

Virginia Occupational Safety and Health (VOSH)
Virginia Safety and Health Codes Board (Board)

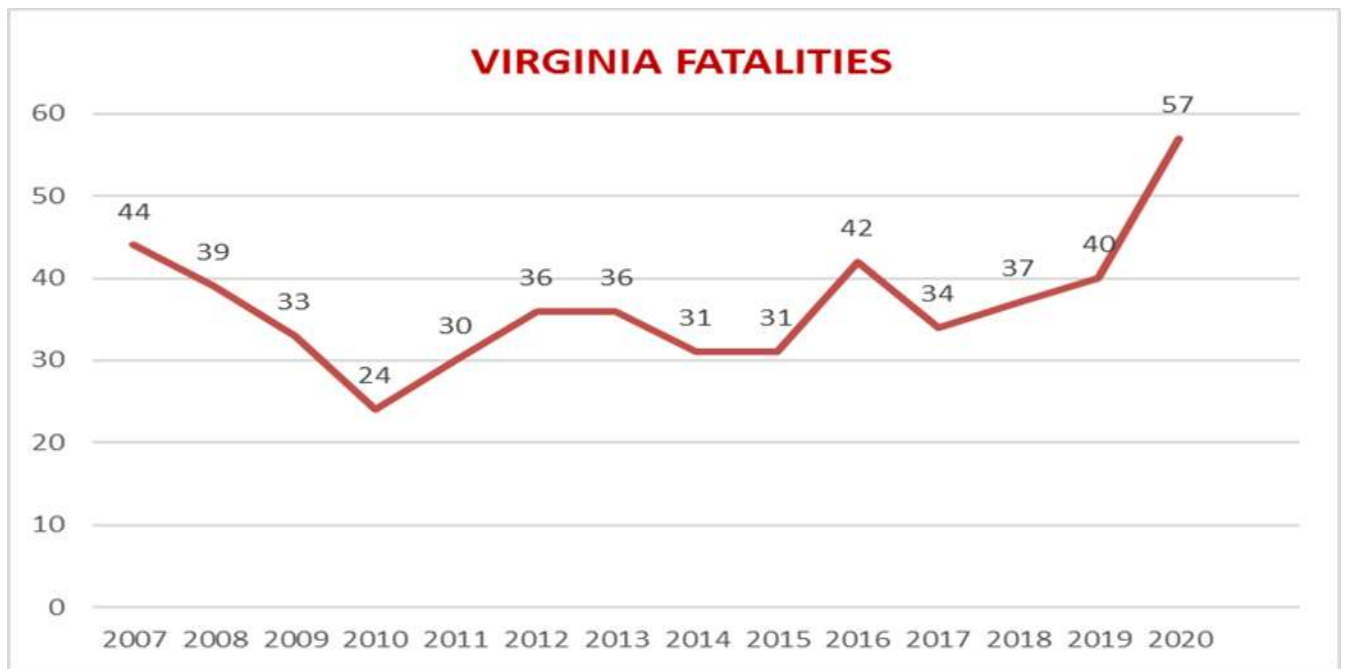
Heat Illness Prevention Standard Regulatory Advisory Panel (Panel)

Summary of Virginia Heat Illness Fatalities and Catastrophes, 1999-2021

Total Fatalities: 16 (16 employee deaths)
Total Catastrophes: 2 (5 employees hospitalized)

Average VOSH Fatalities Per Year Excluding 2020 35

Heat-related Deaths Per Year Since 2007 .8



1. July 7, 1999. Fatality.

Inspection number 301806337. Employee #1 was working the kill floor in a pork slaughterhouse, where the temperature was not regulated. He showed signs of heat stress and was treated with cold packs and oral electrolyte fluids at the work site clinic. Following this treatment, he was conscious, could walk, and did not appear to be disoriented. The clinic supervisor/nurse determined that he needed further treatment and he was transported to a local medical center. About 10 to 15 minutes after arriving at the center, he suffered a grand mal seizure and did not respond to emergency treatment. Employee #1 was declared dead about 10 minutes later. Cause of death was heat stroke. 29 year old employee.

The 24 hour average temperature on the day of the accident was 86 degrees Fahrenheit. It was a common practice of employees to wrap themselves in impermeable plastic sheeting from industrial sized rolls to protect them from blood and other by-products from the hog slaughtering operation – the practice was voluntary but widely done. The kill floor was not air conditioned. The company provided high velocity ventilation from air movers on the roof, but the temperature of the air would have been the same as the outside air. Ice, water and Gatorade was available for employees.

