured.

Fraterville Mine Disaster, Tennessee, USA

In the year 1902, a coal mine explosion occurred in the state of Tennessee. Official records state that 216 miners died as a result of the explosion, from either its initial blast or from the after-effects.

Darby Mine Explosion, Kentucky, USA

In the year 2006, an explosion occurred at the Darby Coal Mine caused by methane gas build-up. Five miners were killed. It prompted investigations and legal actions to improve safety conditions in coal mines.

Unzen Landslide and Tsunami. Japan

In the year 1792, it occurred due to the collapse of the southern flank of the Mayuyama dome in front of Mount Unzen, resulting in a tremendous tsunami, killing 15,000 people altogether.

## Sterlite Copper Plant Protests, TN, India

In the year 2018, during protests against the Sterlite Copper Plant demanding complaints about toxic emissions and groundwater contamination. In police firing 13 people were killed and 102 were injured.

Hajj Stampede, Mina, Mecca, Saudi Arabia

In the year 1994, accident occurred during the Hajj in Mecca during the Stoning of the Devil ritual resulted in the deaths of at least 270 pilgrims.

Estadio Nacional Disaster, Lima, Peru

In the year 1964, the disaster occurred during a football match. Police retaliated by shooting tear gas into the destructive crowd, resulting deaths of 328 people.

Mobile Magazine Explosion, Alabama, USA

In the year 1865, a warehouse containing 200 tons of powder and shells exploded, killing 300 and causing over \$720,000 in property damage.

Point Ellice Bridge Collapse,
British Columbia

In the year 1896, the disaster occurred when the site of the Point Ellice Bridge collapsed, killing 55 people.

Benton Fireworks Disaster, Tennessee, USA

In the year 1983, an explosion at an illegal fireworks operation on a farm near Benton, Tennessee killed eleven, injured one, and inflicted damage within a radius of several

Dhanbad Coal Mine Disaster,
Jharkhand, India

In the year 1965, an explosion occurred in Dhori colliery near Dhanbad, which led to fire in the mine. The fire killed 268 miners.

# Heysel Stadium Disaster, Brussels, Belgium

In the year 1985, crowd disaster occurred when Juventus fans were escaping from an attack by Liverpool fans. The wall collapsed under the force. 39 fans were killed and 600 were injured.

## Wanggongchang Explosion, Beijing, China

In the year 1626, a catastrophic explosion occurred killed around 20,000 people. The epicentre was a major production centre of gunpowder.

## Johnstown Flood, Pennsylvania, USA

In the year 1889, flood occurred after the catastrophic failure of the South Fork Dam. The dam ruptured releasing 14.55 million cubic meters of water. A volumetric flow rate flood killed 2,208 people.

NOTE: \_\_\_\_

ter the the term of the term o



DGUV

Deutsche Gesetzliche
Unfallversicherung

Spitzenverband







Safety. Health. Wellbeing.





In the year 1974, an explosion at a chemical plant killed 28 and injured 36 people. The incident resulted in tighter safety regulations for the chemical industry in the UK.

02 Odisha Train Collision, **Balasore.** India

In the year 2023, three trains collided in Balasore district of Odisha. 296 people were killed in the crash and more than 1,200 were injured.

**Dahei Chemical Plant Explosion, Gujarat, India** 

In the year 2020, the explosion occurred at the chemical factory at Dahej in Gujarat, India, five deaths and more than fifty people were and more than fifty people were injured in the accident.

Sitakunda Fire. Chittagong. **Bangladesh** 

In the year 2022, a fire and subsequent explosions at a container storage facility in Bangladesh's Chittagong District killed at least 33 people and injured more than 450 others.

**Smederevo Fortress Explosion.** Yugoslavia

In the year 1941, stockpiled ammunition and gasoline in Smederevo Fortress, Serbia, exploded due to unknown reasons. The number of casualties reported to several hundred to 2.500.

**Wankie Coal Mine Disaster, Zimbabwe** 

In the year 1972, in a Coal mine disaster 426 people were killed, making it the country's worst-ever mining disaster. mining disaster.

Surinam Airways Crash, **Zanderij, Suriname** 

June 2025

In the year 1989, the flight crashed during approach to Paramaribo-Zanderij, killing 176 of the 187 on board. It is the deadliest aviation board. It is the deadliest aviation disaster in Suriname's history.

**Beas River Disaster,** Mandi. India

In the year 2014, 24 BTech students and one tour operator from the VJIET were washed away from the Larji Dam. were washed away in water released

**ConAgra Foods Plant Explosion, Carolina, USA** 

In the year 2009, a natural gas explosion at the ConAgra Foods Slim Jim production facility in Garner, North Carolina, United States killed four people and triggered an ammonia leak.

Ferndale Colliery Disaster, Ferndale. Wales

In the year 1869, Firedamp spread throughout the workings after an opened safety lamp ignited the gas killed 53 miners and boys due to underground gas explosion.

Le Mans Disaster, Le Mans, **Sarthe. France** 

In the year 1955, large pieces of debris flew into the crowd in a motor race, killing 83 spectators and French driver Pierre Levegh, and injuring around 120 more.

**Mangaf Building Fire,** Mangaf, Kuwait

In the year 2024, a fire broke out at a residential building in Kuwait's Ahmadi Governorate, killed 50 migrant workers, at least 46 of whom were from India, and injuring around

**Uphaar Cinema Fire, Delhi,** 

In the year 1997, the Uphaar tragedy was a devastating fire incident that took place at the Uphaar Cinema in Delhi, India. The fire claimed the lives of 59 people and injured over a hundred others.

Karwin Mine Disaster. **Austria-Hungary** 

In the year 1894, a firedamp explosion occurred and took life of 235 people.

**PS General Slocum Accident. New York. USA** 

In the year 1904, the steamboat caught fire and sank in the East River of New York City with approximately 1,300 people on board. In the course of 20 minutes an estimated 1,021 people died.

Hill Farm Mine Explosion, Pennsylvania, USA

In the year 1890, an explosion occurred in Hill Farm Mine Explosion, Dunbar, killing thirty-one miners in the mine due to underground gas

**Washington Arsenal Explosion, Washington, USA** 

In the year 1864, after flares exploded, some of workers entered in a nearby building which blew up when a barrel of gun powder exploded, killing 21 women and injuring many

**Dublin Whiskey Fire,** 

In the year 1875, Dublin whiskey fire took place in the Liberties area of Dublin. It lasted a single night but killed 13 people, and resulted in €6 million worth of damage in whiskey alone. **Hillcrest Mine Disaster,** Alberta, Canada

In the year 1914, 189 workers died due to an explosion within the mine or from exposure to toxic fumes.

