Tennessee Workers: Dying for a Job

A Report on Worker Fatalities in Tennessee, 2014 & 2015
In Honor of Workers' Memorial Day, April, 2016
A project of: Knox Area Workers' Memorial Day Committee, Knoxville, Tennessee

Cover photo:

Workers' Memorial Day 2015—The son and mother of Roger Lee hold his photo. Lee died in 2013 after falling from a roof while installing an HVAC unit.

Photo by Holly Rainey

Dedication

This report is dedicated to all the working men and women in Tennessee -- both known and unknown -- who died in 2014 and 2015 on the job or from illness or injury contracted on the job.

We continue to hold in special memory the five men who died between 2005 and 2012 while building Tennessee bridges on contracts awarded by the Tennessee Department of Transportation to Britton Bridge LLC or another of its closely affiliated companies. Previous reports have detailed the shameful stories behind those deaths and have acknowledged their role in motiving initial formation of the Knox Area Workers' Memorial Day Committee. We recall those men here again by name: Mario Perez, René Mendez, John Womac, Solín Estrada-Jimenez and Abimael Contreras.

Table of Contents

v. Executive Summary

1. In Memoriam: 2014 and 2015

8. Tennessee Worker Deaths: An Overview

14. Positive Developments
    - 14. Continued progress at TDOT
    - 16. Modest increases in penalties by Congress
    - 16. Breakthrough with new silica standard at OSHA
    - 17. Other persistent efforts despite challenging times
        - Guidance on health & safety program management
        - Enhanced reporting requirements for serious injuries
        - Guidance on protecting whistleblowers

19. Selected Areas of Concern
    - 19. Weak enforcement tools
    - 19. Occupational disease
    - 21. Deaths on public projects
    - 22. Worker vulnerability
        - Contingent workers
        - Immigrant workers
    - 26. Tattered safety net

29. Recommendations

31. References

34. Additional resources

37. Glossary of Acronyms and Other Terms

39. Sponsoring Organizations, Authors, and Acknowledgements

Executive Summary

In Memoriam. The list shows 176 Tennessee worker fatalities known to us by name for 2014-15. Assembled from public records, available news sources, and the work of voluntary groups that honor fallen workers, it is only a partial tally.

Tennessee Worker Deaths: An Overview. Some deaths reported here were unrelated to conditions within an employer's control. However, the majority involved hazards that could have been eliminated with proper care or managed in a way that avoided death or serious injury. Federal statistical sources show gradual improvement from 2010 to 2013 in Tennessee, but an uptick in the state's provisional fatality count for 2014.

Positive Developments.

Further progress at TDOT. The agency has launched a significant initiative to better screen and manage its construction contractors for safety.

At last a new silica standard. After decades of delay and paralysis, OSHA was at last able to announce a new rule more effectively limiting workers' legal exposure to silica dust.

Increase in penalties. Last year Congress passed the first increase in penalties for OSHA violations since 1990, a small but needed catch-up after decades of intervening inflation.

Persistent effort in difficult times. Gridlock in Congress, hateful rhetoric in public discourse, and anti-worker climate in the halls of power at a state level, all pose obstacles to workplace health and safety. Nevertheless, individuals, groups and some public officials continue to find creative opportunities for steps forward.

Selected Areas of Concern.

Weak enforcement tools. Agencies tasked with enforcing health and safety rules still lack the resources, authority and tools required to change existing incentive structures and achieve a widespread climate of workplace safety.

Occupational disease. Workplace death from trauma represents only the tip of the iceberg. Many workers continue to suffer and die from exposure to dust, radiation, repetitive motion, and toxic chemicals in ways rarely captured by lists like ours.

Deaths on public works. As in past years, a number of workers on this year's list were employed by contractors on public projects. Public entities need to do a better job of screening and managing contractors to assure safe and healthy conditions.

Worker vulnerability. Whistleblower protections are weak for all workers, and those with special vulnerabilities – such as sub-contracted workers, temporary workers, and immigrants -- are especially likely to labor in harm's way with little access to recourse.

Tattered safety net. With prevention and deterrence so low, the safety net for workers who end up injured or dead is all the more crucial. Tennessee's is in tatters.

Selected Recommendations—some 17 in all—are directed at federal, state and local government, as well as public and private employers.