No citations issued.

Smithfield, Virginia
Isle of Wight County

General Industry
SIC: 2013/Sausages and Other Prepared Meat Products

2. July 3, 2002. Fatality.

Inspection number 303897862. At approximately 4:00 p.m. on July 3, 2002, Employee #1 suffered heat stroke while picking squash in an agricultural field. The foreman transported him to Mary Washington Hospital, which is about 45 minutes away from the field. Employee #1 died on July 5, 2002. A migrant worker was picking squash with the temperature in the high 90s with a heat index of 105 degrees Fahrenheit.

Port Royal, Virginia
Caroline County

Agriculture
SIC: 0161/Vegetables and Melons

Violation Summary											
	Serious	Willful	Repeat	Other	Unclass	Total	#	ID	Type	Standard	Issuance
Initial Violations			2	1		3					
Current Violations			2	1		3					
Initial Penalty	\$0	\$0	\$560	\$5,000	\$0	\$5,560	1.	01001	Repeat	19280110 C01 III	12/20/2002
Current Penalty	\$0	\$0	\$420	\$2,500	\$0	\$2,920	2.	01002	Repeat	19280110 C02	12/20/2002
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0	3.	02001	Other	19040039 A	12/20/2002

3. July 31, 2002. Fatality.

Inspection number 305264723. At approximately 4:00 p.m. on July 31, 2002, Employee #1, his employer, and several coworkers were completing the installation of the second-story sub-floor on a two-story home under construction. Employee #1 was nailing the sub-floor when the employer noticed that he was missing the floor joist and behaving erratically. The employer sent him to lie down, so Employee #1 descended from the second story and lay down on a pile of plywood sheathing. The employer noticed that he was still acting erratically, so he abandoned his work and escorted Employee #1 into the garage, laid him down on a piece of plywood, placed ice on his neck and wrists, and called the rescue squad. Employee #1 was transported to the hospital, where he died at 10:20 a.m. on the following day of apparent

hyperthermia. The temperature on the day he was stricken had been approximately 90 degrees Fahrenheit.

Suffolk, Virginia
City of Suffolk

Construction
SIC: 1751/Carpentry Work

Violation Summary							#	ID	Type	Standard	Issuance
	Serious	Willful	Repeat	Other	Unclass	Total					
Initial Violations	1					1					
Current Violations	1					1					
Initial Penalty	\$7,000	\$0	\$0	\$0	\$0	\$7,000					
Current Penalty	\$600	\$0	\$0	\$0	\$0	\$600					
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0	1.	01001	Serious	19260050 C	01/29/2003

4. July 27, 2005. Non-fatal catastrophe involving 2 employees.

Inspection number 309211878. At approximately 3:00 p.m. on July 27, 2005, Employee #1 and Employee #2, migrant farm workers, harvested tomatoes in the field for 12 hours per day for at least ten days were exposed to extreme temperatures reading as high as 104 degrees F with relative humidity at approximately 73.4 degrees F, placing the heat index temperature at 118 degrees F. Both Employees were hospitalized and treated for heat stroke for three and four days respectively.

Eastville, Virginia
Northampton County

Agriculture
NAICS: 111219/Other Vegetable (except Potato) and Melon Farming

Violation Summary							#	ID	Type	Standard	Issuance
	Serious	Willful	Repeat	Other	Unclass	Total					
Initial Violations	5					5	1.	01001	Serious	510001 A	10/06/2005
Current Violations	4			1		5	2.	01002	Serious	19100142 K02	10/06/2005
Initial Penalty	\$13,500	\$0	\$0	\$0	\$0	\$13,500	3.	01003A	Serious	19101200 E01	10/06/2005
Current Penalty	\$8,662	\$0	\$0	\$0	\$0	\$8,662	4.	01003B	Serious	19101200 H	10/06/2005
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0	5.	01004	Other	19280110 C01 III	10/06/2005
							6.	01005	Serious	19280110 C04	10/06/2005

5. July 20, 2006. Fatality.

Inspection number 310192240. At approximately 10:00 p.m. on July 20, 2006, Employee #1 was working on a production line where he was flipping fabricated wooden doors. He began to show signs of disorientation and unsteadiness and was escorted to a break room by his supervisor. He was transported to hospital where he died from an apparent heat stroke. Employee's use of a prescription medication may have been a contributing factor to the heat-related cause of death.

