

WAREHOUSE WORKER RESOURCE CENTER

Extreme Heat at Amazon Air

Briefing Paper

September 2022

High temperatures and extreme heat are dangerous and life-threatening. These conditions at work, especially in a physically intensive work environment, are particularly dangerous.

Warehouse workers routinely work outside, inside metal containers and in poorly ventilated and/or insufficiently air-conditioned buildings. As a result heat illness, though preventable, is common.

As California braced for an intense heatwave commencing Aug. 31, one dozen Amazon warehouse workers employed at KSBD, located at the San Bernardino Airport, took thermometers to work with them for seven days. In that time, these workers documented extremely high temperatures and grave inconsistencies with Amazon's own temperature monitors.

Over the summer, several workers documented heat illness at KSBD and as temperatures soared into the 90s, 100s and even as high as 121 degrees, the workers at KSBD took collective action to protect their health. On Aug. 31 and Sept. 2, they directly approached Amazon warehouse management and demanded extra safety precautions to protect their coworkers from extreme heat. They did not wait for Amazon to decide to take their health seriously.

The data they collected both confirmed extreme temperatures at the facility and affirmed that their advocacy was merited. It also underlined the need for improved health and safety protections.

Background

Working Conditions

Workers at Amazon's West Coast Air Freight Fulfillment Center, also known as KSBD, work both inside a 658,500 square foot building with inconsistent ventilation and outside on the San

Bernardino International Airports tarmac. They work inside over the road trailers and inside large air freight containers called ULDs that are used to move packages in bulk by air.

Workers' jobs require physical labor and shifts are generally ten hours a day. About 500 of the roughly 1,400 employees work outside for the duration of their shifts. Amazon also requires a high rate of work of its employees. Amazon famously uses algorithms to set rates that workers individually or collectively must meet, resulting in workers facing intense exertion through their shifts. This has a significant impact on the way heat impacts the body, especially when workers cannot take enough breaks.

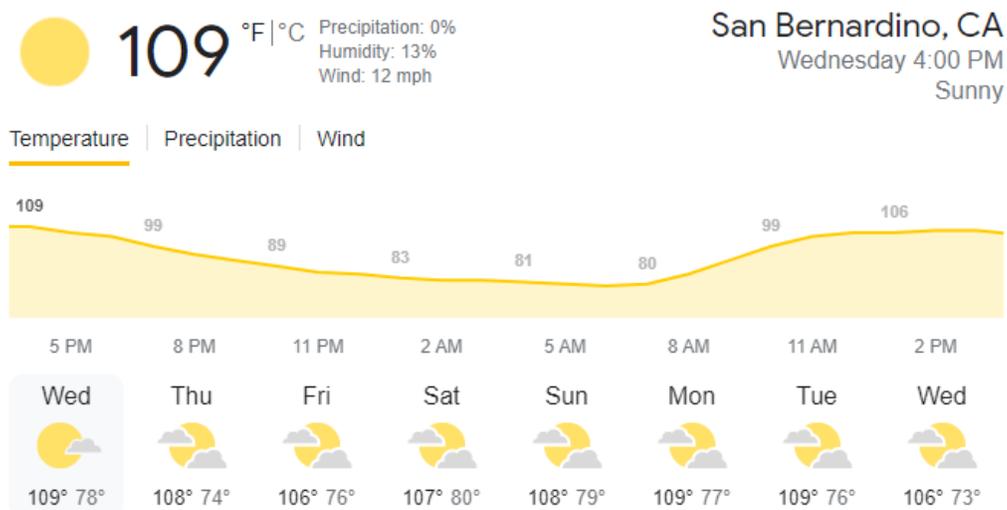
Amazon Air

KSBD opened in March 2021 and it is housed in the former Norton Airforce Base. Amazon currently operates approximately 14 flights a day in and out of the 24-hour facility. At the San Bernardino facility workers process prepackaged merchandise that is flown or trucked in from other Amazon facilities for outbound shipments in either planes or trucks. Freight from KSBD serves markets across the country.

San Bernardino Climate

For the first week of September the National Weather Service issued an excessive heat warning in San Bernardino with meteorologists warning of "dangerously hot conditions."

