ZERO intoxicants at work and in educational settings

Anyone who works while under the influence of intoxicating substances is putting their own health and safety and the health and safety of their colleagues at risk. This applies to alcohol and to other drugs. The legalisation of cannabis raises new questions regarding limits, proof and legally safe penalties. The German social accident insurance has taken a clear stance on this issue.

Five requirements set out by the German social accident insurance regarding the legalisation of cannabis.

According to the German Federal Ministry of Health, 4.5 million adults have consumed cannabis at least once over the past year. With the new law to legalise cannabis, the government is hoping to protect the health of its citizens by creating a situation in which the quality of cannabis can be controlled and by preventing contaminated substances from coming into circulation.

Along with the plans to legalise cannabis, the potential impacts this may have are also discussed. These impacts also relate to the world of work and education. "The

Limits
In road traffic, there is a limit of 1 ng THC per ml of blood for cannabis. However, this only proves consumption and does not allow any conclusions to be drawn about a safety-relevant effect. The *Verkehrsgerichtstag* 2022 (German Traffic Court Conference) recommens raising the limit.

German social accident insurance is taking a very clear position on this matter", states Dr Stefan Hussy, Director General of DGUV, "and that is: ZERO alcohol and ZERO cannabis at work and in education. Because cannabis, alcohol and other intoxicants can have a negative impact on health and safety at work. We advocate for the equal treatment of alcohol and cannabis at the workplace and at educational institutions. Consumption of either substance that could put health and safety at risk must be ruled out."

Risk to safety
Consuming cannabis can impair a person's reaction time. It can also cause euphoria, increased sensitivity to light and even make people more indifferent to risks. Short-term memory can also be impacted. For young people between 17 and 25 years of age, cannabis use may affect normal brain development and may lead to long-term harm.

Companies have a responsibility
According to DGUV Regulation 1, employers must ensure that workers are able to carry out their tasks without causing risks to themselves or to others. However, it is doubtful how they can and may prove the use of cannabis and the possible effects at work. "There are no rapid tests for cannabis consumption, and everybody responds

differently. Therefore, companies have very limited legal means to prove that cannabis has been consumed and take legally safe measures", explains Hussy.

Investing in research
The German social accident insurance therefore calls for research projects to be funded. They can help to establish evidence-based criteria on how cannabis affects behaviour and reactions. There must also be more public information campaigns about the effects of cannabis. In particular, the risks to health and safety must be clearly emphasised. Legalisation should also ensure that employers are legally protected.

Addiction prevention in companies
Workplace addiction prevention has been a focus for Germany's social accident insurance institutions for some time already. They support companies and organisations with advice and information about the effects of consuming narcotics, including cannabis. In light of the planned legislative changes, the social accident insurance institutions will expand the existing activities in cooperation with other stakeholders in workplace and school prevention activities.

···› www.dguv.de › Webcode: dp1320340 (German only)

Dear reader,

3 December will mark the thirtieth anniversary of the International Day of Persons with Disabilities. It was proclaimed by the United Nations in 1993 as a day of remembrance and action. The fact that this day is still needed to "remember" the rights of people with disabilities is thought-provoking.

Why is inclusion a topic for us, the German social accident insurance? Because we take care of people who are dealing with the consequences of an occupational accident or occupational disease – which can be temporary or can affect a person for the rest of their life. We support these people during rehabilitation and help them to get back to participating in social and professional life. We advise companies about how workplaces can be restructured to eliminate barriers for people with disabilities and help them to do this. We have networks such as DGUV job to bring companies and workers with disabilities together. We know that it works – with commitment from all parties involved and adequate information.

The labour shortage is bringing the inclusive labour market into focus. The initiative of the Federal Ministry of Labour and Social Affairs (BMAS) to give people with disabilities equal access to the primary labour market is important and right. But the foundations for this are laid much earlier – in day care centres and schools. If this natural cooperation is not practised and facilitated there, then it cannot continue in the world of work.

This 3rd December will still be needed, especially in times when there are tendencies to cut back on inclusion or take it off the agenda altogether. However, inclusion is not a matter of goodwill – it is a human right.