Stanley, Virginia
Page County

General Industry
NAICS: 321911/Wood Window and Door Manufacturing

No citations issued.

6. August 8, 2006. Fatality.

Inspection number 310354022. At approximately 4:00 p.m. on August 8, 2006, Employee #1 was working for a logging firm. While engaged in a tree limbing operation on a plot of land that had been logged over, he became overheated and passed out. Attempts to revive him failed, and he died later at the hospital. Temperatures on August 8, 2006, were about 98 degrees Fahrenheit, with a heat index estimated to be 105 degrees Fahrenheit or more. Co-workers found the victim passed out at a truck, called the rescue squad, put him in air conditioning and wet him down with some of the drinking water available at the site, but the victim stopped breathing before the rescue squad arrived.

Chase City, Virginia
Mecklenburg County

General Industry
NAICS: 113310/Logging

Violation Summary							#	ID	Type	Standard	Issuance
Initial Violations	2			2		4	1.	01001A	Serious	19100219 D01	01/30/2007
Current Violations	2			2		4	2.	01001B	Serious	19100219 E01 I	01/30/2007
Initial Penalty	\$675	\$0	\$0	\$300	\$0	\$975	3.	01002	Serious	19100266 I07	01/30/2007
Current Penalty	\$405	\$0	\$0	\$180	\$0	\$585	4.	02001	Other	19101200 F05 I	01/30/2007
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0	5.	02002	Other	19101200 F05 II	01/30/2007

7. August 25, 2007. Non-fatal catastrophe involving 5 employees.

Inspection number 311421556. Three firefighters were hospitalized for smoke inhalation and/or dehydration. As of August 30, 2007, all firefighters have been released from the hospital. The SCBAs were donned prior to entry. Members of the interior search and rescue teams had to climb 18 floors in full gear as well as carrying hose packs and various tools. Power to the building had been knocked out prior to their arrival. The fire was reported to have been contained within 45 minutes of arrival of fire and rescue units. All firefighters go through rehab upon exiting a fire for vitals check by emergency medical service personnel. The three firefighters encountered a male resident of the building in a hallway in respiratory distress on their way out. They carried the individual out of the building and immediately began patient assessment and treatment. Another provider on scene noticed the condition of the firefighters and treatment was started on them before being transported to the hospital. They were monitored in the emergency room from around 9:00 p.m. to 3:30 a.m. before being admitted, one of the firefighters was admitted to an intensive care unit due to smoke inhalation and dehydration. Two other firefighters were treated and released.

Alexandria, Virginia
 City of Alexandria

General Industry
 NAICS: 922160/Fire Protection

Violation Summary						
	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations	1					1
Current Violations	1					1
Initial Penalty	\$0	\$0	\$0	\$0	\$0	\$0
Current Penalty	\$0	\$0	\$0	\$0	\$0	\$0
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

#	ID	Type	Standard	Issuance
1.	01001	Serious	19100156 F01 II	02/20/2008

NOTE: At the time of the inspection, VOSH did not issue penalties to state and local government employers. That approach was changed in 2020.

8. August 11, 2009. Fatality.

Inspection number 313479495. At approximately 6:00 a.m. on August 11, 2009, Employee #1 started working in a tobacco field. Employee #1 was pruning tobacco leaves by hand, and between 10:00 a.m. through 12:30 p.m., he collapsed, while suddenly trying to seek shade. Someone immediately took Employee #1 by van to a local fire department less than one quarter mile away. An onsite EMT briefly treated Employee #1, before putting him in an ambulance and taking him to a local hospital. Employee #1 died in route to the hospital. Investigators determined that Employee #1 had taken breaks and was drinking water. The temperature at that time of his collapse was approximately 83 degrees to 85 degrees Fahrenheit.

Agriculture
 NAICS: 111910/Tobacco Farming

No citations issued.

9. June 28, 2010. Fatality.

Inspection number 314620881. On June 28, 2010, Employee #1 was working on a roof in very hot conditions. The employee collapsed against a wall and was breathing but was unable to speak. Coworkers used Skytrak to bring him off the roof to the ground. An ambulance arrived at the worksite and transported the employee to the hospital. Employee #1 was pronounced dead at the hospital. The temperature was 96-97 degrees. The victim had an internal body core temperature of 110-111 degrees.

There was conflicting evidence in the case file that the rescue squad may not have been called for 30-40 minutes after the victim collapsed. The rescue squad says in at least two places that there was a 30-40 minute delay while the police report says the delay was 4-5 minutes before the call was made. VOSH's view of the information at the time was to give more weight to what the workers told the rescue squad as opposed to what they told the police.