Coteau-du-Lac Fire Explosion Ouebec. Canada

In the year 2013, two women were killed in a fireworks warehouse explosion.

**Philadelphia Refinery Explosion, Pennsylvania** 

In the year 2019, an explosion at Philadelphia Energy Solutions' refinery destroyed the alkylation unit, where crude oil is converted to high octane gas, and led to the planned closure of the financially troubled plant.

**Hammond Circus Train** Wreck, Indiana, USA

In the year 1918, in a worst train wreck in U.S. history. Eighty-six people were reported to have died and another 127 were injured when a locomotive engineer fell asleep and ran his troop train into the rear of a circus train.

**Albion Colliery Disaster. Wales** 

In the year 1894, a massive explosion on the Groves level occurred. It was caused by the ignition of coal dust following an explosion of firedamp, and resulted in the deaths of 290 men and boys.

Air India Flight Crash, Mont Blanc, Switzerland

In the year 1966, the Air India flight that crashed into Mount Blanc killed all 117 people on board, including Dr. Homi Jehangir Bhabha, the founder of India's nuclear program.

**Aerlex Fireworks Plant Explosion. Oklahoma** 

In the year 1985, in a fire explosion 21 people were killed after a chain-reaction occurred.

**Gunpowder Warehouse Lightning, Luxembourg** 

In the year 1807, the lightning ignited the ammunition and triggered a huge explosion in a ware house. The incident killed more than 300 people and destroyed two entire blocks.

Aqaba Toxic Gas Leak. Jordan

In the year 2022, at least 10 workers died and more than 251 injured by ruptured tank containing 25 tons of chlorine in Port of Agaba, Jordan.

**Bastian Plating Company,** Auburn. Indiana

In the year 1988, improper mixing of chemicals at Bastian Plating Company killed four workers in the worst confined-space industrial accident in U.S. history; a fifth victim died two days later.

Viareggio Train Derailment, Viareggio, Italy

In the year 2009, the Viareggio derailment was occurred due to derailment and fire of a freight train carrying liquefied petroleum gas. Thirty-two people were killed and twenty-six were injured.

**Grand Canyon Mid-air** Collision, Arizona, USA

In the year 1956, a mid-air collision of United Airlines aircraft and Trans World Airlines aircrafts over Grand Canvon National Park, Arizona took place. All 128 on board in both the airplanes perished.

NOTE:

INTERNATIONAL SOCIAL SECURITY ASSOCIATION

**DGUV Deutsche Gesetzliche** Unfallversicherung Spitzenverband







Section on Prevention in the Construction Industry

Safety. Health. Wellbeing.



In the year 2020, a boiler explosion at Neyveli Lignite Corporation resulted in the death of 13 workers and injured 17 others. The explosion raised concerns about plant safety, particularly in older thermal power plants.

## **MV** Nasrin-1 Accident, Chandpur, Bangladesh

In the year 2003, a passenger ferry ship sank in the Meghna River near Chandpur, Bangladesh. Of the 750 people on board, only 220 were rescued.

# **Cymmer Colliery Explosion,**

In the year 1856, underground gas explosion occurred in the Old Pit mine of the Cymmer Colliery, Wales. The underground gas explosion resulted in a sacrifice of 141.

**Porth. Wales** 

#### South Ethiopia landslides, **East Africa**

In the year 2024, two landslides buried two villages in the South Ethiopia Regional State, Ethiopia, killing 257 people and injuring 12.

# **Bazhanov Coal Mine**

In the year 2011, in Bazhanov Coal Mine Elevator Accident, Makiivka, an elevator collapse killed 11 miners and seriously injured four others.
Hundreds of workers were evacuated from the mine.

## 02 South Kivu Fuel Tank **Explosion, Congo**

In the year 2010, a fuel tank truck exploded in Sange, Congo, killing 230 people and injuring 196. The explosion occurred after the truck overturned and villagers attempted to collect the spilled fuel.

**HMS Vanguard Explosion,** Scapa Flow, Orkney

In the year 1917, the British dreadnought battleship HMS Vanguard exploded due to fire and faulty cordite, killing 843 of the 845 men on board.

#### **Kumbakonam School Fire,** Thaniavur. India

In the year 2004, in Kumbakonam, Tamil Nadu, 94 students of the Tamil Nadu, 94 students of the primary section were killed after the school's roof caught fire. It was the second-largest school fire in India after the Dabwali Fire.

#### **Union Oil Refinery Explosion.** Illinois. USA

In the year 1984, an explosion and fire took place at a Union Oil Lemont Refinery in Romeoville, Illinois, putside Chicago killing 17 people and outside Chicago, killing 17 people and causing major property damage.

# **Ghislenghien Gas Explosion,**

In the year 2004, a massive gas explosion occurred due to a leak in a high-pressure gas pipeline in the industrial area of Ghislenghien. 24 people were killed and injured over 120. The blast destroyed nearby factories and buildings.

#### **Mecca Tunnel Tragedy.** Mecca, Saudi Arabia

In the year 1990, 1,426 people were suffocated and trampled to death in a crowd crush or stampede event in a tunnel near Mecca during the Hajj.

**Seveso Disaster, Italy** 

In the year 1976, in Seveso, Italy, due to the release of dioxins into the atmosphere 3,000 pets and farm

animals died and, later, 70,000

animals were slaughtered to prevent

**Port Chicago Naval Explosion,** 

dioxins from entering in food chain.

In the year 1944, Port Chicago explosion occurred during the loading of munitions at a naval magazine in Port Chicago. The explosion killed

320 people, including many African

**Roller Coaster Incident.** 

In the year 1930, in the Krug Park,

Omaha, Nebraska a "Big Dipper"

roller coaster crashed due to a loose

bolt. Four cars full of children and

teenagers plunged to the ground

California, USA

American sailors.

Nebraska, USA

killing 4 and injuring 17.

In the year 1898, the French ocean liner and mail ship SS La Bourgogne were sunk in a collision with the British sailing ship Cromartyshire in dense sailing ship Cromartyshire in dense fog off Cape Sable. The disaster killed 562 people on board.

**Nova Scotia** 

SS La Bourgogne Disaster,

#### **Evangelos Florakis Naval Base Explosion, Cyprus**

In the year 2011, disaster occurred when 98 containers of gunpowder exploded; 13 people were killed and 62 people were injured. The explosion knocked out the island's power station

#### **Gunpowder Magazine Explosion. Birgu. Malta**

In the year 1806, approximately 18,000 kg of gunpowder stored in a magazine in Malta, mistakenly detonated. The explosion killed an estimated 200 people and injured more than 100 persons.