Best regards
Dr Edlyn Höller
Deputy Director General of the German
Social Accident Insurance (DGUV) der DGUV

"We should use AI to make work safer."

Artificial intelligence (AI) is changing the world of work. This opens up new possibilities and also carries some risks. Occupational safety and health and the social accident insurance are also grappling with the impacts of AI. DGUV Kompakt spoke with Dr Stefan Hussy, Director General of DGUV, about projects that have already been put into action, the potentials of AI and necessary regulations.

Dr Hussy, AI is said to have the potential to change the world of work to a greater extent than previous technologies. Can AI also help to make work even safer?
AI will change the world of work profoundly and will of course have an impact on occupational safety and health. We can and should use this technology to make work safer.

How can this be done?
Machines can be made safer, for example, by using sensors that record measurement data that provide insights about the status of the machine. This can include temperature, pressure, vibrations, noise or throughput. By combining this data with data from the past, AI can identify potential malfunctions at an early stage.

Another example is assistance systems that make working with machines and vehicles safer by detecting obstacles or the hand of a person. In this case, the saw blade remains stationary when a hand comes too close.

With regard to our key duties of consulting and monitoring, AI can help to analyse large quantities of data and make predictions as to which companies are most likely to have serious accidents due to deviations in the area of occupational safety and health. Supervisors can then go to these companies and provide advice. Of course, there is also a lot of potential in administration by speeding up processes.

Is AI already being used in the German Social Accident Insurance?
Yes. At the German Social Accident Insurance Institution for the energy, textile, electrical and media products sectors (BG ETEM), AI is being utilised as part of the Reha Plus project. Here, AI helps to identify potential cases for rehabilitation management as early as possible. This allows for optimal utilisation of capacities in the accident teams.

AI has also been used for a long time in the legal recourse department of the BG ETEM to evaluate and flag around 50,000 accidents every week according to standardised criteria. This would not be possible manually.

In BG Hospital Berlin, colleagues in the Radiology department have been using AI since 2021 to identify brain haemorrhages more quickly and with greater accuracy. They are currently working on a similar diagnostic process for injuries to the spine.

What other potentials does AI offer?
AI can help us to identify patterns when accidents or near accidents occur, which can then help us to predict such events in future. Therefore, we are currently funding the ENTRAPon project, which studies accidents caused by slipping and tripping. AI could also be used to develop tailored prevention measures for individual companies.

If we think about sensor technology, large quantities of real-time data could be generated and evaluated using artificial intelligence. I'm thinking of predictions about changing working conditions, for example in the event of exposure to toxic substances. AI could provide early warnings as soon as limit values are exceeded.

Another application scenario would be to update risk assessments in real time and report possible measures directly to employees.

Does the use of AI in occupational safety and health carry any risks?
As a social insurance provider, we have a special responsibility with regard to how we use AI in the area of administration. This is because we process sensitive data and our decisions directly impact companies and their employees. It is important that AI applications are only used as a basis for decisions, and that these decisions can ultimately be made and understood by humans.

The ENTRAPon project funded by the German Social Accident Insurance aims to identify patterns in slipping and tripping accidents and use the data to make predictions.

Preventing slip, trip and fall accidents with AI

A slip, trip or fall – all it takes is one wrong step, improper footwear or poor visibility. Accidents like this happen very frequently, and this is why the DGUV is funding the ENTRAPon project, which aims to help recognise and prevent such accidents at an early stage using artificial intelligence.

When AI learns the desired behaviour from sample data, this can result in mistakes, which mirrors the process of human learning. The impacts are often non-critical, such as in the case of automated music recommendations. However, in the field of safety-relevant machine applications, a mistake could potentially pose a risk of injury or loss of life. Because of this, the German social accident insurance institutions are actively involved in developing safety concepts.

Which national and EU-wide framework conditions do you think the use fo AI needs?
In the area of labour and social administration, we are already developing shared values and principles for the use of AI. To this end, the social accident insurance institutions have been intensely involved in the *Netzwerk KI in der Arbeits- und Sozialverwaltung* (Network on AI in Labour and Social Administration) under the leadership of the Federal Ministry of Labour and Social Affairs. The result is the "Self-commitment guidelines for the use of AI in official practice".

