Delivered with Care



Safety, Health, and Well-Being at Amazon



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We strive to be safer, every day for our employees, partners, and communities

Executive Summary

Safety is integral to everything that we do at Amazon—every day, in every operation, across every country. This report establishes our benchmarks for safety, health, and well-being as we endeavor to make Amazon the safest place to work.

Our work environments allow our employees, regardless of background, skill level, or experience, to work with confidence. In 2021, we released a new Leadership Principle, "Strive to be Earth's Best Employer," which further cements our commitment to creating safe work environments for our operations employees. Our safety training, coaching, and employee engagement initiatives are just a few of the mechanisms that we are leveraging to live up to this new Leadership Principle.

Our safety performance is possible because of the drive of our operations managers, employees, and our nearly 8,000 safety professionals. This committed team uses the science of safety to solve complex problems and establish new industry best practices.

We are often asked about our performance expectations and whether they can coexist with safe operations. The answer is yes—we continually strive to optimize our operations for safety and productivity.

In 2021, we invested \$300 million in safety improvements such as capital improvements, new safety technology, vehicle safety controls, and engineering ergonomic solutions. In addition, we have incurred more than \$15 billion in COVID-19 related costs since March 2020 to help keep our employees safe while delivering for our customers.

Part of our commitment to safety excellence is measuring where we are now so we can continually improve. We go beyond industry reporting requirements to comprehensively evaluate our risks and the control measures we use to minimize those risks. We use data to innovate and guide our decisions. That includes measuring how we're performing against the U.S. Bureau of Labor Statistics (BLS) benchmarks and comparing our performance with our competitors'. We are seeing improvements in our key safety indicators—for example, Amazon's worldwide Lost Time Incident Rate (LTIR), a measure of the number of injuries, per 100 employees, that resulted in missed work—reduced from 4.0 in 2019 to 2.3 in 2020, a 43% improvement.

Our scale, resources, and technology allow us to undertake initiatives that benefit the entire industry. For example, we are investing an initial \$66.5 million to create technology to improve universal fork truck safety. We also have established a first-of-its-kind partnership with the National Safety Council (NSC) to uncover new ways to prevent and address musculoskeletal disorders (MSDs)—which are our most common type of injury, are sustained over a long period of time, and are caused by repetitive motion. We are committed to leading the way to proactively manage—and prevent—work-related MSDs by drawing on our expertise in innovation and technology and by collaborating with proven thought leaders and scientists.

We focus on designing safe buildings and equipment and creating new solutions to reinforce and improve safety in our operations. We are identifying opportunities to innovate so we can achieve better outcomes and solutions for our people. This includes integrating new and advanced technologies that interface safely with our employees and the environment and increasing safety throughout Amazon's processes.

Beyond our fulfillment centers, our delivery network is powered by thousands of small businesses and hundreds of thousands of independent drivers who rely on Amazon's technology and safety initiatives every day.

We will continue to research, invest, and apply data and insights to improve safety in our workplaces and share our initiatives and progress to improve workplace safety.

Safety at a Glance

We invested \$300 million in 2021 in safety projects.

We incurred more than **\$15 billion in COVID-19** related costs since March 2020 to help **keep our** employees safe while delivering for our customers.

Employees have access to **top quality health care and benefits starting on Day 1.** These benefits include medical, prescription drug, dental, and vision coverage.

Since 2020, we have opened **17 Neighborhood Health Centers for employees and their dependents.**

Continually seeking feedback from employees is critical to taking action to improve safety. Our Voice of Associate (VOA) and Safety Leadership indices help gather feedback and suggestions. **In 2021, we addressed over 210,000 suggestions, questions, and comments through the VOA boards.**

Our growing safety team reached **8,000 workplace** health and safety professionals globally in 2021.

Our Lost Time Incident Rate—which is a measure of the number of employees, out of 100 who work 40 hours per week, who missed work due to a workplace injury—**has improved by 43% since 2019**

Our People

Amazon is a workplace for all





Our employees are the heart of Amazon

This is why safety is woven into everything that we do. No matter who our employees are, where they work, or what they do, we are committed to ensuring everyone's safety and well-being every day.

Our operations are streamlined and structured to fulfill customer orders as efficiently and safely as possible. And thanks to our industry-leading health benefits and development opportunities, we are building a thriving, engaged, and loyal workforce. Consequently, we were recently ranked as #4 on Forbes World's Best Employers list.



Our global workforce is currently more than 1.4 million employees

Global operations workforce: 2018: **512,000** 2019: **690,000** 2020: **1,200,000** 2021: **1,400,000**

By region:

North America: **70%** Europe: **16%** Asia Pacific: **8%** Other: **6%**

Amazon is currently home to 1.4 million operations employees globally. In 2021, we added over 300,000 people in operations. We also hired, onboarded, and supported seasonal workers and part-time employees to help us meet increased customer demands. Amazon is able to attract many employees because our work environment allows almost anyone, regardless of background, skill level, or experience, to work with confidence. Our employees also value having a direct relationship with their managers, which gives them a chance to invent together and improve the experience of their teammates and customers.

Our pay and benefits are industry leading

Our starting-wage increase in 2018 to \$15 an hour helped boost local economies across the U.S. by not only benefiting our own employees, but also increasing the average hourly wage by 5% for other workers in the same community.

We are committed to leveraging our scale for good and using our ability to innovate quickly to strengthen communities around the world where our employees live and work. Our commitment to providing a fair wage extends across the globe. For example, in the UK, Amazon's starting wage for full-time, part-time, temporary, and seasonal employees—between £10 and £11.10 per hour, depending on location—is also above the national living wage.

A recent paper by economists at the University of California-Berkeley and Brandeis University analyzed the impact of our decision to raise our starting pay. Their assessment reflects what we've heard from our employees, their families, and the communities they live in.

Our starting-wage increase helped boost local economies across the U.S. by benefiting not only our own employees but also other workers in the same community. The study showed that our pay raise resulted in a nearly 5% increase in the average hourly wage among other employers in the same labor market without resulting in significant job losses at Amazon or other local employers.