#### Air France Accident, **Gonesse. France**

In the year 2000, Air France Flight 4590, a Concorde passenger jet on an international charter flight from Paris to New York, crashed shortly after take-off. 113 people were died and 6 were seriously injured.

## **Sainthia Train Collision,** Sainthia, India

**ARCO Explosion, Channelview.** 

In the year 1990, an explosion and fire occurred at the Arco Chemical Company complex. 17 people were killed An area approximately the size

of a city block was completely

**Panshet Dam Failure**,

In the year 1961, The dam burst due to a lack of RCC strengthening in the

conduit through the earthen dam.
Instead, unreinforced concrete blocks
were used due to a steel shortage.

1,000 people died in the flood.

Instead, unreinforced concrete blocks

Pune. India

killed. An area approximately the size

Texas. USA

destroved.

In the year 2010, a high-speed passenger train collided with a stationary train at Sainthia station, killing 63 people and injuring over 160. The accident was caused by human error and poor signalling prompting reforms.

#### Six Flags Parks Incident, Missouri, USA

Skyway ride at Six Flags Eureka, plunged to the ground after a six beam broke. A bolt on one of the "T" arms sheared off, causing death of 3.

#### **Asiana Airlines Flight Crash,** San Francisco

In the year 2013, the Flight 214 crash landed in San Francisco International Airport killing 3 people and injuring at Airport killing 3 people and injuring at least 190 others. This was the first fatal incident involving a Boeing 777.

#### **Dukla Coal Mine Accident.** Czechoslovakia

In the year 1961, a tragedy occurred in Dukla Coal Mine, Dolní Suchá, which resulted in the death of 108 miners due to fire.

#### **Methane Gas Mine Explosion. Netherlands**

In the year 1928, at least 13 miners were killed and 10 more injured in a methane explosion at Methane Gas Mine, Hendrik, Brunssum, Netherlands.

#### **Faversham Guncotton Explosion. UK**

**July 2025** 

In the year 1847, 18 employees killed due to major explosion during manufacture of guncotton.

#### **Bolivia-Chile Highway** Accident, Bolivia

In the year 2024, a head-on collision between a truck and a passenger bus between a truck and a passenger bus on a highway between Patacamaya, Bolivia, and Tambo Quemado, Chile, killed 16 people and injured 14 others.

#### Senjski Rudnik Disaster, **Kingdom of Serbia**

In the year 1893, an accident occurred in the mine. A forest fire spread to the shaft, killing the entire shift of 28 miners. Their bodies were never

#### **Bombay High Fire,** Arabian Sea, India

In the year 2005, a fire broke out on the Bombay High North offshore oil platform operated by ONGC, killing 22 people and injuring several others. The fire was caused by a collision between a support vessel and the platform.

#### **Chemical Tank Wagon Explosion. Germany**

In the year 1948, a chemical explosion within the BASF's Ludwigshafen, Germany site caused 207 fatalities. 3,818 were injured, and 3,122 buildings were significantly

# **Accident. Ukraine**

# **Kaohsiung Gas Explosions,**

In the year 2014, from the underground-installed gas pipelines of a petrochemical factory, a large-scale petrochemical factory, a large-scale leakage led to a series of gas explosions in the streets of Kaohsiung. 32 people were killed and 321 were injured.

Ν	O	T	Ε	:



**DGUV Deutsche Gesetzliche** Unfallversicherung Spitzenverband







Safety. Health. Wellbeing.



In the year 2004, a disastrous fire occurred in Asunción, Paraguay. After the fire broke out, exits were locked to prevent people from stealing prevent people from stealing merchandise. Over 400 people were killed and 300 were injured.

**Uttar Dinajpur, India** 

In the year 1999, it occurred, when two trains carrying about 2,500 people collided killing at least 285 people in West Bengal, India. Owing to a signalling error, both trains were using the same track.

02 Gaisal Train Collision,

**Naina Devi Temple** Stampede, Bilaspur, India

In the year 2008, stampede occurred in Himachal Pradesh. 146 people died and 150 were injured when they were crushed and forced over the side of a ravine by the movement of a large panicking crowd.

**Beirut Port Explosion.** 

In the year 2020, an explosion caused by improperly stored ammonium nitrate killed over 200 people and injured thousands. This led to increased scrutiny of port safety and increased scrutiny of port safety and the storage of hazardous materials

Copiapó Mining Accident, Copiapó, Chile

In the year 2010, 33 miners were trapped 700 meters underground after a cave-in at the San José after a cave-in at the San José copper-gold mine. After 69 days all miners were successfully rescued.

**Crandall Canyon Mine** Collapse, Utah, USA

In the year 2007, 6 miners and 3 rescue workers killed after subsequent collapses caused by inadequate mine collapses caused by inadequate mine design at the Northwestern Emery County, Utah.

Cali Explosion, Cali,

August 2025

In the year 1956, explosion of seven army ammunition trucks loaded with 1053 boxes of dynamite, killed more than 1,300 persons from the explosion, and another 4,000 were

## **Bois du Cazier Mine Disaster,** Marcinelle. Belgium

In the year 1956, an accident occurred underground as a result of the attempt to use the hoist mechanism before a coal wagon had been correctly loaded. Cables were severed, and an electrical fire broke out causing 262

Searcy Missile Silo Fire, Arkansas, USA

In the year 1965, 53 contract workers were killed during a fire at a Titan missile silo. The cause of the fire was determined to be a welding rod damaging a hydraulic hose carrying Aerozine 50 fuel.

**Nuclear Submarine Reactor Accident. Russia** 

In the year 1985, an accident occurred while it was being refuelled at Chazhma Bay, Dunay, Vladivostok in Russia. The accident resulted in 10 deaths and 49 radiation injuries.

**Stowmarket Guncotton Explosion. England** 

In the year 1871, during manufacture of guncotton at Prentices Guncotton Factory, Stowmarket, Suffolk, two massive explosions killed 28 and injured 70 persons injured 70 persons.

**Tianjin Explosions, China** 

In the year 2015, a series of explosions at a warehouse storing explosions at a warehouse storing hazardous materials killed 173 people and injured hundreds more. This disaster highlighted the need for stricter controls on hazardous materials in China.

**Collapse of the Royal Plaza Hotel. Thailand** 

In the year 1993, a collapse took place after structural deformation due place after structural deformation due to creep occurred in Royal Plaza Hotel Mueang District, Nakhon Ratchasima Province, Thailand, killing 137 people and injuring 227.

