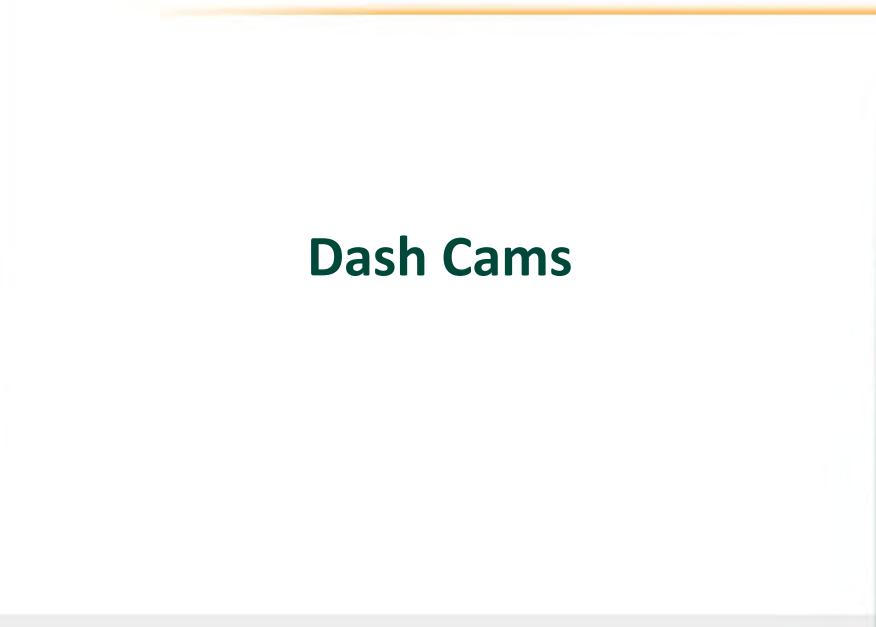
# Dash Cams & Heat Illness in Construction

Matt Mileski - HRI Morgan Koprivnak – The Lindy Group



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## What are Dash Cams?

Video-based safety program

**Detects and Captures Risk** 

Prevents incidents before they happen with in-cab alerts

Identifies at-risk behaviors for driver improvement





# Why Dash Cams?

Keep employees safe

Exonerate drivers

Improve driver performance

Reduce at-fault collisions

Improve driver training

Increase driver retention



# Why Dash Cams?





# What do Dash Cams monitor?

### **At-Risk Driving Behaviors**

- Speeding
- Distracted Driving
- Seat Belt Usage
- Harsh Event
- Following Distance
- Rolling Stops
- Camera obstruction

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# How do Dash Cams work?

Artificial Intelligence (AI) and telematics to detect at-risk driving behaviors

Alert driver of these behaviors through in-cab nudges (voice prompts)

Video Events saved when an at-risk driving behavior or crash is detected

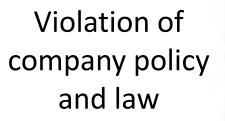
Video Events are automatically sent to a safety inbox for review