In addition to industry-leading pay, regular, full-time Amazon employees receive comprehensive health benefits starting on their first day of employment.

These benefits include medical, prescription drug, dental, and vision coverage. We offer U.S. employees and their families access to telehealth and on-demand healthcare services through Amazon Care, which allows them to connect with a doctor in 60 seconds or less.

We also offer generous, flexible paid leave for parents, from our hourly employees to our most senior executives. Where possible, we provide unlimited gender transition benefits, including gender affirmation, and support for employees.

We encourage our employees to take time off both paid and unpaid according to policies—when they need it. We also offer flexible work schedules and leaves of absence to accommodate personal circumstances, from dealing with health risks to helping care for children and loved ones.

We invest in improving access to convenient healthcare for our employees and proactively help them manage their health and well-being

In partnership with Crossover Health, we've opened 17 Neighborhood Health Centers for employees and their families to access quality care when and where they need it.

Each center is located next to one of our fulfillment centers and provides affordable, convenient, and high-quality healthcare to our employees. Each Neighborhood Health Center provides same-day in-person appointments and virtual care for adults and children.

The centers also offer annual physicals and preventive care including health and wellness coaching, specialist care, behavioral health, physical therapy, chiropractic care, mental health services, and private urgent care.

Learn more about our industry-leading pay and benefits at <u>AboutAmazon.com</u> and our commitment to sustainability at <u>Sustainability.AboutAmazon.com</u>

We are often asked about our performance expectations and whether they can coexist with safe operations. The answer is yes

Our performance review process is designed to ensure that we review employee performance fairly and consistently, to identify employees for recognition and for support, and to account for daily changes to the business—all while prioritizing safe work performance and actions.

We believe individual performance metrics are a key business tool for ensuring high-quality work, operational efficiency, and fairness in employee engagement. We assess performance based on safe and achievable expectations, accounting for tenure, peer performance, and adherence to safe work practices. Our employees, in addition to their regularly scheduled breaks, are able to take informal breaks to stretch, get water, or talk to a manager. In mid-2021, we updated our policy that measures the time employees are logged onto their work area. This measurement, along with direct employee feedback, helps us understand if there are any issues with tools and equipment that employees use to do their jobs.

Employees are only questioned about unproductive time if they are regularly absent for long periods. Less than 0.4% were separated from the company due to their inability to perform their job in 2021. Also in 2021, 83% of coaching was positive and was provided to employees who were meeting or exceeding expectations.

We provide opportunities for career growth offering a spectrum of work opportunities that can accommodate a variety of needs and schedules

We believe that supporting and celebrating the development of our diverse workforce is key to our success. We have found there is a greater need for technical skills in the workplace than ever before. We actively help our employees explore their options and pursue roles that align with their interests and skills.

Opportunities for career growth not only increase employee happiness, motivation, and productivity but also lead to learning and growth outside of the workplace. We have committed \$700 million to upskill 100,000 U.S. employees by 2025, and are investing in skillstraining programs to achieve this goal. We offer a range of programs to develop the skills of employees who are interested in either progressing in their current role or switching their professional area of expertise.

Amazon was recently named a top employer in France, for the third year in a row, and in Spain and Italy, a recognition of the career development opportunities we offer employees and of our high-quality work environments.

Learn more about our upskilling programs at **Sustainability.AboutAmazon.com**

We invest in new training technologies to continually build safety skills and competencies

Everyone at Amazon shares ownership in creating a safe workplace, and we are constantly evaluating new technologies and learning programs such as micro-learning, just-in-time training, and learn-by-doing.

To make sure our employees understand how to use all of the equipment and processes designed to keep them safe, we leverage a variety of tools and techniques to train people on an ongoing basis. On their first day, new employees participate in New Hire Orientation, which details safety expectations, policies, and most recently, how to comply with COVID protocols.

After orientation, training continues with routine reminders delivered through daily standups, regular newsletters, messages in the A to Z employee app, messages on TV screens in our buildings, alerts when logging on to a workstation, e-learning modules, and wall posters in restrooms, breakrooms, and other common areas. Employees also receive other training based on their job duties, including training modules specific to dock safety, power industrial trucks, and emergency response procedures. Employees with work station computers also receive "Safety Reminders" that appear every day when they log in, which they are required to view before their computers will allow them to begin work. The reminders include messages relating to body mechanics, keeping work areas clean, and avoiding fall hazards. Managers and supervisors advise and coach employees about safety throughout their shifts.

Every employee and manager participates in annual safety training, which reinforces concepts such as emergency preparedness and response, hazards and controls of the specific job that they are doing, safety coaching, identifying and reporting unsafe conditions and behaviors, and safety engagement. This goes beyond merely teaching someone the skills they need to complete a specific task. We incorporate real-world scenarios, with practical opportunities for them to apply what they've learned. Our goal is to build capability, preparing individuals to do their work today, while helping them get ready to meet challenges in the future.

By leveraging technology, we deliver relevant, contextual, and succinct training content on the appropriate device at the moment it's needed. As a health measure during COVID-19, our In App Standups were deployed worldwide, delivering site announcements and guided stretching to more than 300 sites and 700,000 employees.

Our global safety capability building program, Safer Me, reimagines skill building across 4 key stages of development

Safer ()

Our health and safety orientation experience establishes awareness about common hazards, incident reporting protocols, and where to find support when new employees join Amazon.

Safer Year

Our annual refresher training provides employees and leaders with yearly training on our latest health and safety initiatives and standards.

We also offer a range of programs to develop the skills of employees who are interested in either progressing in their current role or switching their professional area of expertise. We have committed \$700 million to upskill 100,000 U.S. employees by 2025.



Our everyday on-the -job training shows employees how to do their job safely and shows managers how to encourage proper safety behaviors and working practices.



Our Workplace Health and Safety training

provides career and leadership development coaching specifically about health and safety.