**Hamburg Dome Skylab** Disaster, Hamburg, Germany

In the year 1981, a crane collided with the Skylab carousel, which was spinning at the fair, killed seven and injured fifteen.

#### Peru Earthquake, Peru, **Western South America**

In the year 2007, the earthquake occurred in Peru, its epicentre was located at 150 km south-southeast of Lima at a depth of 39 km. At least 595 people died and over 2,290 people were injured.

**Football Fans Stampede, Eden Gardens. India** 

In the year 1980, 16 football fans died due to a stampede and riot inside the stadium in Kolkat a Kolkata Derby r Football League. stadium in Kolkata on the occasion of a Kolkata Derby match in the Calcutta Sayano-Shushenskaya Power **Station Accident. Russia** 

In the year 2009, 75 people were killed at Sayano-Shushenskaya hydroelectric power station when a turbine failed. Emergency doors to stop the incoming water took a long time to close.

**Brescia Explosion**, **Brescia. Italy** 

In the year 1769, an explosion occurred in Brescia (Italy) when a large store of gunpowder exploded after a lightning strike, causing extensive destruction and 6000 extensive destruction and 6000

Tigra Dam Failure, Gwalior,

In the year 1917, the Tigra Dam failed in 1917 due to infiltration into its sandstone foundations, killing approximately 1,000 people.

Firozabad Rail Disaster, Firozabad, India

In the year 1995, a rail collision occurred near Firozabad on the Delhi-Kanpur section, when a passenger train collided with a train which had stopped after hitting a Nilgai, killing 358 people.

Atchutapuram Pharmaceutical **Factory Explosion. India** 

In the year 2024, caused by an electrical fire, an explosion occurred in Anakapalli, Andhra Pradesh killing at least 18 people. 50 more were injured.

#### Alcântara VLS Accident, Maranhão. Brazil

In the year 2003, an accident at Alcântara Launch Center, killing 21 people occurred during the Brazilian Space Agency's third attempt to launch the VLS-1 rocket, which was intended to launch two satellites into

**DAP Fertiliser Company Gas** Leak. Bangladesh

In the year 2016, an incident of gas leakage happened at a fertilizer company in port city of Chittagong. Nearly 250 people fell sick inhaling the toxic gas, and 52 of them were hospitalized.

Franklin Mine Disaster. Franklin, Washington, USA

In the year 1894, the mine disaster occurred at the mine in Franklin. A fire caused 37 miners to suffocate in the **Explosion at Refinery,** Amuav. Venezuela

In the year 2012, an explosion caused by the ignition of leaking gas at the Amuay refinery killed 48 people, primarily National Guard troops primarily National Guard troops stationed at the plant, and injured 151

**Guangxi Chemical Plant Explosions. China** 

In the year 2008, a deadly explosion occurred at a chemical plant in Guilin. Yizhou City, Southwest China. At least 20 people were killed, 60 were injured and six people remained missing following the explosions.

**Comair Flight Crash,** Lexington, Kentucky, USA

In the year 2006, Comair Flight 5191 crashed during takeoff from Blue Grass Airport in Lexington, Kentucky, killing all 47 passengers and two crew members.

**Sumitomo Besshi Bronze** Mine landslide. Japan

> In the year 1899, 512 deaths resulted due to landslide disaster in Bronze Mine in Niihama, Shikoku, Japan

#### **HMS Royal George Accident, Portsmouth. England**

In the year 1782, the ship sank whilst anchored at Spithead off Portsmouth. The ship was rolled for maintenance work on the hull, but the roll became unstable and ship sank. More than 800 people died.

#### **Taroom Explosion, Taroom, Oueensland.** Australia

In the year 1972, an explosion occurred after a truck carrying ammonium nitrate, an explosive and fertilizer, caught fire. The explosion at the 90 kilometres north-west of Taroom in Central Queensland, killed

## **Dongying Explosion, Dongying, Shandong, China**

In the year 2015, an explosion occurred at the Diao Kou Xiang Bin Yuan Chemical Co. 13 people killed and 25 injured in the explosion.

NOTE:

INTERNATIONAL SOCIAL SECURITY ASSOCIATION

**DGUV Deutsche Gesetzliche** Unfallversicherung Spitzenverband







Safety. Health. Wellbeing.





In the year 1923, the Great Kanto Earthquake measuring 7.9 on the Richter scale struck the Tokyo and Yokohama regions in Japan. Earthquake triggered fires in factories and oil depots killing over 100,000

#### **Shanxi Mudslide Xiangfen** County, Linfen, China

In the year 2008, Shanxi mudslide was caused by the collapse of an unlicensed mine landfill in Shanxi Province of China which caused 277 deaths, 4 missing and 33 injuries.

## Train Truck Accident,

In the year 1954, a train crashed into a truck carrying students at an unmanned level crossing 130 km north of New Delhi, killing 10 and

Near Delhi, India

#### **Gresford Disaster,** Wrexham, UK

In the year 1934, an explosion and underground fire killed 261 men at Gresford Colliery.

### **Kyshtym disaster, Mayak, Soviet Union**

In the year 1957, the Kyshtym disaster also referred as Mayak disaster was a radioactive contamination accident that occurred contamination accident that occurred at a plutonium production site. It was classified as Level 6 on the INES.

In the year 1956 due to the collapse of a single span 37-metres long railway bridge at least 125 passengers were bridge at least 125 passengers were killed in a train accident between Jadcherla and Mahbubnagar

Mahbubnagar Train Accident,

Andhra Pradesh, India

#### The Honolulu Molasses Spill. Hawaii. USA

In the year 2013, 1,400 tons of molasses spilled into Honolulu Harbor. It was caused by a faulty pipe, for which the shipping company Matson Navigation Co. took molasses spilled into Honolulu responsibility.

#### Fire at Bagree Market, Kolkata, India

In the year 2018, a major fire broke out in Bagree Market in Kolkata, West Bengal. Several people were injured in the panic caused by the fire. The fire gutted over 1,000 shops, causing significant financial losses.

#### **Nanyang Export Fireworks Factory. China**

In the year 2014, an explosion at a fireworks factory in Liling in Hunan people and injured 33 others.

province, China killed at least 12

### Jodhpur stampede, Jodhpur, India

In the year 2008, in Jodhpur, Rajasthan, India, 224 people were killed and more than were 425 injured killed and more than were 425 injured in a human stampede.

#### Fire at ONGC Gas Plant. **Uran.** India

In the year 2019, a massive fire broke out at the ONGC gas-processing plant in Uran, Navi Mumbai killing 5 workers. The fire was triggered by a gas leak that ignited in one of the gas-processing units.