Coaching scheduled based on at-risk behaviors

Dash Cam does not record audio

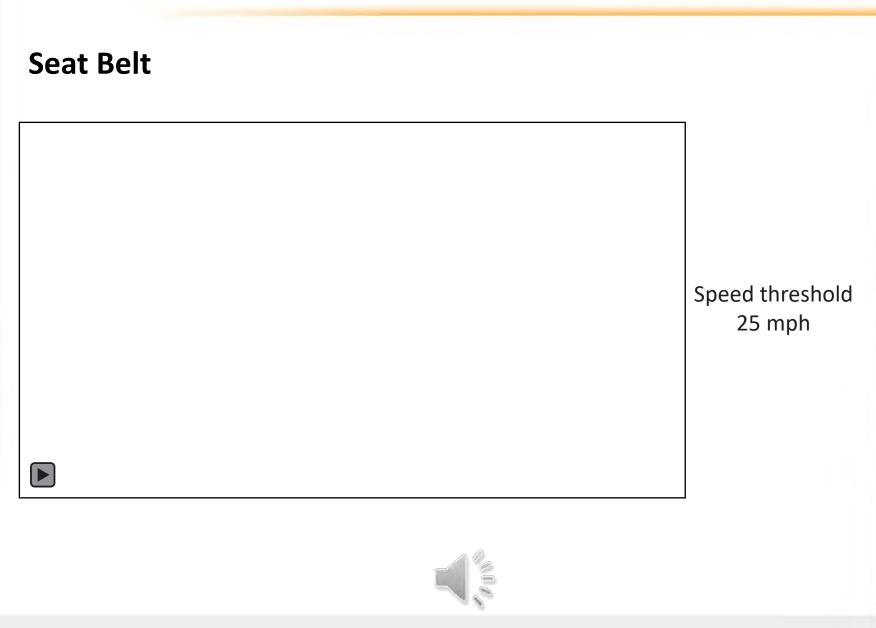


# Handheld Phone



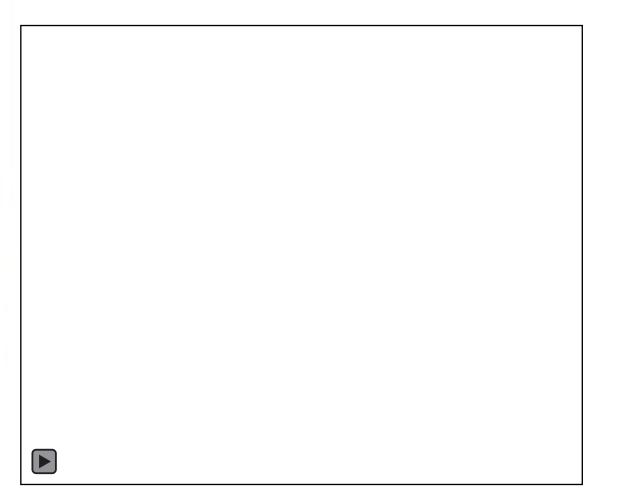








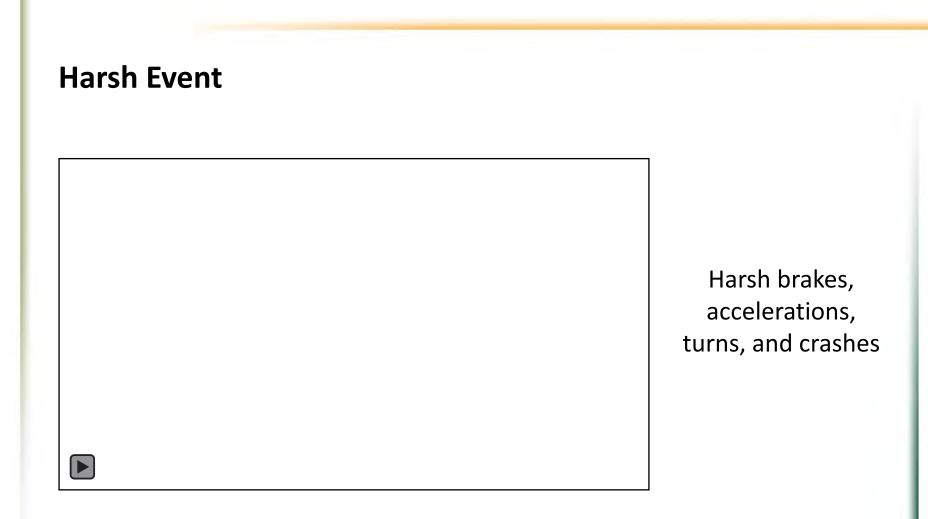
# **Distracted Driving**



### Camera detects dip in head pose









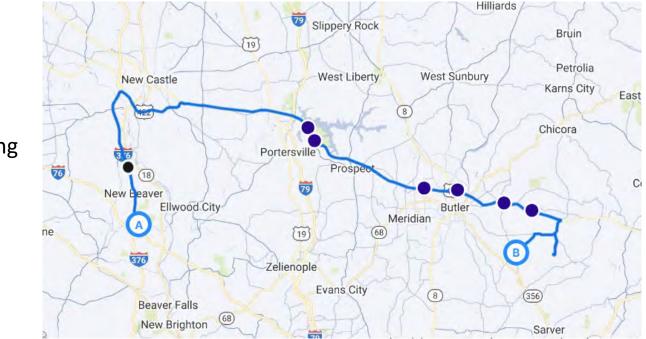
# Speeding

Light Speeding Moderate Speeding

Moderate Speeding

Heavy Speeding

Severe Speeding

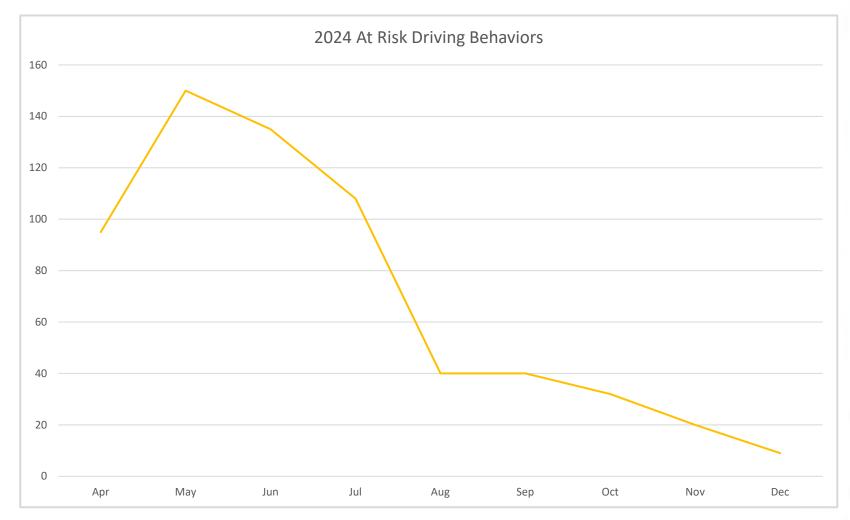


Drivers will receive an in-cab nudge when speed exceeds posted speed limit by 5 mph for 60 seconds.



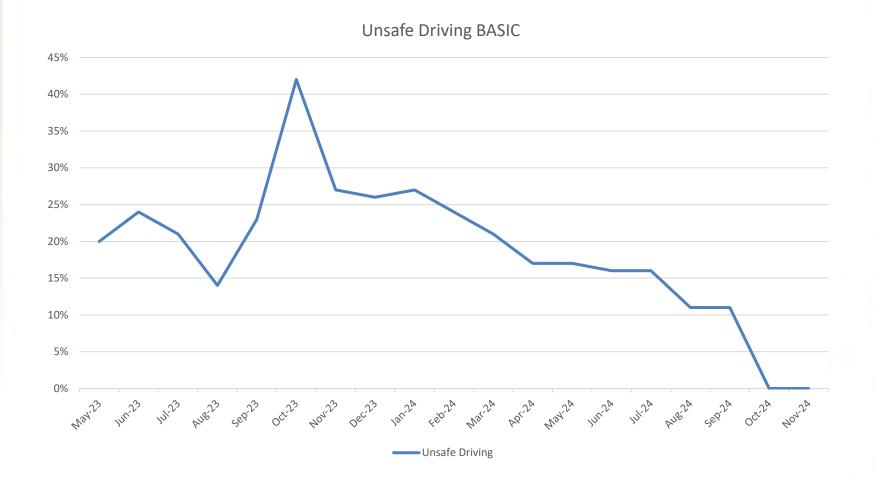


# Coaching





# Coaching



# **Before Implementing a Dash Cam Program**

lytx

DriveCam.

Research

Commitment

Pilot

Policy

Training



*M*otive

**netradyne** 

samsara



# Questions on Dash Cams?



# Staying Out of the Red Zone – Allan Myers

### DANGER ZONE

### **RED ZONE**

- 1. Never walk in the live traffic portion of the Red Zone,
- 2. Only be in the closed lane portion of the Red Zone (the side of Dump Trucks, Paver, MTV, Mill, etc.) when it is absolutely necessary and while being on high alort (focused on oncoming traffic and having an exit strategy). Move to the Yellow or Green Zones whenever possible.
- Never use cell phones, iPads, computers, or walkie-talkies or hold one on one or group discussions in the Red Zone.