Our employees are key to helping us create safe workplaces

Getting honest feedback about safety from our employees and operational site leaders is paramount to continually improving our work environment

Our goal is to hear from, and listen to, everyone about safety. We achieve this by relying on:

- A candid and constructive open-door philosophy that encourages employees to raise safety suggestions and concerns, as well as to provide feedback through their manager, Human Resources team member, and any of Amazon's leadership team.
- Physical and virtual Voice of the Associate (VOA) Boards. In 2021, we addressed over 210,000 suggestions and comments that were raised.
- Connections, an Amazon survey engine that enables employees to provide anonymous feedback everyday to improve the employee experience.

We created our Safety Leadership Index, or SLI, to measure and improve safety

SLI helps us to get ahead of safety risks by collecting information from our employees through a monthly rotation of six questions that pop up on employees' scanners and computers when they login for work. We also ask managers a similar set of six questions every month, which lets us compare how employees feel about safety versus how managers feel about it. With the feedback collected from SLI, we have been able to improve our safety practices and enhance the working environments of our facilities in matters both large and small. When we detect an issue, we flag it for managers, who have a very short turnaround time to respond to, and correct, any serious issues. In 2021, thanks to SLI, we engaged with more than 500,000 employees per month, across 4,000 sites globally. Their feedback helped us address concerns, hear suggestions, and take action, like providing free additional safety equipment.

Empowering employees to take action

In 2021, we piloted Dragonfly, our safety observation program. Dragonfly empowers employees during the course of their work to find and fix unsafe conditions or behaviors, escalate safety concerns, and suggest safety improvements. We also use this data to draw insights and use predictive analysis to enable managers to be proactive with safety conversations and inspections. The observation program is having a positive impact on employee experience and safety performance, for instance by reducing incidents and injuries. A global rollout is scheduled for 2022.



Spotlight on Yusaku

Outbound Associate, NRT1, Japan

"I was surprised at first by how Amazon prioritizes safety over everything else. I'm sure other companies pay attention to safety, but my impression is that the safety is so ingrained at Amazon that when I come to work every day, I always see and hear the word 'safety'."

Measuring Safety

We rely on data to drive safety initiatives and technology



We collect and analyze data to proactively reduce and eliminate safety risks

Metrics are essential for assessing and evaluating risk controls, identifying potential injury and illness sources, measuring progress toward achieving goals, and tracking trends over time. We note what an employee was doing when they were injured, the hazards contributing to the injury, the area of the body that was injured, the injury severity, and whether the employee required medical care, among other factors. We use this information to make our workplaces better by constantly iterating, inventing, and innovating to ensure our employees are safe.

Safety performance targets are reviewed regularly to ensure each site meets our safety goals.

Our managers, leaders, and safety professionals track and measure safety performance by analyzing proactive data (leading indicators) and reactive data (lagging indicators).

Proactive data

Proactive data allows us to gauge whether we are focusing on the right risk controls, applying them correctly, and whether the controls are producing the desired results. Proactive data includes:



Inspections

Check that our safety measures and controls—such as safety guards on machinery—are working across our sites. In 2021, we conducted almost 3.4 million inspections globally.



Assessments

Annual reviews of site performance and health, including potential safety program weaknesses and regulatory risks. We conducted thousands of assessments globally in 2021.



Audits

Verify compliance with national and international regulations and standards in 152 jurisdictions globally, including:

- Occupational health
- Safety management
- Facility/technical safety.



Spotlight on Jenni

Senior Operations Manager, ABQ1, U.S.

"Safety is the most important component of what we do and HOW we do it. To compromise safety is to compromise our integrity as leaders. Safety is a topic that is discussed at the highest level of leadership in the building and beyond."

Understanding our data¹

For 2020, our Recordable Incident Rates (RIR) and Lost Time Incident Rates (LTIR)—both lagging indicators that track how many incidents took place—improved over 2019.

Recordable Incident Rates (RIR)

This rate measures how often an injury or illness occurs at work—measured in injuries per 200,000 working hours—according to local occupational health and safety reporting requirements.²

The safety industry recognizes that RIR is not designed to fully measure safety performance because it does not help to understand which prevention strategies work and which do not.

Lost Time Incident Rates (LTIR)

This rate measures the number of injuries and illnesses that result in time away from work.³

LTIR gives a more focused picture that allows us to analyze the injuries that have the greatest impact on employees.



We also track incidents that lead to the most serious injuries to devote greater attention to activities with high risk potential. The types of injuries we track include degloving, amputation, fractures, concussions, and hospital admissions requiring a stay longer than 24 hours. In 2020, our serious injury rate was 0.220, a 20% improvement from 2019.

¹ To calculate injury rates, we take a count of any incidents and injuries that occurred during a given period, multiply that number by 200,000 to normalize the rate for 100 full-time employees, and divide the total by the number of hours worked in that period.

² RIR does not differentiate between a minor injury and a more serious one. For example, an employer who had several small, non-serious injuries (i.e., cuts requiring stitches) may have a higher RIR than a similarly sized employer who had a serious injury, which should merit greater scrutiny.

³ For example, in the U.S., this is any work-related injury or illness resulting in days away from work, restricted work, or transfer to another job. Essentially, this is any work-related injury or illness requiring medical treatment beyond first aid like a band aid or aspirin.

Understanding safety metrics

The U.S. Bureau of Labor Statistics (BLS) annually reports on workplace injuries and illnesses. Each year in November, BLS publishes the injury and illness data covering the prior year; so, in November 2021, BLS released 2020 data. With the recent BLS release of 2020 benchmarks, it's a good time to discuss our 2020 OSHA recordable performance.

While we measure safety across Amazon, the safety performance rates reported here are based on data for our global fulfillment, sorting, logistics, and retail stores, which is where we know injuries are more likely to occur and where approximately two-thirds of our employees work. For purposes of this discussion, we removed performance data from our corporate offices, call centers, and Amazon Web Services, which would lower our rates but distort our overall data.