In Memoriam: Tennessee Worker Deaths 2014 and 2015

The purposes of Workers' Memorial Day are two: to mourn for the dead and to fight for the living. Both goals are important to this Report, and in later sections our focus will turn to what can and should be done to protect the living. But the first goal has been our primary one in compiling the following *In Memoriam* list.

Because we aim to mourn the dead -- that is, to honor those who died in workplace fatalities, and to comfort families left behind -- we lean toward inclusion here. The list therefore contains the names of workers who came to work in Tennessee from elsewhere, and the names of Tennesseans who died while working out of state.

Similarly, the list includes people who died on the job, without regard to whether the death was directly or primarily caused by the job, without regard to whether an employer was ever found legally responsible for the death, and without regard to opportunities for prevention. Some heart attacks, for instance, and other sudden illnesses experienced at work are almost certainly related to conditions at work, but many are not. We do not have the information to distinguish the factors leading to loss of life in such cases, and therefore, since we lean toward inclusion, this list includes all such events. We also include the self-employed.

Finally, despite our desire to be inclusive, we know that occupational disease cases are overwhelmingly absent from our list. Studies suggest that for every acute workplace fatality, ten times as many people die of occupational disease, but the vast majority of those cases go unmarked in records of job-related fatalities.

Given the limitations of the sources and resources available to us, and given the lag time involved in many reporting systems, we have done what we conscientiously could to find all recorded relevant Tennessee fatalities for 2014 and 2015 that could be identified by name. Nevertheless, it is certain that the two lists below do not include all cases and do not get every detail right.[1]

Please take the time to pause and review this roll. Not only does it speak to the magnitude of losses suffered, it also reminds us of the tasks done by workers every day, and of the dignity and value of human labor.

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1 Cases were drawn primarily from three sources: Tennessee Dept. of Labor Workers' Compensation Division, federal Occupational Safety and Health Administration (OSHA), and Tennessee OSHA (TOSHA). Also consulted were the U.S Worker Fatality Database of the National Council on Occupational Safety and Health (National COSH), news sources, public agencies, and groups that provide support to families or honor particular kinds of workers. (See Resources below.) Each source has its holes, and some fatalities were undoubtedly missed. Some federal, maritime, and local government fatalities, for instance, may have been omitted, along with some workers employed by out-of-state employers but working in Tennessee at the time of their death.