#### **Boiler Explosion, Gazipur, Bangladesh**

In the year 2016, a boiler explosion in a packaging industry in Tongi, Gazipur, led to the death of 23 workers. The explosion was so powerful that it made part of the fourstory building collapse.

#### **Allegheny Arsenal Explosion, Pennsylvania**

In the year 1862, three explosions killed a total of 78 workers in Lawrenceville, Pennsylvania. The largest civilian disaster during the American Civil War.

the deadliest Hajj disaster.

#### Mina Stampede, Mina, Mecca, Saudi Arabia

In the year 2015, a fatal crowd crush resulted in the death of more than 2.000 individuals, many of whom were suffocated or crushed, during the annual Hajj pilgrimage making it

## **Explosion on the French** battleship Liberté

Zenica Mine Disaster, Bosnia

and Herzegovina, Europe

In the year 2012, 289 people died in a fire at the Ali Enterprises garment

clothing for Western export.

Accident, Japan

In the year 1890, a sailing frigate of the Ottoman Navy, while returning

from a goodwill voyage to Kushimoto,

Japan, encountered with a typhoon

resulted in the loss of more than 500

factory, which made ready-to-wear

**Ottoman Frigate Ertuğrul** 

In the year 1911, a tremendous explosion aboard Liberté rocked the harbor in which 286 were killed in the explosion and 188 were wounded.

**Explosion. India** 

**Sivakasi Firecracker Factory** 

In the year 2014, after a 3.5 Richter-scale earthquake hit Zenica, causing a rock burst in the coal mine "Raspotočje". Out of the 34 miners trapped inside the mine, 5 lost their In the year 2012, an explosion at a firecracker factory in Sivakasi killed 40 workers and injured over 60 others. The accident occurred due to others. The accident occurred due to improper storage of chemicals and poor safety protocols.

#### **Garment Factory Fire, Marcoule Nuclear Plant** Karachi. Pakistan **Explosion. Gard. France**

In the year 2011, an explosion occurred at the Marcoule Nuclear Plant in southern France. The explosion took place in a furnace used to melt metallic radioactive

### **Shiloh Baptist Church** Stampede, Alabama, USA

In the year 1902, a stampede occurred at the Church in Birmingham, Alabama, resulting in the deaths of 115 people.

### MV Le Joola disaster, Senegal. West Africa

In the year 2002, MV Le Joola was a Senegalese government-owned rollon/roll-off ferry that capsized off the coast of the Gambia, 1,863 people died in the accident.

# In the year 1976, 6-floor apartment building in Pakistan collapsed, killing

Karachi, Pakistan

building in Pakistan collapsed, killing 80 people and injuring 48 due to faulty foundation.

In the year 1807, one of the bridge girders collapsed under the crowds

Hachiman festiva people were killed.

on board were killed.

disaster. USA

In the year 1973, Airlines Flight 655 aircraft crashed in the Black Fork Mountain, Arkansas. The eight

passengers and three crewmembers

heading towards the Fukagawa

Hachiman festival, nearly 1,500

**Texas International Airlines** 

**Avondale Mine Disaster,** 

Pennsylvania, USA

In the year 1869, a massive fire at the Avondale Colliery, Plymouth caused the death of 110 workers. Fire started with wooden lining of the mine shaft blocking the only entrance and exit to

#### **Congo Football Riots. Apartment Building Collapse, Democratic Republic of Congo**

In the year 2008, riot broke out during a football game in Butembo, Nord-Kivu, Congo. Firing of shots into the air by the police caused panic. 13 people were killed by suffocation. while 36 others were injured.

**Knockshinnoch Mine** 

Disaster, Ayrshire Scotland

In the year 1950, liquid peat and moss flooded the mine, trapping over 100

men underground. It took days to

reach the trapped men of whom 13

#### Eitai Bridge Collapse, **Oppau Explosion,** Tokvo. Japan **Ludwigshafen, Germany**

September 2025

In the year 1921, an explosion occurred when a tower silo storing 4,500 tonnes of a mixture of ammonium sulphate and ammonium nitrate fertilizer exploded at BASF plant killing 500 people and injuring 2,000.

#### **Indonesia Earthquake and** Tsunami. Indonesia

In the year 2018, a 7.5 magnitude earthquake struck the island of Sulawesi, Indonesia, followed by a devastating tsunami with waves as high as 6 meters. The city of Palu was hard hit. More than 4300 people died.

## NOTE:

**DGUV Deutsche Gesetzliche** Unfallversicherung

Spitzenverband







Safety. Health. Wellbeing.



In the year 2022, 135 people had lost their lives, and 583 others were injured as a result of stampede in injured as a result of stampede in Malang Regency, East Java. The disaster is the second deadliest in the history of association football.

> **Great Chicago Fire,** Chicago, Illinois, USA

In the year 1871, the Great Chicago Fire began in the barn of Patrick and Catherine O'Leary and blaze could be controlled only two days later. A large area of the city was devastated killing 300 people.

**Rail Road Collision,** Texarkana, Arkansas

In the year 2005, A liquefied gas leak and explosion occurred after seven train cars and a tank car derailed. The explosion killed one person and forced the evacuation of hundreds of homes.

**Blantyre Mining Disaster, Blantvre. Scotland** 

In the year 1877, a Firedamp explosion occurred. It was known that firedamp was present in the pit and it is likely that this was ignited by a naked flame. The accident left 92 widows and 250 fatherless children.

Jaipur Oil Depot Fire, Raiasthan, India

In the year 2009, a massive fire broke out at the Indian Oil Corporation's oil depot, causing explosions that lasted for over a week. The fire claimed 12 lives and injured over 200 people. 02 Air Union Accident, **Kent. England** 

In the year 1926, an Air Union Blériot 155 crashed at Leigh, Kent, England, after the aircraft caught fire in mid-air during an attempted emergency landing at Penshurst Airfield, killing all seven on board.

Vajont Dam Landslide, Italy

In the year 1963, A landslide of about 270 million cubic meters of rock fell into the Vajont Reservoir. It was a catastrophic event that caused a wave that destroyed villages and killed nearly 2,000 people.

**Explosion of Ammunition,** near Kiukiang, China

In the year 1926, 1200 people were died due to explosion of ammunition on Chinese Troopship Kuang Yuang, near Kiukiang, China

> Springhill Mining Disaster. Nova Scotia, Canada

In the year 1958, a "bump," or underground earthquake caused by a collapse, killed 75 miners. The other 99 miners were rescued by a recovery effort. Previous disasters had occurred at the same mine in 1891 and 1956.