In understanding our data and comparing our safety performance to other companies, it is important to note that Amazon has generally reported to OSHA using the "General Warehousing and Storage" industry code. However, as our business has grown over the years and we've invested in, and taken on various other parts of the fulfillment process, parts of our operations—such as our sort centers, air hubs, and delivery stations—are more closely aligned with companies, such as some of the largest logistics companies, that use the "Couriers and Express Delivery Services" industry code. In 2020, the average rates for General Warehousing and Storage for large employers were 5.5 for our Recordable Incident Rate (RIR) and 2.3 for Lost Time Incident Rate (LTIR). While the average rates for Couriers and Express Delivery Services for large employers was 9.1 for RIR and 3.9 for LTIR.

If we look at our performance against the largest US transportation and logistics companies, we can see our performance is comparable, and in some cases better.

1

Read Amazon's Safety Data Verification Statement Apex OHS Assurance Statement

2020 BLS Data for Warehousing and Storage; Courier and Express Delivery Services Industries



Comparing BLS rates

Amazon's safety rates include a variety of operations that are tracked in separate categories by BLS. Below are Amazon's overall rates compared with other BLS-tracked industries.⁴



Comparable BLS RIR Rates, 2020

and Storage

Delivery

Services

⁴ BLS uses a coding system to classify all economic activity into twenty industry sectors. These charts show the BLS average Recordable Incident Rates and Lost Time Incident Rates for several industries.

Supercenter

Stores

We support employees during their recovery

While we seek to avoid incidents and injuries, providing an injured worker with a temporary work assignment that safely accommodates their injury and follows their treating physician's instructions can allow the individual to continue to generate an income while they recover. One of the drivers in our reduction of time off work due to injury is Amazon's Return to Work (RTW) program. RTW is a comprehensive program that focuses on finding meaningful, temporary work for employees who wish to continue earning an income through their recovery period. By carefully matching an employee's restrictions to the physical requirements of available tasks, this program not only benefits Amazon but also has physical and psychological benefits for our employees as well.

The safety of our pregnant workers is a priority for Amazon, and we've created robust benefits to ensure they are fully supported. Our accommodation program is designed to support each pregnant worker's individual needs specific to physical restrictions and limitations and determine which job paths will allow for a continued safe work environment. We also offer comprehensive benefits to all regular, full, and reduced time employees who are scheduled to work at least 30 hours per week. In the US, these benefits include up to 14 weeks of pre and post-partum maternity leave (at hire) and 6 weeks Parental leave (after 1 year of service), in addition to our Leave Share and Ramp Back programs that let employees share their leave with a partner and then return to work at their own pace.

Amazon Community Together supports employees returning to work and our local communities

We are partnering with nonprofits and charitable organizations across the U.S. to find additional temporary light duty roles for employees. This allows them to continue to receive full pay while recovering from an injury. Each location, including thrift shops, homeless shelters, and educational foundations, is vetted in person to verify that it is a clean and safe work environment. Our Amazon Community Together program has donated more than one million hours to more than 920 nonprofits in 32 states in the U.S.



Spotlight on Angela

Fulfillment Associate, SDF9, U.S.

"Thanks to the Return to Work program, I was able to move into a temporary position, which allowed me to continue to work full-time, while promoting rest and getting off my feet post injury."



We have invested—and will continue to invest—in programs and technologies to prevent and manage MSDs, and we are committed to being a global innovator in this space

Nearly 45% of work-related injuries at Amazon are related to musculoskeletal disorders (MSDs),⁵ which include carpal tunnel syndrome, tendinitis, muscle strains, and lower back injuries. MSDs are common across our industry. Our own data show that MSDs are often caused by repetitive motions, including lifting and lowering objects, or using improper posture when reaching or twisting. We also know that MSDs are more likely to occur during an employee's first six months, as many of them might be working in a physical role for the first time. We are consistently incubating tools and technology to reduce MSDs for new employees.

Of the new employees who joined Amazon in 2021:

2 in 5 were employed in a different job

2 in 5 were unemployed

1 in 5 were in full/part-time study

before joining Amazon.



4 in 5 had never worked in a warehouse

7 in 10 had not stood for multiple hours at a time

before joining Amazon.



More than a quarter of new hires in operations come from industries that have more sedentary tasks, such as customer service and corporate industries. Nearly 30% of new hires performed office tasks in their role before joining an operations team at Amazon.

⁵ Because there is not a consensus from international regulators and industry on what constitutes a work-related MSD, we define it as an injury that occurs at work and causes accumulative tissue damage. This could be repeated or sustained exposure of muscles, tendons, ligaments, bones, or nerves due to repetitive motion, force, vibration, awkward posture, and extreme temperature.

Amazon is drawing on our expertise in innovation and technology and collaborating with proven thought leaders and scientists to enhance proactive management and prevention of work-related MSDs

We are continually creating new solutions to reduce MSDs for all employees, especially for those who are new and might be working in a physical role for the first time.

We are also actively partnering with universities and non-profit organizations to develop tech solutions that help to reduce workplace MSDs.

When in tenure MSDs occur:

(normalized for population growth and attrition)



In June we launched a five-year, \$12 million partnership with the National Safety Council (NSC)

In 2021, we launched a first-of-its-kind partnership with the NSC to invent new ways to prevent MSDs. This five-year engagement has five components: an international advisory council, pioneering research, small business and university grants, an innovation challenge, and an industry call to action.

The partnership will benefit a variety of industries by engaging key stakeholders, conducting research, inventing new technology and processes, and scaling the results. Amazon's \$12 million contribution is the largest corporate contribution in the Council's history This partnership aims to leverage academic expertise and investment in breakthrough technologies to expedite MSD RIR reduction, not only at Amazon, but industry-wide.



WorkingWell

Our innovative WorkingWell program uses academic research and certified athletic trainers to educate new employees about their bodies, health, and wellness and to help them successfully adapt to working at Amazon.

After the onboarding phase, WorkingWell continues to provide support for new hires and veteran employees through Huddles.

Huddles are the continuous lifecycle of the WorkingWell program. Area Managers or Site Leads conduct Huddles with a small group of employees during their shifts and cover a rotating set of topics that include training and conditioning. It is an opportunity to discuss the benefits of strong body mechanics and provide ongoing safety education.