In national and international standardization, the social accident insurance institutions are actively working on shaping the use of AI applications in the context of functional safety.

However, it is also important that employees from being monitored by AI. That is why we welcome the fact that the German Federal Government is planning a bill on this topic. The EU's AI Act will also be an important and necessary step for the safety and fundamental rights of EU citizens and companies using AI.

How does the German Social Accident Insurance support its members with the introduction of AI applications?
Support is provided in the form of networking, exchanging information, joint research projects and practical guidelines. The "Competence Centre for Artificial Intelligence and Big Data" at the Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA) was established in 2020. The team there supports the social accident insurance institutions with the planning and implementation of specific AI projects. It also serves as a key point of contact for stakeholders in the fields of politics, research and society.

···⟩ www.dguv.de › IFA › Webcode: e1179676

Slip, trip and fall accidents (STF accidents) are one of the most common and often underestimated accidents at work. They can lead to serious injuries and can even be fatal. These types of accidents are responsible for a high amount of lost time in many industries. In 2022, there were 165,420 STF accidents and 2,485 new accident pensions were registered.

The ENTRAPon project is a research project for the prevention of slip, trip and fall accidents using the example of a company in the steel production industry and a company in the postal and parcel delivery industry. It is being carried out by Ruhr University Bochum, London South Bank University and Koblenz University of Applied Sciences, with the involvement of the Institute for Occupational Safety and Health of the German Social Accident Insurance and is funded by DGUV. The project makes use of virtual reality as a training method. Employees from two companies are taking part in the project and are divided into three training groups. The first two groups receive treadmill-based training with various gait disturbances (virtual or mechanical). The last group, the control group, does not receive such training. Each test subject completes a course while wearing a full body motion capture suit. This suit records the movement data. After the course has been completed, the data is analysed to identify near fall accidents. AI technology helps with this. The aim is to create a practical warning system for everyday working life that predicts the individual risk of falling, for example. The integration of such AI-supported systems for accident prevention into operational practice can save lives and prevent injuries. This benefits not only employees, but also companies.
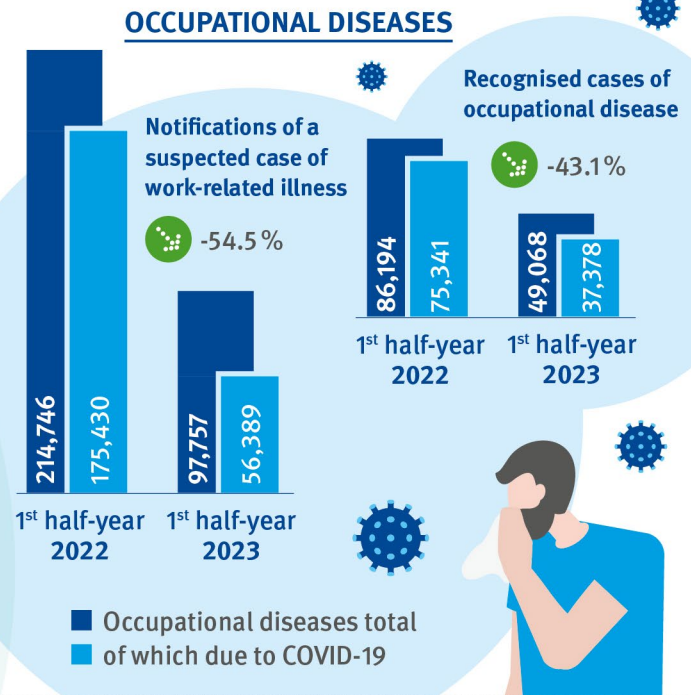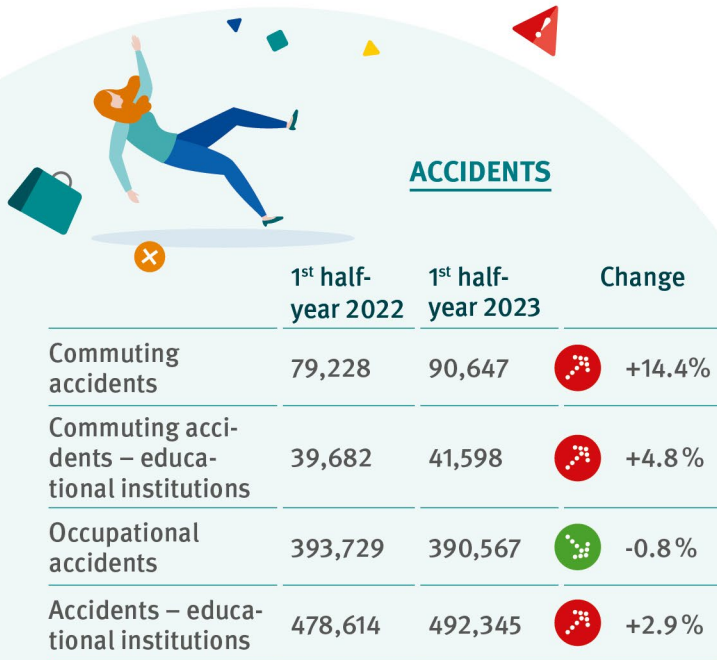
···⟩ www.dguv.de › ep1201642