Morbi Bridge Collapse, **Guiarat. India** 

In the year 2022, a pedestrian suspension bridge over the Machchhu River in the city of Morbi Machchhu River in the city of Morbi collapsed, causing the deaths of at least 141 people and injuries to more than 180 others.

Patna Stampede, Bihar,

In the year 2014, when people were returning after attending Dussera Mela at Patna where a huge crowd had gathered to witness the event. 32 had gathered to witness the event. 32 people died in the stampede and 50

Windscale Fire, Seascale, Cumbria. UK

In the year 1957, the worst nuclear accident in the United Kingdom's history, and one of the worst in the world, ranked in severity at level 5 out. world, ranked in severity at level 5 out of 7 on the INES. There were 100 to

**London Beer Flood, Horse Shoe Brewery. London** 

In the year 1814, it took place when one of the 6.7 m wooden vats of fermenting porter burst at the Meux & Co's Horse Shoe Brewery. The pressure of the escaping liquid dislodged valve of other vessels releasing huge quantity of beer.

> **Nedelin Catastrophe, Kazakh SSR. Soviet Union**

In the year 1960, an explosion occurred when the second stage engine ignited accidentally, killing approximately 54 to 300 technical and military personnel working on the preparations.

> **An Imperial Disaster- Bengal Cvclone. India**

In the year 1876, in the Bay of Bengal, the 40 feet height wave swept away drowning around 215,000 people. At least another 100,000 died in the least another 100,000 died in the cholera epidemic and famine that followed.

**British Civil Airship Accident, Shell Loading Plant Oise. France Explosion, New Jersey** In the year 1930, on its maiden voyage, the British civil airship crashed in Allonne, Oise, while flying at low altitude at night in a rainstorm, killing 48

In the year 1918, T.A. Gillespie Company Shell Loading Plant in Sayreville, New Jersey, exploded, killing approximately 100 people, destroying 300 buildings and causing \$18 million in damages.

**Bridge Stampede Lyon,** 

In the year 1711, 245 people were killed in a crush on the Guillotière bridge, when a large crowd on the other side of the Rhône trapped against an obstruction in the middle of

Jesse Pipeline Explosion, Lagos, Nigeria

In the year 1998, in the community of Jesse, Nigeria, which is about 180 miles southeast of Lagos. It was the deadliest pipeline explosion in Nigeria's history, with 1,082 deaths.

**Luxury Liner sinks off, Brazil** 

In the year 1927, Italian luxury liner SS Principessa Mafalda was rocked breaking propeller shaft. Unable to close the watertight doors, the ocean began to pour in. 309 passengers and SS Principessa Mafalda was rocked

NOTE:

**Tangerang Fireworks Disaster,** Kosambi. Indonesia

Java, killing 353 people.

killing 48.

**Spyros Disaster, Singapore** 

In the year 1978, the Greek Tanker Spyros exploded at Jurong Shipyard in Singapore. It killed 76 people, and

post-war history.

Indonesia

in Singapore. It killed 76 people, and

remains the worst industrial accident,

in terms of lives lost, in Singapore's

Fishing Boat SIEV X Sank,

In the year 2001, the dilapidated Indonesian fishing boat was carrying

cover 400 asylum seekers. It sank just

south of the Indonesian island of

In the year 2017, a fireworks factory exploded, shattering windows as far as 4 kilometres away and igniting a massive fire inside the factory. 49 were killed and 46 were injured.

Datia. India In the year 2013, during the Hindu festival of Navratri, a stampede broke

out on a bridge near the Ratangarh Mata Temple in Datia district, Madhya Pradesh, India, killing 115 people and injuring more than 110.

> Russian Battleship Explosion, Sevastopol

**Bus Accident, Anchumoorthy** 

Mangalam, India

and more than 50 others injured when a tourist bus carrying school children In the year 2022, 9 people were killed

rammed into a KSRTC bus at

Vadakkenchery in the Kerala district.

**Ratangarh Temple Stampede,** 

Imperatritsa Mariya - the Russian Battleship, was sunk at anchor in Sevastopol by a magazine explosion in late 1916, killing 228 crewmen.

Berg, Norway

Widerge Flight 744 Accident.

In the year 1993, incident occurred and killed 6 people on board, including the crew of two. The aircraft crashed at Berg in Overhalla Municipality because it held too low an altitude. 13 people were injured in the accident.

**United Air Lines Crash,** Wyoming, USA

October 2025

In the year 1935, a Boeing 247D flying from Salt Lake City, Utah, to Cheyenne, Wyoming, United States, crashed near Silver Crown, Wyoming. crashed near Silver Crown, Wyoming, due to pilot error; all 12 people on board died.

Senghenydd Colliery Disaster,

In the year 1913, an explosion in a coal mine killed 439 miners and remains one of the worst mining disaster in British history. This incident prompted improvements in mine ventilation and safety practices.

**Aberfan Disaster, Wales** 

In the year 1966, a colliery spoil tip collapsed, burying a school and killing 144 people, including 116 children and 28 adults. This led to changes in regulations for waste tipping in the coal

Baku Metro Fire, Baku Metro. Azerbaijan

In the year 1995, a fire broke out in the subway system of Baku, between the stations Ulduz and Nariman Narimanov. According to official figures, the fire killed 289 people while 270 people were injured.









www.vz-rsi.in



Safety. Health. Wellbeing.



In the year 2017, a boiler explosion at the National Thermal Power Corporation Plant in Unchahar resulted in the death of 43 workers and resulted in the death of 43 workers and injuries to over 100 others. It sparked debate about worker safety & management systems.

#### Sherbrooke Accident, **Quebec. Canada**

In the year 2012, two people died and 19 were injured in an industrial processing plant belonging to Neptune Technologies & Bioressources, a manufacturer of health care products.

#### X-15 Flight 191 Accident, California. USA

In the year 1967, U.S. Air Force test pilot was killed during X-15 Flight 191 when it entered a hypersonic spin while descending, then oscillated violently as aerodynamic forces increased after re-entry.

#### The Phnom Penh Stampede, Cambodia

In the year 2010, 347 people were killed and another 755 injured in a stampede and crowd crush during the Water Festival celebrations at Diamond Gate Bridge of Diamond Island, Cambodia

## Big Game Disaster,

In the year 1900, at the annual college football game at San Francisco, Berkeley, California a large crowd gathered upon the roof of a glass blowing factory to watch. The roof collapsed factory to watch. The roof collapsed spilling spectators onto furnace, 23

### 02 Dhanbad–Alappuzha Express Train Accident, India

In the year 2024, 10 people were killed and at least 20 were injured in a train accident. Passengers jumped onto the adjacent track after hearing a rumor that their train was on fire. The train on other track ran over the passengers.