Sample discussion topics include gripping and handling objects, lifting and carrying, and bending. Today we offer 130 unique versions of Huddles, which are customized to sites based on operation type and language. These concepts have a positive impact on both work and leisure activities, such as sports, home improvement, housework, and hobbies. The initiative reaches nearly 1.2 million employees, contributes to reducing our overall MSD recordable incident rates, and has received positive feedback from participants in North America, Europe, Australia, and South America. Those who have participated in a Huddle have reduced MSD incidents by more than 15% in 2021, compared to those who did not participate in a Huddle.

In 2022, we will expand WorkingWell huddles even further in Europe, South America, and Australia.



Spotlight on Patrick

Transportation Associate, U.S.

"I love that everyone is committed to safety and uses job rotations to prevent injuries."

Regular reminders improve mental and physical well-being

Mind and Body Moments are short activities that pop up on workstation screens and encourage employees to take a break and stretch, breathe, or take a mindful moment. Their aim is to improve employees' mental and physical well-being, reduce fatigue and stress, and improve health and safety engagement—both at work and outside of the workplace. Internal surveys show over 70% of employees feel that Amazon values their health. Sites across North America, South America, India, and Europe currently use Mind and Body Moments and more are planned for 2022.

Early intervention is key to preventing injury

We use science to redesign work rotation management and reduce the likelihood of MSDs.

New automated staffing schedules use complex algorithms to rotate employees among jobs that use different muscle-tendon groups to decrease repetitive motion, alleviate muscle fatigue, and help protect employees from MSD risks. Our pilot of this technology achieved a nearly 45% reduction in RIR. This innovative technology is central to a job rotation program that we launched in 2021, and that will be implemented throughout 2022.

Our Wellness Centers in North America include preventive care, first-aid response, and return-to-work support. In most of our buildings, medically trained personnel are available—in-person or virtually—to provide private healthcare support.

Our focus on reducing fatigue and discomfort and increasing early MSD prevention is already achieving results globally. MSDs resulting in time away from work have decreased by more than 50%.

Investing in Safety

Our safety performance is possible because of leadership commitment and the drive of our growing safety team



At Amazon, safety is embedded in all that we do

We recruit experts in occupational health, safety, industrial hygiene, transportation, public health, technology, data analytics, engineering, and operations to design and synthesize innovative safety solutions. Our safety team has grown from 2,400 employees to 8,000 over the past four years and is dedicated to using the science of safety to solve complex problems and establish new industry best practices. We are building technical safety skills, competencies, and interpersonal skills to enable everyone at Amazon to be a safety leader and encourage safer ways of working.



Spotlight on Heather

Heather MacDougall, Vice President, Workplace Health and Safety

"Hundreds of thousands of people around the world are coming to work every day for Amazon, and we take the responsibility of protecting everyone very seriously. We are energized and motivated by the critical importance of the work that we do for our employees and our customers."

Financial Investments

In 2021, we committed \$300 million to safety projects across our operations. These projects include capital improvements, new safety technology, vehicle safety controls, and engineering ergonomic solutions that aim to reduce and eliminate risks for our employees, contractors, and visitors.

We've also incurred more than \$15 billion in COVID-19 related costs to help keep our employees safe while delivering for our customers. This includes an investment of more than \$1.2 billion in measures like temperature checks, masks, gloves, enhanced cleaning and sanitization, on-site vaccination events, extended pay and benefits options, on-site testing, and more.



Learn more about our COVID-19 response at AboutAmazon.com

Our teams are focused on one thing: the safety of our employees, partners, and communities.



Human Factors and Ergonomics Team

Our professional ergonomists and safety professionals apply scientific principles to design our workplaces around human capabilities and limitations. We work to prevent the occurrence of MSDs by, for instance, by redesigning work stations and tools, and by providing training and conditioning programs.



Technical Safety Team

This team's core focus is preventing safety risks through design, providing technical expertise to assess and manage risk, and brainstorming ways to eliminate or reduce risk at the source. It is comprised of safety engineers, ergonomists, industrial hygienists, safety design and construction engineers, and due diligence experts. They have deep technical and industry knowledge across a diverse range of hazards including construction, fork trucks, noise, chemicals, manual handling, machinery, automation, and maintenance.



Health Solutions Team

Our Health Solutions team of safety professionals, certified athletic trainers, and medical doctors are transforming the way that we provide health and wellness care at Amazon. The Health Solutions team focuses on on-site proactive wellness, first aid treatment, and preventive care, and they manage our comprehensive Return to Work program and Temporary Light Duty program in the U.S., where employees take a temporary position that requires less physical activity than their current role. This team launched the job rotation program and enhances the return-to-work experience.



Programs and Systems Team

Our safety engineers, program managers, business intelligent analysts, auditors, and compliance and continuous improvement specialists build technological solutions and mechanisms, create a safety mindset, that help ensure safety is a top priority for our teams and communities. This team makes rapid data-driven decisions, deploys solutions at scale, and enables systematic management of health and safety risks.



Safe Operations Team

Site safety specialists, managers, and regional managers join our operations partners to deliver safety solutions through project implementation and design of safety risk controls. They also continuously improve safety performance by delivering novel solutions to common safety challenges. For example, we innovate safety technology that evaluates driving behaviors and surrounding conditions to keep drivers and members of the community safe.

Safety Design and Technology

We innovate and invest to continuously reinforce safety in our operations



We are investing in and innovating new solutions in technology, robotics, and automation to improve safety across our operations—from receiving vendor shipments to sorting multiple packages into shipments ready for delivery

Pods/Workstations

Digital modeling and virtual reality simulate employee interactions in their work environments to enhance ergonomic design.

Truck Conveyor Technology

Conveyors help our employees safely load and unload shipments in trucks.

Trailer Dock Release

Employees digitally perform a series of checks when trailers arrive and before trailers depart from the dock.

Robotic Tech Vest

Intelligent wearable safety equipment, including safety vests, communicate with robots and equipment in real-time, enhancing safety.

Pallet Lift Tables

Reduce the need to bend over to pick up objects to put on conveyors.