Ridgeway, Virginia
Henry County

Construction.
NAICS: 238160/Roofing Contractors

Violation Summary							#	ID	Type	Standard	Issuance
	Serious	Willful	Repeat	Other	Unclass	Total					
Initial Violations	2			1		3					
Current Violations	2			1		3	1.	01001A	Serious	19260020 B01	12/17/2010
Initial Penalty	\$14,000	\$0	\$0	\$5,000	\$0	\$19,000	2.	01001B	Serious	19260021 B02	12/17/2010
Current Penalty	\$10,664	\$0	\$0	\$100	\$0	\$10,764	3.	01002	Serious	19260050 C	12/17/2010
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0	4.	02001	Other	19040039 A	12/17/2010

10. July 23, 2011. VWCC Employee Death.

No inspection conducted – VOSH not notified of employee death. Employee was hanging drywall and became overheated and died.

Richmond, Virginia
City of Richmond

Construction
NAICS Code: 238310 Drywall and Insulation Contractors

11. July 21, 2015. Fatality.

Inspection number 1079793. The employee was engaged in carpentry work on a new bridge constructions worksite. At 10:00 p.m. on October 21, 2015, a carpentry employee began to feel ill on the site and told his supervisor that he needed to go to the doctor. He left the site and drove himself to a convenience store that was approximately 15 to 20 minutes away, where he collapsed and was taken to the hospital where he died later. The employee had a body temperature of 104.2 degrees Fahrenheit.

Big Island, Virginia
Bedford County

Construction
NAICS: 237310/ Highway, Street, and Bridge Construction

Violation Summary							#	ID	Type	Standard	Issuance
	Serious	Willful	Repeat	Other	Unclass	Total					
Initial Violations				1		1					
Current Violations				1		1					
Initial Penalty	\$0	\$0	\$0	\$5,000	\$0	\$5,000					
Current Penalty	\$0	\$0	\$0	\$0	\$0	\$0	1.	01001	Other	40.1-51.1.D	02/23/2016
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0					

Leesburg, Virginia
Loudoun County

Construction
NAICS: 236220/Commercial and Institutional Building Construction

No citations issued.

12. September 21, 2015. Fatality.

Inspection number 1096071. A temporary employee at a manufacturing facility reported feeling hot and sweaty and started to cool himself off in front of a pedestal fan in the work area. It apparently was not normal for the employee to cool himself in the work area. It was estimated that the employee remained in the area for 10 minutes before complaining of abdominal pain and leaving for the restroom, where he was later found unresponsive. The temperature inside the facility was estimated to be between 72-74 degrees Fahrenheit. A heart condition is considered to be a contributing factor to the employee's death.

Newport News, Virginia
City of Newport News

General Industry
NAICS: 561320/Temporary Help Services

13. July 23, 2016. Fatality.

Inspection number 1164344. At 4:30 p.m. on July 23, 2016, an employee was weeding in a tobacco field with a hoe. The employee was overcome by heat, and died from hyperthermia. The employee was 41 years old. The farm laborers started work at 7:20 AM that day. They were weeding a tobacco farm. The crew took a 15 minute break at 9:00 and then took a lunch break at noon. The crew resumed work after lunch, and took another break between 3:15 and 3:40. Shortly after returning from the break, the employee stood up and fell to his knees, but got up on his own, stating that he was fine, but tired. Shortly thereafter, the employee began to experience breathing difficulties. The employee was taken to the farm office to cool down, and 911 was called. The employee was transported to the hospital and had a body temperature of 109.9° and was unable to be resuscitated.

Employees were trained in tobacco farm worker safety - a training document briefly discusses heat stress issues. The employer posted OSHA's Heat Stress Safety Fact Sheet and OSHA's Heat Stress Quick Guide in the break room. There was a heat stress document included in the Pesticide Awareness Training binder. All of the documents are in English and Spanish. Employees indicated that they watched the training videos; were told how to work in the heat; told to get shade and water when you get tired; the symptoms of when you feel bad; and were given breaks.

Danville, Virginia
City of Danville

Agriculture
NAICS: 111910/Tobacco Farming

No citations were issued.

14. June 17, 2017. Fatality.

Inspection number 1240654. At 10:00 a.m. on June 17, 2017, Employee #1, employed by a concrete company, was working at a construction site. He was making concrete molds and pouring concrete. Employee was admitted to the hospital with signs of heat exhaustion and died of heat stroke heat stroke 4 days later. The employee was 23 years old.