Fatalities in 2014: *A Partial List*

Date	Name	Age	Occupation/Employer	Location	Incident
1/9/2014	**Andrew Arnold**	29	Armored truck driver	Davidson	Killed after vehicle ran off road
1/9/2014	**Terry Jordan**	64	Tradebe GP employee	Shelby	Chemical exposure on job
1/10/2014	**Cedric Lyle**	45	Construction worker	Montgomery	Suffered heart attack after installing brick step
1/11/2014	**Robert Smith**	72	Grocery store employee	Rutherford	Died of heart attack, found at work
1/12/2014	**David Johnson**	52	Sheriff's deputy	Montgomery	Killed when vehicle went off roadway into tree
1/15/2014	**Angela Presnell**	50	McFarland Apothecary	Knox	Killed when hit head-on by van in wrong lane
1/16/2014	**John Courtney**	71	Security guard	Monroe	Found dead in security office
1/17/2014	**Jerry Turner**	63	Paper mill worker	Rutherford	Died of cancer after chemical exposures on job
1/18/2014	**José Barcenas**	40	Carpenter	Haywood	Crushed between beam on bridge and aerial lift
1/18/2014	**Ronald Lemmons**	67	Advanced Tech. Staffing	Out-of-state	Hit in head by part of tree
1/21/2014	**Danny Case**	50	Materials handler	Out-of-state	Back injury led to surgery, quadriplegia, death
1/24/2014	**Omar Badillo**	36	Worker at fence company	Davidson	Hit by material loaded onto truck by forklift
1/27/2014	**Eddie Hamer**	36	Animal control officer	Hardeman	Killed when vehicle left roadway and overturned
1/30/2014	**Ned Livingstone**	77	Agricultural statistician	Rutherford	Killed when passenger in car wreck
2/5/2014	**Camron Hill**	24	Lumber company worker	Perry	Died days after right arm pulled into machine
2/11/2014	**David Moore**	43	Goodwill employee	Shelby	Died of heart attack
2/24/2014	**Michael Chism**	41	Worker in flare factory	Hardeman	Burned over 90% of body in flash fire at plant
2/28/2014	**Harold Ledford**	51	Bottled water employee	Polk	Struck by unsecured forks that fell from lift
3/1/2014	**Jerry Campbell**	61	Wildland fire fighter	Cocke	Suffered heart attack while deploying to fire
3/6/2014	**Christopher Weaver**	22	Truck driver	Jefferson	Died in construction zone pile-up
3/11/2014	**Mark Appel**	45	Maintenance worker	Shelby	Suffered heart attack
3/11/2014	**Khon Latsombath**	57	Sequoia Club employee	Davidson	Found unresponsive after heart attack
3/14/2014	**Steve Young**	61	Simmco LLC	Haywood	
3/18/2014	**Howard German**	78	Chemical employee	Hamilton	Exposure to asbestos in past incident
3/30/2014	**Richard Cox**	61	Lowe's Home Centers	Davidson	
4/2/2014	**Johnnie Adams**	55	Concrete finisher	Davidson	Collapsed on job after finishing concrete
4/3/2014	**Danny McDonald**	53	Bid runner for contractor	Out-of-state	Killed in car wreck, may have had heart attack
4/8/2014	**Bradford Higgins**	28	Youth counselor	Gibson	Hurt in collision after last session of day
4/16/2014	**Rodney Edwards, Jr.**	23	Factory worker	Humphreys	Killed in explosion at shotgun-shell plant
4/16/2014	**Martin Pack**	50	Bid-runner for contractor	Out-of-state	Died in construction zone pile-up in Kentucky
4/24/2014	**Theodore Fortner**	45	Construction worker	Roane	Died at home unexpectedly after injuring ankle in fall
5/4/2014	**Robert Strickland**	46	Truck driver	Hardin	Crushed between trailers when unbraked truck rolled
5/6/2014	**Terry Tomlinson**	49	Equipment operator	Williamson	Killed when truck went into ravine
5/10/2014	**Michael Petrina**	25	Police officer	Davidson	Struck by negligent driver while directing traffic
5/14/2014	**Edward Congleton**	64	Truck driver	Cumberland	Suffered heart attack while inspecting his truck
5/19/2014	**Scott Crisp**	45	Self-employed caterer	McMinn	Electrocuted while repairing wiring in food truck