Powered Industrial Trucks

Our extensive industry-changing fork truck initiatives will improve fork truck safety for all.

Vehicles

Our comprehensive mobile and vehicle technology helps drivers to efficiently and safely perform pick-ups, deliveries, and returns.

We wake up every day with a drive to design and create new solutions in technology, robotics, and automation



We design our buildings and equipment to exceed safety standards and reduce risk

In 2021, we launched hundreds of new operations facilities and completed several major site extensions globally. Up to 18 months before opening a new site, we scrutinize safety and engineering details to limit potential hazards and lower risk.

In partnership with our architects and design teams, we created 46 new and improved design guidelines to incorporate innovative safety principles into new construction and building upgrades.

Our facilities are designed to be safe workplaces that enable our people to excel

When designing new sites and equipment, our engineers rigorously consider safety across design, construction, commission, operation, and maintenance. We then use 3D modeling to simulate and address potential safety hazards, such as those related to machine guarding, ergonomics, and industrial hygiene.

We have strict equipment and machine design, installation, testing, and compliance standards, which we regularly review with manufacturers and vendors. We also require vendors to perform installation self-checks to ensure any equipment installation issues are immediately addressed. This has reduced the number of post-installation corrections by nearly 70% over the course of 2021.

Amazon's design and construction review process



1. Pre-Design

6 -18 months before launch, identify and review hazards and improve process flow and environment to enhance safety



2. Design

Review conveyor safety, noise control, machine controls, shelving, racking, and fork trucks with building designers and suppliers



3. Construction

Perform ongoing on-site inspections and risk assessments for 2,500 inspection points across 70 topics



4. Post-launch

Capture lessons learned and incorporate improvements into future site design

Our contractors across the globe adhere to rigorous design standards and are held to high safety expectations. Prior to approving a site launch, we ensure that all areas, processes, and equipment pass our safety approval process.

Post-launch design reviews are completed after a new site is launched, and that information is used to continuously improve future builds. We completed more than 400 new site reviews in 2021. Examples of improvements include equipment maintenance access, lighting and audible alarms, and pedestrian traffic routes.



Spotlight on Jorge

Workplace Health and Safety Global Launch Senior Manager

"The path to become Earth's Safest Place to Work for each of our new sites begins before the doors open on Day 1, by ensuring that throughout design and construction, each aspect of the building—from curb to workstations and break areas—has been thoroughly considered for safety."

We maintain sites and equipment for safety and performance

Our Reliability, Maintenance, and Engineering team of nearly 21,000 employees and contractors maintain almost 4 million pieces of equipment globally to ensure that we have the safest working environments.

High-risk operations involving electrical safety, work at heights, or welding are actively managed with risk assessments and controls to keep employees and partners safe. For tasks that require specific expertise, we engage specialized independent contractors that pass and adhere to our rigorous safety protocols. We prequalify all contractors to confirm that they comply with our safety protocols and that they complete training prior to starting work at any Amazon facility.

In 2020, we developed a new electronic Pre-Task Safety Plan application. This enables field technicians to identify hazards and implement safe methods, controls, and protective gear prior to starting specific high-risk tasks. **In 2021, our North American field technicians completed 6.3 million Pre-Task Safety Plans.**



New processes and equipment are designed to international safe-equipment design guidelines

When innovating new processes and equipment, we adhere to international safe-equipment design guidelines, such as ISO 12100, the International Standard for Designing Safe Equipment. We then supplement them with Amazon's more stringent Global Safety Technical Specification. As applicable, we test equipment by nationally recognized testing labs (in North America) or notified bodies (in Europe) before installing across our network. This process validates that each component meets strict safety and compliance requirements as it goes through research and development.



We design ergonomic solutions to enhance health and safety

Ergonomic design optimizes work environments, equipment, and activities to complement the human body's natural movement. Our global teams of ergonomists and design engineers are focused on transforming our work environment and equipment by:

- Building human movement considerations into our next generation of Amazon facilities and systems.
- Performing on-the-ground ergonomic assessments and identifying solutions to reduce human movement risks.
- Developing training and tools to improve knowledge of optimal human movement.

Our ergonomic design initiatives include:

- Digital human modeling, a software tool that simulates employee interactions with work environments.
- Virtual reality, which explores and assesses better ergonomic designs like workstations that discourage repetitive processes.
- Collaborations with academic leaders and universities, to research improved ergonomic workplace design.

People, infrastructure, and technology fuse to accelerate safety and efficiency

By integrating robotic technology into operations, we can now reconfigure workstations and reduce the distances employees need to walk to pick products. This reduces the physical demands on our employees.

Our ergonomic engineering team is continually working to eliminate and minimize ergonomic risk from our work. **One example is the installation of adjustable-height workstations** for employees at packing stations in select North American buildings. This change has allowed employees to easily work within their power zone, regardless of their height. According to our ergonomics research, this reduced the risk of lower-back injury by over 20%. As a result, these workstations will be used at all North American customer fulfillment sites.

For making the process of loading and unloading trailers easier, we are introducing into US operations conveyors that transport packages directly into, and out of, the trailers. **Employees use a powered, adjustable platform that raises packages so they can be stacked in a trailer, or unloaded, with ease.** This reduces the range of motion required while loading and unloading packages at the top of a trailer. All North American sites will use this technology by





the end of 2022.

Spotlight on Sumiko

Senior Product Manager Tech

"From my first day, Amazon's commitment to safety was obvious—we were asked what opportunities we saw to make things better and shown examples of innovations that had been suggested and implemented by employees. I am energized to bring technology like machine learning to improve safety for all employees."

We design and develop safety clothing to protect our employees

We have developed intelligent hands-free clothing to enhance safety and simplify work processes for our employees. **By combining the science behind human behavior with engineering expertise, we are producing advanced wearable technology to improve safety in operations.**

We invested \$9.8 million to develop special safety vests for our employees who work alongside, and maintain, our robotic pods. Technician employees are sometimes called on to maintain and reset drives while the robotics floor is active.