### YELLOW ZONE

- Only be in the Yellow Zone when performing required work tasks that require Yellow Zone access (be focused on oncoming traffic as much as possible and have an exit strategy). Move to the Green Zone whenever possible.
- Use of cell phones, iPads, computers, or walkie-taikies is restricted to management employees in the Yellow Zone and only permitted for them if Green Zone space is not reasonably available
- Holding brief one on one or brief group discussions (instructing employees or inspectors) is permitted in the Yellow Zone but only if Green Zone space for this is not available.

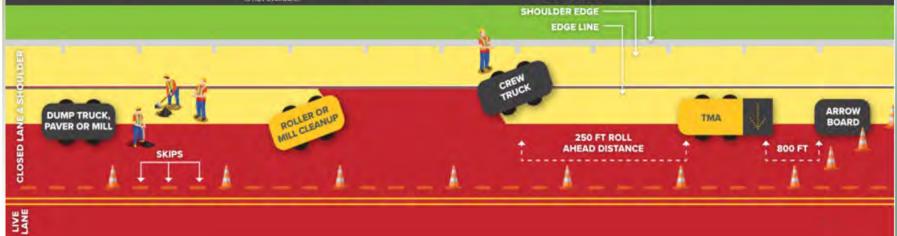
### **GREEN ZONE**

 Use of cell phones, iPads, computers, or walkie-talkies along with brief one on one or brief group meetings is allowed for all employees.

GUARDRAIL -

#### GROUP MEETINGS

 Areas that are not next to live traffic (staging areas, rest stops, park & rides, parking lots, etc.) are to be used for crew or client meetings. Green Zone areas can only be used for this purpose





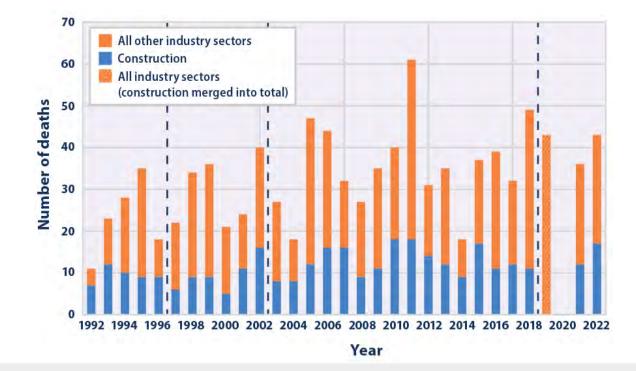
# Heat Illnesses in Construction: Prevention, Signs, and OSHA's Proposed Rule



# **Why Heat Illness Matters in Construction**

Construction workers are at high risk due to outdoor work, heavy physical exertion, and often limited shade.

Heat is a leading cause of weather-related deaths in the U.S., with construction accounting for a significant portion of heat-related workplace incidents.

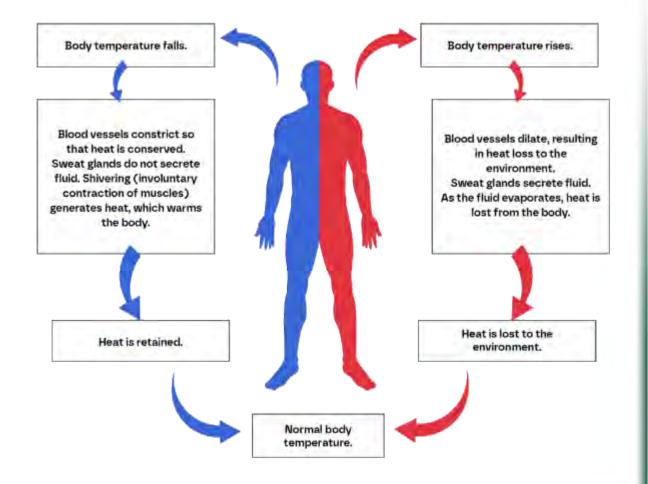




# What Are Heat Illnesses

Heat illnesses occur when the body cannot cool itself effectively, leading to a rise in core temperature.