## **Mitsui Miike Coal Mine** Disaster. Fukuoka. Japan

In the year 1963, a coal dust explosion at the Mitsui Miike coal mine killed 458 miners and injured over 800 due to carbon monoxide poisoning. This disaster drew attention to the dangers of coal dust.

#### **Aeroflot Accident, Vnukovo** Airport. Moscow

In the year 1959, the Antonov An-10 operating this flight crashed short of

the airport runway while on final approach. All 32 passengers and eight crew members were killed.

## Gowari Stampede, Nagpur,

In the year 1994, 114 people from the Gowari community were killed and 500 more injured when Nagpur Police were trying to disperse almost 50,000 Gowari protesters using a baton, triggered a stampede amongst the protesters.

# Eastern Air Lines Accident,

In the year 1962, Eastern Air Lines Flight 512, while attempting to land at its destination hit the ground at its destination hit the ground at Idlewild Airport, 25 of the 51 occupants of the plane died in the

# **Seest Fireworks Disaster.**

In the year 2004, N. P. Johnsens Fyrværkerifabrik fireworks factory exploded in Seest, Denmark. 1 firefighter died and seven from the rescue team as well as 17 locals were injured. 2,107 buildings were damaged.

#### **Wannian Coal Mine Explosion, Handan City. Hebei Province**

In the year 2008, a gas explosion at the mine killed 4 miners and thirteen injured at Wannian Coal Mine of Jizhong Energy Group Co., Ltd. in Handan City, Hebei Province.

In the year 1981, at least 169 workers

## Manila Film Center Collapse, **Pasav City. Philippines**

died or were buried in quick-drying cement after the scaffolding collapsed during the construction of the Manila Film Center in Pasay City, Philippines.

#### **Tazreen Garment Factory Fire,** Dhaka, Bangladesh

In the year 2012, a devastating fire broke out at the Tazreen Fashions garment factory located in Ashulia. Bangladesh. The fire killed 112 workers and injured more than 200

# Blast, Pirana, India

**Sahil Enterprise Chemical** 

In the year 2020, in Ahmedabad a chemical factory blast resulted in 12 deaths and injuries to nine people.

The building collapsed and several The building collapsed and several people died and others injured due to the fallen debris.

#### Kogushi Sulfur Mine Collapse, Western Gunma, Japan

In the year 1937, a sulphur mine explosion took place in Japan. The explosion resulted in the deaths of 254 workers and injured several

### Aleksinački Rudnik Mine Accident. Yugoslavia

In the year 1989, an underground fire caused by negligence at the depth of 700 m killed the entire shift of 90 miners, who suffocated from the smoke and carbon monoxide.

#### Listvyazhnaya Mine Disaster, Kemerovo Oblast. Russia

In the year 2021, smoke from a fire in a ventilation shaft of the Listvyazhnaya Mine at Kemerovo Oblast caused the suffocation of over

more than 44 people.

In the year 1984, a series of boiling liquid expanding vapour explosions (BLEVEs) at a liquefied petroleum gas tank farm killed more than 500 and injured thousands in San Juan Ixhuatepec, Mexico.

San Juanico Disaster,

**Mariana Dam Disaster, Minas** 

In the year 2015, an iron ore tailings dam suffered a catastrophic failure. The resultant flooding destroyed the village of Bento Rodrigues and killed 19 people.

Foord Pit Explosion,

Stellarton, Canada

In the year 1880, a deadly firedamp explosion took place at Canada killing

Gerais. Brazil

## **HMS Bulwark Magazine Explosion. UK**

explosion. A total of 741 man

#### **Sumburgh Disaster, Shetland Islands. Scotland**

In the year 1986, a British International Helicopters Boeing 234LR Chinook crashes 21/2 miles helicopter crash on record.

east of Sumburgh Airport killing 45 people. It is the deadliest civilian

## **Mahabir Colliery Disaster,** Ranigani, India

In the year 1909, a series of blasts triggered by workers broke the mine's water table, flooding the mine within minutes. Six miners died from waterlogging, and 71 workers were trapped underground for almost two days.

**Farmington Mine Disaster,** 

miners. This accident led to the

passage of the Federal Coal Mine

West Virginia. USA

In the year 1968, an underground explosion at a coal mine killed 78

Health and Safety Act in 1969

### Pelsall Hall Colliery Disaster, Pelsall. England

November 2025

In the year 1872, the Pelsall Ironworks saw the Pelsall Hall Colliery disaster, which lay claim to the lives of twenty two men between the ages of twenty two men between the ages of

# **Heilongjiang Mine**

In the year 2009, a mining accident occurred near Hegang in the Heilongjiang, North-eastern China, which killed 108 people and 29 people were hospitalised.

**Explosion. China** 

Campos Basin Oil Spill,

In the year 2011, a Chevron owned oil well began leaking causing 32,000 to 52,000 litres of crude oil to enter the

ocean every day. 590,000 litres of oil

were spilled over the course of four

Campos Basin, Brazil

#### **Dongfeng Coal Mine Explosion, Qitaihe City, China**

In the year 2005, a methane gas explosion occurred inside the coal mine located in Qitaihe City, Heilongjiang Province, China. 171 miners were killed in the explosion.

#### **Marianna Mine Explosion,** Pennsylvania. USA

In the year 1908, Marianna Coal Mine disaster, in Marianna, Pennsylvania, killed 154 miners and left one survivor. It was the worst disaster in Washington County history.



people were killed, and 100 were injured.

# **New York City, USA**

NOTE:

**DGUV Deutsche Gesetzliche** Unfallversicherung

Spitzenverband







INTERNATIONAL SOCIAL SECURITY ASSOCIATION

Safety. Health. Wellbeing.



In the year 1923, the dam collapsed in the Northern Province of Bergamo, forty days after the reservoir was filled causing widespread flooding filled, causing widespread flooding that killed at least 356 people.

Bhopal Gas Tragedy, Bhopal, India

In the year 1984, the worstever industrial disaster occurred at the Union Carbide plant in Bhopal, India, where methyl isocyanate gas leak killed 3700 to 16,000 people and injured hundreds of thousands. The tragedy led to the development of stringent hazardous chemical safety regulations in India and globally.

**Giroux Mining Accident,** Ely, Nevada

In the year 1907, 2 men were killed and 4 other men were trapped 1000 feet down in a mining shaft for 46 days due to collapse.