The forecast predicted unsafe temperatures:

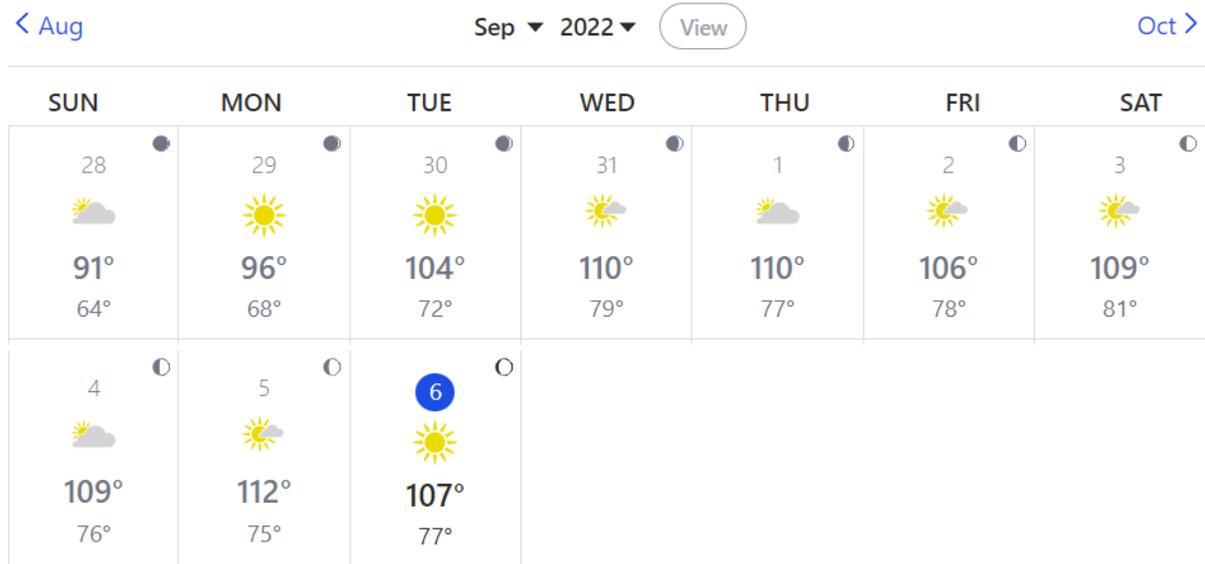


Screenshot of weather forecast 8-31-22 through 9-7-22. Source: weather.com

The actual temperatures were even higher:

Monthly Weather - San Bernardino, CA

As of 12:07 pm PDT



Screenshot of actual temperatures Aug. 28- Sept. 6, 2022. Source: weather.com

San Bernardino County is known for its high temperatures, arid climate and relatively short and mild winters. In 2022, weather logs show that temperatures never went below 80 degrees during the day for the entire summer. Temperatures regularly topped 95 degrees and even 100 degrees.

Table 1: San Bernardino Temperatures Summer 2022				
Month	Number of days 90-94 degrees	Number of days 95-99 degrees	Number of days 100+ degrees	Total days over 90 degrees
June 2022	2	11	10	23/30
July 2022	5	18	6	29/31
August 2022	3	9	18	30/31
Sept. 1- 6, 2022			6	6/6

Data was compiled from Zip code 92408 using AccuWeather.com

Temperature Data collected between Aug. 31 and Sept. 6, 2022

Workers took the initiative in identifying and tracking hazardous heat in their workplace because of the lack of initiative from KSBD management in response to heat illnesses through the summer. They carried heat trackers in parts of the workplace where they work through the week and tabulated the data.

Table 2 details the high and low temperatures for these sites through the week.

Table 2: High and Low Temperatures at KSBD, Aug 31–Sept 6 2022		
Area of Warehouse	Lowest Temperature	Highest Temperature
Indoor	75	89
Planes (Inside cargo planes)	83	96
Trailers (Inside tractor-trailers)	77	96
Outdoor (Tarmac)	80	121

Examples of Temperature Readings

Workers carried temperature trackers that read out in real time and they documented these temperatures in four distinct areas of the warehouse.



84 degrees, Inside (Finger 1)
08/31/22 at 8:47am



96 degrees, Inside plane
08/31/22 at 3:10pm



121 degrees, Gate 11 (outside,
tarmac) 09/04/22 at 2:32pm



Inside "cooling van"
09/04/22 at 2:23pm



94 degrees, Gate 9 (outside,
tarmac), 09/03/22 at 1:27pm



87 degrees, Inside the main
office 09/02/22 at 12:04pm

KSBD workers recorded a range of temperatures indoors and outdoors. With common indoor temperatures in the 80s and outdoor temperatures in the 90s and 100s. Even in an area designated for cooling, the temperature was 90 degrees.

In August [Amazon spokesperson Paul Flannigan said](#) the highest recorded temperature in KSBD is 77 degrees, however workers' measurements dispute that.

Every year, thousands of people get sick from workplace heat exposure, and some cases are fatal. Heat illness is a serious medical condition that can occur when the body becomes unable to cope with heat conditions and maintain a safe internal temperature. Heat-related illnesses include heat exhaustion, heat rash, heat syncope (fainting), and heat stroke.

Heat exhaustion is a serious medical condition that requires prompt attention. Left untreated, heat exhaustion can quickly progress to heat stroke, which is a medical emergency that can be fatal without emergency care.