Range from mild to severe





# **Types of Heat Illnesses**

**Heat Rash**: Red, itchy bumps on skin from excessive sweating.



**Heat Cramps**: Painful muscle spasms, often in legs or arms.



Heat Exhaustion: Heavy sweating, weakness, dizziness, nausea, headache, cool/moist skin.



Heat Stroke: Life-threatening confusion, slurred speech, seizures, loss of consciousness, hot/dry skin, body temp >104°F.



### HEAT RASH

HOW IT HAPPENS: Sweat ducts become clogged & sweat can't get to the surface of the skin HOW TO TREAT IT: Keep the skin dry & rest in a cool place

### **HEAT CRAMPS**

HOW IT HAPPENS: Salt & moisture levels are depleted through excessive perspiration

HOW TO TREAT IT: Move to a cool, shaded area, apply something cool, drink plenty of fluids

### HEAT EXHAUSTION

HOW IT HAPPENS: Prolonged exposure to high temps & poor hydration

HOW TO TREAT IT: Move to a cool, shaded area, apply something cool, drink fluids & monitor

### HEAT STROKE

HOW IT HAPPENS: When the body becomes unable to controls its core body temp HOW TO TREAT IT: Seek medical attention immediately



# Signs, Symptoms & Response

### Early Symptoms of Heat Illness:

- Thirst
- Fatigue
- Heavy sweating
- Headache
- Cramps
- Dizziness
- Rash
- Nausea or vomiting

### **Response:**

- Move the employee to a cooling area
- Provide cool water to drink
- Remove excess layers of clothing
- Place ice packs in the armpits and groin
- Fan the employee

Do not leave the employee unattended as symptoms can change quickly.



# Signs, Symptoms & Response

### Life-Threatening Symptoms:

- High body temperature (>104°F)
- Red, hot, and dry skin
- Confusion
- Convulsions
- Fainting
- Rapid pulse
- Loss of consciousness

### **Response:**

- Call 911 immediately.
- Cool aggressively while waiting for help—do not delay.
- Do not leave the person alone.

If someone is displaying life-threatening symptoms of heat illness – Call 911



# **How to Prevent Heat Illnesses**

**Hydration**: Drink water every 15-20 minutes (about 1 cup), even if not thirsty. Avoid caffeine/alcohol.

**Rest Breaks**: Schedule frequent breaks in shade or cooled areas, especially during peak heat.

**Shade:** Take breaks in a shady area, an air-conditioned vehicle, under a tent, etc. to recover from the heat.

Acclimatization: Gradually increase workload for new or returning worker.

**Clothing**: Wear light-colored, loose-fitting, breathable fabrics; use cooling vests if possible.

Work Scheduling: Shift strenuous tasks to cooler parts of the day.

Training: Educate workers and supervisors on heat risks and prevention.





# **OSHA's Proposed Heat Illness Rule (Overview)**

Announced July 2, 2024; published in the Federal Register August 30, 2024—first federal heat standard.

Applies to construction, general industry, maritime, and agriculture where OSHA has jurisdiction.

Goal: Reduce heat-related injuries, illnesses, and deaths (estimated to protect 36 million workers).

Comment period extended to January 14, 2025; public hearing set for June 16, 2025.



# **OSHA's Proposed Rule – Key Requirements**

Heat Injury and Illness Prevention Plan (HIIPP): Employers must create a site-specific plan to identify and control heat hazards.

Heat Triggers:

- Initial Trigger (80°F heat index): Provide water, break areas.
- High Heat Trigger (90°F heat index): Mandatory breaks, monitor for symptoms.

**Training**: Annual training for workers and supervisors on heat risks, signs, and emergency procedures.

Acclimatization: Programs for new/returning workers to build heat tolerance.

Monitoring: Use heat index or wet bulb globe temperature (WBGT) to assess conditions.

**Emergency Response**: Procedures for heat-related incidents, including designated safety coordinators.



# Questions on Heat Illnesses?



# THANK YOU