**Brooklyn Theatre Fire, New York. USA** 

In the year 1876, the fire took place at the Brooklyn Theatre, near the corner of Washington and Johnson streets, with over 1,000 quests attending. The with over 1,000 guests attending. The conflagration killed at least 278

The Halifax Explosion, Halifax. Canada

December 2025

In the year 1917, a ship loaded with about 9,000 tons of high explosives caught fire as a result of a collision in Halifax harbour, and exploded. The explosion killed about 2,000 and injured about 9.000.

Pearl Harbor Attack and Industrial Accidents, Hawaii, USA

In the year 1941, the attack on Pearl Harbor resulted in the loss of lives, military assets also triggered multiple military assets also triggered multiple industrial accidents. The attack killed 2,403 people, wounded thousands due to fires and explosions.

### **Church of the Company** Fire, Santiago, Chile

In the year 1863, the Church of the Society fire is the largest ever to have affected the city of Santiago, Chile.
Between 2,000 and 3,000 people **KLM Croydon Accident, Croydon, United Kingdom** 

In the year 1936, KLM Croydon accident occurred while taking off from the Croydon Air Port on a scheduled flight to Amsterdam, Netherlands. The aircraft was destroyed and 15 of the 17 passengers and crew died.

**Uyo Church Collapse,** Akwa Ibom State, Nigeria

In the year 2016, the roof of the Reigners Bible Church International, collapsed in Uyo, a city in Akwa Ibom State, Nigeria, during the consecration or ordination of the local bishop. At least 23 people are confirmed to have died in the disaster, with other reports stating numbers as high as 160.

**Hertfordshire Oil Storage Terminal Fire. UK** 

In the year 2005, A series of explosions at the Buncefield oil storage depot near Hemel Hempstead, described as the largest peacetime explosion in Europe, devastated the terminal and many surrounding properties

Oaks Colliery Explosion in **Barnsley, Yorkshire, UK** 

In the year 1866, Oaks Colliery Explosion caused by the explosion of firedamp. It was the worst mining accident in England, with a death toll

Talke o' the Hill Colliery explosion, Talke, England

In the year 1866, a gas explosion occurred at the Big Banbury Pit at Talke. 89 men and boys were corpses strewed in all directions; 14 horses were struck dead, and their stables were on fire.

**MV Salem Express Accident,** 

In the year 1991, the ferry ship sink off Port Safaga in the Hyndman Reef, red sea with the reported loss of 470 passengers and crew members

## The Mitsubishi Hōjō Mine Disaster, Kyushu, Japan

In the year 1914, A gas explosion at the Hōjō (Hojyo) coal mine killed 687. It was the worst mining accident in Japan. **Yolande Mine Explosion,** Birmingham, Alabama

In the year 1907, a major explosion occurred at the Yolande mine, Tuscaloosa County, Birmingham, Alabama. The explosion resulted in 57 deaths and numerous injuries.

Niterói Circus Fire, Niterói. Brazil

In the year 1961, the fire occurred in the city of Niterói, Brazil. A fire in the tent housing a sold-out performance by the Gran Circus Norte-Americano caused more than 500 deaths.

Ferrari Crash, Cavriana, Italy

In the year 1957, the damaged Ferrari spun out of control and flew off the road, instantly killing de Portago and his co-driver Edmund Nelson. Tragically, nine spectators were also killed -five of them children.

**Tacoa disaster, Venezuela** 

In the year 1982, an immense boilover from a fuel oil tank within the premises of a thermal power plant. It caused about 150 fatalities, including firefighters, media workers and bystanders.

Ferry MV Doña Paz Accident, **Tablas Strait. Manila** 

In the year 1987, passenger ferry MV Doña Paz collided with the oil tanker in Doña Paz collided with the oil tanker in the Tablas Strait, roughly 180 km south of Manila. The collision ignited the 8,800 barrels of oil engulfing both ships. of Manila. The collision ignited the 4,400 passengers and crew died.

**Hulton Colliery Disaster,** Lancashire, England

In the year 1910, the Hulton Colliery disaster in Westhoughton, also known as the Pretoria Pit disaster occurred deep underground, causing a massive loss of life. 344 miners were killed.

### **Kingston Fossil Plant Coal Fly** Ash slurry spillage, Tennessee

In the year 2008, 1.1 billion gallons of coal ash were released when a dike ruptured at an ash storage pond at the Roane County, Tennessee Valley Authority's Kingston Fossil Plant.

Dabwali Fire Accident. Sirsa. India

In the year 1995, the fire occurred at the marriage hall and spread quickly and blocked the main entrance. At least 400 people died in the fire, and another 160 were injured, half of them with serious burns.

**Sowcrofts Colliery Explosion, Kearsley, England** 

In the year 1879, an underground gas explosion occurred at Kearsley, England. Approximately 11 workers died due to a big gas explosion.

**Luoyang Christmas Fire, Zhongzhou Road, China** 

In the year 2000, a major fire occurred in Luoyang, in China's Henan Province, killing 309 people. It was the second deadliest nightclub fire resulting from welding that sparked flammable materials.

Indian Ocean Tsunami, **Southeast Asia** 

In the year 2004, triggered by a 9.1 magnitude earthquake, tsunami in Indian Ocean impacted industrial facilities in the Southeast Asian coutries. Over 230,000 people were killed and thousands injured.

**Chasnala Mining Disaster,** Jharkhand, India

In the year 1975, disaster killing 372 miners occurred when water from an adjacent mine flooded the Chasnala coal mine following an explosion. The coal mine following an explosion. The incident led to a review of mine safety standards.

Tay Bridge disaster, Firth of Tay. Dundee. Scotland

In the year 1879, the first Tay Rail Bridge collapsed into the Firth of Tay at Dundee, taking with them a train, 6 carriages and 75 souls to their fate.

#### South Korea Plane Crash. **South Korea**

In the year 2024, a Boeing 737-800 (Jeju Air) crash landed at the Muan Airport, South Korea. 179 killed (175 passengers, 4 crew).

**Iroquois Theater Fire,** Chicago, Illinois, USA

In the year 1903, the Iroquois Theatre caught fire during a crowded performance. The fire spread rapidly performance. The fire spread rapidly due to the lack of fire exits and fireproof materials, trapping many people inside the theatre. The fire killed 602 people.

**Bagley train wreck, Bagley,** west of Ogden, Utah, USA

In the year 1944, the Bagley train wreck (also known as the Great Salt Lake wreck) occurred in Utah, United Lake wreck) occurred in Utah, United States. The crash killed 50 including over 35 military personnel and injured NOTE:

**DGUV Deutsche Gesetzliche** Unfallversicherung

Spitzenverband