Unsafe working conditions are always dangerous, but with the extreme heat, they can be life-threatening. The notorious and well-documented high workloads and speeds at Amazon compound the risk of heat illness, particularly in indoor areas. The fast pace of work that is common at Amazon and other warehouses rooted in algorithmic rates exacerbate already dangerous working conditions, particularly when workers are denied extra breaks and relief when temperatures rise.

Workers' Solutions and Victories

Over the course of summer 2022, workers at KSBD came together to demand improved conditions in their workplace. Through a series of petitions, they have raised concerns around wages, leave policy and other issues. They also spoke up with heat. Workers began to experience heat illness in the warehouse early in the summer, and immediately began speaking to management about taking measures to protect them, especially with extra breaks and water. The company began responding but workers continued to face heat illness and saw the threat of the historic heatwave of the past week.

On Aug. 31, 2022 and Sept. 2, 2022, in response to worker heat illness and in anticipation of a historic heat wave, more than 100 KSBD employees demanded to meet with facility management to address unsafe temperatures, worker heat illness and offer solutions to protect workers' health.

Workers called for four demands based on Cal/OSHA regulations and National Institute for Occupational Safety and Health (NIOSH) recommendations and shared their experiences with high heat and heat illness in the facility. Their demands are:

1. Training:

- Comprehensive training for all KSBD Associates, in compliance with Cal/OSHA's Outdoor Heat Illness Prevention Standard, 8 CCR Section 3395(h) for outdoor workers, and training that includes similar content for indoor workers. The training must be conducted in person by a qualified trainer and on company time.
- Additional immediate retraining of supervisors, Amcare staff, and Safety Committee members on heat illness symptoms, first aid, and emergency response.

2. Respect for our health:

- Encourage preventative cool-down rest breaks for any individual who feels the need to take one to protect themselves from overheating. Do not send anyone back to work until their heat illness symptoms have abated. Do not take UPT for heat-related illnesses.
- Provide immediate first aid or summon emergency care to anyone showing symptoms of heat illness. Do not delay, send them back to work, or send them home without offering treatment in line with their symptoms.

3. All-Associate protections:

- Extra breaks when temperatures or the heat index hits 80.
- Ensure the NIOSH recommended hierarchy of controls as they pertain to heat illness are in place in each department, preferably engineering and administrative changes that impact the entire workplace as much as possible.
- Transparency for where temperature readers are located.

4. Outdoor protections:

- Comply with Cal/OSHA Outdoor Heat Standard (Title 8, Section 3395, California Code of Regulation).

Remedies for extreme heat still fall to the employee and are inconsistent depending on an individual's manager. There lacks a comprehensive plan to address high heat at KSBD.

However, since those meetings workers have won:

- Increased, yet inconsistent, preventative cool down breaks
- Increased access to water, ice and electrolyte packets
- Increased fans inside the facility, permanent fans yet to be installed
- Outdoor employees have been moved indoors one time
- Increased rotation for outdoor employees

Relevant California Law

Cal/OSHA's standard on heat illness prevention in outdoor workplaces (Title 8, Section 3395, California Code of Regulations) requires, among other things, employers to provide training, water, shade, and preventative cool-down rests when workers need them.

Currently California does not have an official standard on heat illness prevention in indoor workplaces, despite the Legislature passing legislation in 2016 requiring Cal/OSHA to develop one by January 1, 2019. Cal/OSHA submitted a proposed regulation to the California Department of Finance in 2021 for fiscal review, where it remains.

However, Cal/OSHA's Injury and Illness Prevention Program (IIPP) standard (8 CCR Sec. 3203), requires employers to protect workers from heat illness in indoor workplaces, as part of general obligations to maintain a safe workplace. Cal/OSHA actively enforces indoor heat illness prevention under the IIPP, and may be increasing enforcement as part of Federal OSHA's National Emphasis Program ("NEP") for Outdoor and Indoor Heat-Related Hazards.

Conclusion

As temperatures continue to rise, Amazon must consider the dangerous impact heat can have on its employees.

While workers at KSBD are speaking out and advocating for themselves, we don't know what is happening at Amazon's other facilities in the Inland Empire where the corporation employs approximately 40,000 people and operates approximately 36 warehouses, delivery stations and other supply chain operations.

Amazon's health and safety [record](#) is notoriously poor, as has been their recent response to emergencies that risk the health of workers, as in the case of the [tornado](#) that hit a fulfillment center in Illinois in late 2021 and several [heat related deaths](#). We also know that those who advocate for their health and the health of their coworkers, risk retaliation including termination.

Without clear standards in place, KSBD is an unsafe workplace, and every day Amazon is knowingly putting employees at risk of illness and even death.