Arlington, Virginia
Arlington County

Construction

NAICS: 238110/Poured Concrete Foundation and Structure Contractors

Violation Summary						
	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations	2					2
Current Violations	2					2
Initial Penalty	\$11,200	\$0	\$0	\$0	\$0	\$11,200
Current Penalty	\$11,200	\$0	\$0	\$0	\$0	\$11,200
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

#	ID	Type	Standard	Issuance
1.	01001	Serious	40.1-51.1.A	12/06/2017
2.	01002	Serious	19260050 C	12/06/2017

15. August 17, 2018. Fatality.

Inspection number 1339750. On August 12, 2018, an employee was back filling a sewer during a hot and humid day. The employee expressed concern of discomfort from heat and humidity to his immediate supervisor. The employee and supervisor then went to the truck to sit in the air conditioning to drink water. The employee expressed he needed to use the bathroom, the supervisor escorted him to the porta john. The supervisor found the victim had fallen. The employee was transported to the hospital where he passed away from a heart attack.

Culpeper, Virginia
Culpeper County

Construction

NAICS: 238220/ Plumbing, Heating, and Air-Conditioning Contractors

No citations issued.

16. August 6, 2019. Fatality.

Inspection number 1421218. On August 6, 2019, an employee had climbed up a tree approximately 20 feet when he began to feel sick, hot, and dizzy before falling from the tree. The employee land on the ground and was killed. The employee was 25 years old.

Colonial Beach, Virginia
Westmoreland County

General Industry
NAICS: 561730/Landscaping Services

Violation Summary						
	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations	5					5
Current Violations	5					5
Initial Penalty	\$32,075	\$0	\$0	\$0	\$0	\$32,075
Current Penalty	\$32,075	\$0	\$0	\$0	\$0	\$32,075
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

#	ID	Type	Standard	Issuance
1.	01001A	Serious	16VAC25-73-40.C.2	01/31/2020
2.	01001B	Serious	16VAC25-73-40.C.5	01/31/2020
3.	01002A	Serious	16VAC25-73-40.D.2	01/31/2020
4.	01002B	Serious	16VAC25-73-40.D.7	01/31/2020
5.	01002C	Serious	16VAC25-73-40.D.8	01/31/2020
6.	01003	Serious	16VAC25-73-90.A.4	01/31/2020
7.	01004	Serious	16VAC25-73-90.A.19	01/31/2020
8.	01005	Serious	16VAC25-73-90.A.20	01/31/2020

17. September 3, 2020. Fatality.

Inspection number 1491534. At 2:15 p.m. on September 3, 2020, an employee worked outdoors performing various labor tasks such as site cleanup and demolition of roofing materials. After approximately six to seven hours of working in the heat, the employee went to the work vehicle to take a break. The employee was later discovered unresponsive in the driver's seat of the vehicle. Coworkers called for emergency services and attempted first aid. The employee was transported, by ambulance, to a local hospital, where the employee was pronounced dead of heat stroke.

Hampton, Virginia
City of Hampton

Construction
NAICS: 236118/Residential Remodelers

Violation Summary						
	Serious	Willful	Repeat	Other	Unclass	Total
Initial Violations	2			2		4
Current Violations	2			2		4
Initial Penalty	\$18,887	\$0	\$0	\$0	\$0	\$18,887
Current Penalty	\$13,221	\$0	\$0	\$0	\$0	\$13,221
FTA Amount	\$0	\$0	\$0	\$0	\$0	\$0

#	ID	Type	Standard	Issuance
1.	01001	Serious	40.1-51.1.A	02/25/2021
2.	01002	Serious	19260050 C	02/25/2021
3.	02001	Other	19260051 A01	02/25/2021
4.	02002	Other	19040029 B03	02/25/2021

18. July 6, 2021. Fatality.

Inspection number 1540563. The employee was working outside in 90 degree Fahrenheit weather in an open field on a portable screener, which screens the mulch chips by size, when he began to feel ill. The employee took a break in the truck, and was found a few minutes later unresponsive. The employee was transported to the hospital and ultimately passed away. The employee appears to have died of a heart attack, however heat stress may be a factor. Per the employer, the employee had been acclimatized, water was available, and training on heat stress has been provided.

Waverly, Virginia
Sussex County

General Industry
NAICS: 321999/All Other Miscellaneous Wood Product Manufacturing

No citations issued.