Our intelligent vests use short-range radio frequencies to send signals to robots in real-time. **Robots in range of the vests will automatically slow down, alter their routes, and—when in closer range —stop entirely when they detect an employee is nearby.** Once an employee is out of range, the robots resume normal operation.

We have piloted similar wearable technology for grocery delivery in North America to support Amazon Fresh, including 44 sites with large, walk-in freezers. At our fresh-food hubs, **employees wear safety vests that are embedded with intelligent chips that track how long they spend inside freezers to limit their cold exposure.** When the vest technology detects that safe time thresholds have been reached, it alerts the employee and their manager. Freezer doors also only open to allow employees to enter when they detect that the employee is wearing correct protective clothing.

Another example of intelligent clothing is our protective gloves, which have an intelligent chip embedded to keep employees safe when operating equipment like meat slicers in our fresh grocery delivery operations. **The meat slicers can only turn on when they sense an employee is wearing the correct safety gloves.**





Spotlight on Jay

Global Applied Data Scientist

"I felt lucky to work on the ground breaking, computer vision safety project as my first job. It is one of the most exciting and complex projects I have worked on. The algorithm has been deployed with Amazon Web Services technology, and we are on the track to scale the solution later this year. I am truly living in the motto of working hard, having fun, and making history!"

Our technology will improve universal fork truck safety

Using powered industrial trucks, such as forklifts, electric pallet jacks, and reach trucks to safely move products in our operations is critical for employee safety and operational effectiveness.

All 150,000 of Amazon's fork truck operators globally hold a country or state license, follow a rigorous authorization process (including extensive training and competency evaluations), and are retrained and recertified at least every three years.

In our opinion, universal fork truck safety across the industry has not materially improved over the past 20 years. Our goal is to reduce and eventually eliminate fork truck incidents.

We are investing an initial \$66.5 million to create technology to improve universal fork truck safety and avoid collisions.



Our software designers, scientists, and engineers are constantly creating new solutions to make fork trucks safer and have already reduced serious events related to fork trucks by 60% since 2018. Engineering and administrative improvements that contributed to that reduction included the installation of 8-foot barriers between fork trucks and pedestrians, light curtains, and deadman pedals on all tuggers, as well as weekly operations leadership engagement and site layout changes.

One technology that we are developing with vendors is a system that integrates real-time location systems with light detection and ranging technology, known as Collision Avoidance Technology (CAT). When mounted on forklifts, this technology enables fork trucks to sense the distance between vehicles and people and structures, so the vehicles can slow down or stop to avoid collisions.

This semi-automated, real-time location tracking hardware is an industry first. We rolled this out at 10 of our sites and are finalizing plans for global implementation. At the sites where this technology has already been deployed, Amazon reduced its fork truck-related recordable incidents by 95% in 2020. As a result, Amazon is the 2021 recipient of the prestigious Green Cross for Safety Innovation Award, presented annually by the National Safety Council.

We invested \$66.5 million to install telemetry hardware on 33,000 fork trucks, digitize our pre-start inspection checklists, regulate speeds for new drivers, restrict vehicle use to authorized operators, and help improve site design where impacts occur across our U.S. Operations by 2025. We are developing sight and sound alerts to notify employees operating fork trucks if they are not properly connected to fall protection. For example, we use our custom Smart Hooks technology to remind fork truck operators to connect their body harness to their vehicles. In doing this, we increased fall protection compliance by 95%. Smart Hooks are being deployed at all sites using fork trucks across the U.S. and Canada.

Our transportation operations blend Amazon's advanced technology and safety initiatives to transport packages across our network of fulfillment centers, sortation centers, and delivery stations, and to your door

In 2021, hundreds of thousands of drivers navigating over 2 billion miles delivered packages to our customers around the world. This is the equivalent of circling the Earth 220 times a day.

As our transportation operations have expanded, we have focused on making our docks and roads safer through innovative mobile and vehicle technology.

We have redesigned loading docks for safety

To reduce the risk from unexpected trailer movements and improve safety for employees working in loading docks, our team created a Global Trailer Dock Release application. With this paperless technology, employees verify that trailers are docked properly from the safety of inside the building by sharing photos with drivers.

Our freight operations network uses technology to keep drivers and freight partners safe

Amazon's freight operations guide the flow of goods from vendors into our fulfillment network, and then further downstream to facilities, including Amazon sort centers and delivery stations and third party locations like US Post Office and UPS facilities. We use a variety of partners, and we support their driver safety by providing access to the Relay driver app, our truck-safe navigation technology.

The Relay driver app provides drivers with safety messages—33 million delivered in 2021—such as CDC health guidelines, temperature checks, and most recently, the location and availability of vaccines.



The Relay driver app is used by thousands of drivers traversing billions of miles each year.

The Relay driver app helps keep drivers safe during gate interactions at our facilities, minimizing the need for stopping or exiting the vehicle. The Relay driver app also aids in safety on the road with navigation that takes vehicle attributes such as height and weight class into consideration; directing drivers to specific gate entry points to avoid dangerous detours. It also provides truck-safe route coverage across all classes of roads, from single-lane country roads to major highways. Location-based proximity alerts help notify drivers of nearby hazards, disruptions and restrictions, speed limits, and weather alerts. Amazon has partnered with more than 40,000 Department of Transportation (DOT) registered motor carriers across the US, providing growth opportunities for many small businesses. We assess safety and compliance of all carriers by verifying and monitoring each carrier's DOT operating authority, insurance, and FMCSA Safety rating in real-time. If any of these measures are not compliant, the freight partner will automatically be prevented from booking additional trips until the defect is remedied.

Our new and growing Amazon Freight Partner (AFP) program provides drivers with branded tractors with enhanced safety features. These

features include online driver training as well as handsfree camera safety technology, which reduce accidents using artificial intelligence or physical triggers from the vehicle to capture at-risk driving events. These measures enable owners to build and operate trucking operations that meet our high standards of safety, compliance, sustainability, and performance.

We have invested over \$280 million and committed to invest an additional \$320 million enhancing fleets with collision warning, automatic emergency braking, stability control, lane-departure warning, side-object detection, adaptive cruise control, camera safety technology, and speed limiters.