Further reading

Article from DGUV *forum* "Möglichkeiten und Grenzen von künstlicher Intelligenz in der Arbeitswelt" (Opportunities and limits of artificial intelligence in the world of work)

···⟩ DGUV forum › Ausgabe 3/23
(German only)

Selbstverpflichtende Leitlinien für den KI-Einsatz in der behördlichen Praxis der Arbeits- und Sozialverwaltung (Self-imposed guidelines for the practical use of AI in labour and social administration settings)

···⟩ www.bmas.de › Publikationen
(German only)

More commuting accidents, fewer occupational diseases.

In the first half of 2023, there were 14.4 percent more reportable commuting accidents than in the same period of the previous year. Likewise, there has been a 4.8 percent increase in accidents that occur during the commute to an educational or childcare facility. These are the preliminary figures from the German social accident insurance institutions. In contrast, there was a slight decrease of 0.8 percent in reportable occupational accidents. The number of reportable school accidents increased by 2.9 percent. This means that the number of accidents at work is still lower than before the coronavirus pandemic, while commuting accidents are almost back to the same level.

The number of notifications of an occupational disease saw a significant decrease of 54.5 percent. The number of recognised cases of occupational diseases saw a similar decrease of 43.1 percent compared to the previous year. Both are mainly due to the fact that fewer notifications on the basis of COVID-19 were received.

Detailed statistics can be found here:
····> www.dguv.de › Webcode: d25485 (German only)

ACCIDENTS

	1st half-year 2022	1st half-year 2023	Change	
Commuting accidents	79,228	90,647		+14.4%
Commuting accidents – educational institutions	39,682	41,598		+4.8%
Occupational accidents	393,729	390,567		-0.8%
Accidents – educational institutions	478,614	492,345		+2.9%

OCCUPATIONAL DISEASES

Notifications of a suspected case of work-related illness −54.5%

1st half-year 2022	1st half-year 2023
214,746	97,757
175,430	56,389

Recognised cases of occupational disease −43.1%

1st half-year 2022	1st half-year 2023
86,194	49,068
75,341	37,378

■ Occupational diseases total
■ of which due to COVID-19

German Paralympic Media Award

The German Paralympic Media Award (GPMA) is the perfect platform for anyone who wants to tell an exciting story about sports for people with disabilities and win an award for their work. On 24 April 2024, the 23rd award ceremony of Germany's largest media award in the field of disability sport will take place at the DGUV in Berlin.

With the GPMA, the German Social Accident Insurance honours outstanding pieces of journalism covering the topics of rehabilitation sport, popular sport and competitive sport. Participation and inclusion are key topics for social accident insurance. With the GPMA, DGUV hopes to encourage people with and without disabilities to take part in sport and at the same time recognise the commitment of journalists.

Whether reportage, background, interview or other journalistic formats – contributions in the categories of film/video, photo, audio, article and online platform/social media channel can be submitted until 3 January 2024. Entries must have been published in 2023.

Enter now: ····> www.dguv.de › gpma (German only)

With the GPMA, the DGUV shows the important role sport plays in rehabilitation.