Our delivery network is powered by thousands of small businesses and hundreds of thousands of drivers who leverage Amazon's technology to improve on-road safety every day

In 2018, we launched our Delivery Service Partner program to share our experience in operations and logistics with aspiring entrepreneurs. The program empowers these entrepreneurs to build their own delivery companies from the ground up with support infrastructure, technology, and a suite of exclusive services. This has enabled many to create thriving small businesses and deliver for customers.

Our Delivery Service Partners (DSPs) and their drivers, along with Amazon Flex drivers—individuals who contract with Amazon to deliver packages based on their availability—are all supported by the Amazon Delivery App. The app includes a GPS mapping and navigation system that optimizes the route sequence based on a variety of factors—prioritizing on-road safety by, for example, limiting unprotected left turns and road crossings and noting speed limits. The app provides drivers with customer address information in app, including safety tips for each delivery location, such as a dog being present. Immediate live support is available if a driver feels that a delivery situation is unsafe or if they need to report an incident.

Camera technology is improving safety for our drivers and creating safer roads for all

Amazon-branded delivery vehicles operated by DSP drivers are fitted with in-vehicle camera safety technology. Artificial intelligence reduces accidents by capturing data and providing real-time alerts for unsafe driving behavior, such as driver distraction, close following distance, stop sign and signal violations, and seatbelt infractions. Since the rollout of this technology in October 2020, we have seen an overall reduction in accident rates of nearly 50%. Ongoing improvements to safe-driving behaviors of nearly 90% can be seen in the 10 months after a vehicle has been upfitted with this safety technology.



We maintain safety and compliance scorecards for all DSPs that meet or exceed requirements set by the Department of Transportation (DOT), and we regularly audit our partners using these standards. Partners who fail to meet our high safety and compliance requirements are removed from our operations.

Our 2021 investment of more than \$130 million in new transportation safety technology and programs has resulted in 50% fewer accidents, making communities in which we deliver safer

Innovative technology and driver-centric customization across our delivery fleet bring safety to the forefront of vehicle design

We are investing an incremental \$100 million across our fleet in 2022, to bring innovations in ergonomics and driver assistance technologies.

Amazon-branded delivery vehicles are currently equipped with a suite of features to improve driver safety and comfort. This includes active safety systems such as automatic emergency braking, technologies that improve visibility, and alerts for nearby vehicles.

In 2021, we also began testing our custom Electric Delivery Van (EDV), built in partnership with Rivian, in over 15 cities. The EDV is designed to consider the ergonomic, comfort, and safety needs of our drivers. It will launch with 12 advanced driver-assistance features, rivaling the most advanced luxury consumer vehicles. We will be deploying these vehicles across the network in 2022.

In addition, we are actively collaborating with drivers to develop custom vehicles catered to their needs. Our newly launched 2021 custom gas-powered delivery van features a host of ergonomic improvements developed based on driver feedback.

Comprehensive onboarding sets drivers up for success

Along with our investments in safe driving technology, we are committed to extensive, handson safety training before drivers get on the road.

DSP drivers are required to complete a comprehensive onboarding program, covering driving skills, maneuvering, defensive driving, and making safe deliveries. Training includes behind-the-wheel experience and driving simulators. Drivers must demonstrate proficiency in closed-course and on-road scenarios before receiving clearance to drive. We have also created driver safety videos to address driver distractions and fatigue; braking and stopping distance; speeding, acceleration, following distance; reversing; mirrors and blind spots; and spatial awareness, vehicle size, and cornering.

When a driver exhibits consistently unsafe driving behavior, they are required to undertake re-training before they return to delivery. Serious situations trigger immediate suspension from driving.

Drivers also have access to \$125 credits from Amazon for safety shoes and are provided a suite of branded uniform items by their DSPs. These are suited for all weather types. Appropriate reflective gear makes sure others can see our drivers.





Spotlight on Nick

Operations Manager at BISN, U.S.

"As a driver, I feel protected and safer with Amazon's technology. If something happens, the footage is there to help me. Alerts provide a level of safety that wasn't there before, helping me consciously think about safety, which actually continues after my shift ends when I'm driving in my own vehicle."

Our aircraft safety standards exceed regulatory requirements

Amazon Air's (AIR) fleet of contracted cargo aircraft exceed all local aviation regulatory requirements and Amazon's own safety, security, and operational policies and procedures, both in the air and on the ground.

In the U.S., AIR and its third-party contractors ensure airport ground services and aviation security functions are performed in accordance with Federal Aviation Administration (FAA) and Transportation Security Administration (TSA) approved programs. AIR employees and third-party contractor personnel are trained not only on their airline partners' approved safety and security programs and Regulated Agent requirements, as applicable, but also on AIR-specific operational and safety policies that exceed these baseline regulatory requirements.

Aircraft Proximity Detection (APD) uses infrared camera, radar, or ultrasonic sensors to determine the distance between the Ground Support Equipment (GSE) and aircraft. As the GSE approaches the aircraft, warning lights are displayed and speed is reduced. Each of our 165 belt loaders and cargo loaders are equipped with APD as well as pressure-sensitive bumpers that shut down the equipment if more than five newton force is experienced between the equipment and aircraft.



Conclusion



Safety is integral to everything we do at Amazon—every day, in every operation, across every country

We begin each day with a determination to make better, do better, and be better for our employees, our partners, our customers, and the world at large. And we end every day knowing we can do even more tomorrow. Whether we are setting strategic direction, managing day-to-day operations, or innovating new technology, we consider the impact on our people.

We educate and empower every Amazon employee to consider their own health and safety, and the health and safety of those around them, in their daily work. One incident is one too many, and we will continue to research, invest, and apply data and insights in order to eliminate incidents.

We will innovate, evolve our operations, and develop technology to continually improve. We will hire and develop the best safety professionals and maintain a singular focus on reducing and eliminating safety risks before incidents occur. This report demonstrates our actions, accountabilities, and progress in achieving our commitments.



Find more information about workplace safety, best practices, and new innovations and technology at **AboutAmazon.com**