5/20/2014	**Joseph Seul**	54	Alexander Metals	Davidson	Heart attack
5/21/2014	**Earl Bailey**	86	Iron worker	Knox	Died of mesothelioma from asbestos exposure
5/22/2014	**Jamie Fore**	37	Truck driver	Shelby	Killed after his truck crashed, burst into flame
5/31/2014	**Billy Shelton**	39	Truck driver	Washington	Disabling injury led to death after several years
6/6/2014	**Terry Lawson**	66	Truck driver	Sullivan	Suffered heart attack at work
6/6/2014	**William Waddell**	57	Animal Health Int'l	Shelby	Fell from lift platform
6/7/2014	**Jason Ramirez**	31	Roland Ramirez employee	Johnson	Died in motorcycle crash
6/10/2014	**Tommy Newman**	55	Ergon-Knoxville employee	Knox	
6/10/2014	**Larry Releford**	42	Steel worker	Knox	Severely burned in steel mill furnace explosion
6/16/2014	**Dwight Anderson**	49	Labor Finders of Tn	Williamson	Passed out with heart attack in heat
6/16/2014	**Aron Pack**	45	Self-employed contractor	Knox	Electrocuted on ladder at office building job
6/18/2014	**Siler Helton**	59	Construction contractor	Madison	Fell 16' when forklift dropped unsecured platform
6/28/2014	**Brian Crawford**	35	Tower climber	Knox	Struck and killed on highway
6/29/2014	**Paul Shepherd**	40	Taxi driver	Knox	Shot during robbery after two days on the job
6/30/2014	**Larry Cash**	68	Officer in sheriff's office	Knox	Suffered heart attack
7/2/2014	**William Dougherty**	65	Feed delivery driver	McMinn	Electrocuted by power lines at chicken farm
7/2/2014	**Chandler Warren**	19	Material handler at FedEx	Shelby	Crushed between platform and loader at airport
7/7/2014	**Jack Hesson**	68	Tree feller	Williamson	Struck by tree while attempting to get distance
7/9/2014	**James Holland**	48	Finchum Sports Flooring	Davidson	Collapsed of heart attack at hotel on business
7/10/2014	**Thomas Kiersnowski**	54	Assistant retail manager	Sullivan	Suddenly fell backwards while stocking product
7/17/2014	**Jack Moody**	58	Maintenance worker	Benton	Crushed by forklift that fell on him during repair
7/25/2014	**Charles Garrison**	63	Paper mill worker	Hardin	Struck by forklift whose loaded rolls obscured view
8/5/2014	**Pierre Davis**	29	Equipment operator	Shelby	Mowing tractor flipped, no seat belt or roll bar
8/11/2014	**Charles Taylor**	83	Apartment maintenance	Cocke	Passed away in maintenance shed
8/12/2014	**Merrill Kingsbury**	69	Truck driver	Hardin	Struck on roadway after stopped to help motorist
8/15/2014	**Bobby Bobo**	67	Truck driver	Giles	Killed in explosion of tanker truck he was driving
8/16/2014	**David Ciglar**	50	Coca-Cola Refreshments	Bradley	Collapsed at work
8/26/2014	**John Gavin Duncan**	23	Christian staff counselor	Hamilton	Fell into river on group trip to Big South Fork
8/26/2014	**Trevor Flum**	37	Tower technician	Out-of-state	Struck on roadside while securing load in Okla.
8/31/2014	**Phllip Toombs**	27	Truck driver	Coffee	Struck by car after his own truck crashed
9/3/2014	**Donald Edens**	44	Empire Equipment	Hamilton	Died piloting small plane that crashed
9/18/2014	**Floyd Deal**	77	Power equipment sales	Anderson	Hit in chest by clasp while unloading lawn mowers
9/23/2014	**Ricky McCurry**	58	Construction worker	Rutherford	Pinned under flipped back hoe on school job
10/6/2014	**Maggie Bloodsaw**	32	New hire at FedEx	Hamilton	Taken ill and died, first day at orientation
10/14/2014	**Gary Reedy**	43	Nuclear waste worker	Unicoi	Fell 27 feet from deck into transfer vault
10/16/2014	**Pruitt Watson**	62	Levy employee	Shelby	Taken ill at work
10/20/2014	**Gordon Schaffer**	22	Fast food worker	Maury	Shot in night robbery while alone at restaurant
10/21/2014	**Juana Mendoza**	65	Staff Line employee	Out-of-state	Died of heart attack while at work
10/24/2014	**Kagan Dindar**	37	Police detective	Montgomery	Heart attack while directing traffic at large event
10/24/2014	**Zach Holliday**	21	Construction worker	Shelby	Fell 45' thru large hole in floor on job site
10/30/2014	**Jerry Anders**	59	Truck driver	Out-of-state	Crushed between trailer & tire while repairing trailer
11/4/2014	**Darrell Perritt**	42	Law enforcement	Maury	Killed in course of vehicle pursuit

11/7/2014	**Doris Hopson**	55	School bus driver	Shelby	Heart attack while driving, no children hurt
11/13/2014	**Ray Rhodes**	27	American Bottling Co.	Shelby	Killed when his truck hit ice and flipped
11/14/2014	**Gerald Mathews**	64	Truck driver	Putnam	Found unconscious in the bed of his truck
11/17/2014	**Steven Woolridge**	46	Elwood Staffing	Davidson	Taken ill while packing boxes
11/18/2014	**Dale Jones**	37	Automation Temp Srvcs	Rutherford	Suffered heart attack
11/18/2014	**Gregory Rigney**	55	Sequatchie Concrete	Williamson	Pinned by forklift that tipped over onto him
11/20/2014	**Thomas Dunn**	61	FedEx employee	Shelby	Suffered heart attack
11/23/2014	**Monty Crabtree**	43	Hotel employee	Montgomery	Collapsed walking down hallway
12/2/2014	**Michael Donley**	52	Truck driver	Davidson	Smashed head-on by semi that crossed median
12/2/2014	**Jon Greer**	29	Truck driver	Davidson	Died in head-on collision with other truck
12/9/2014	**Gus Losleben**	69	Fire fighter	Hardin	Killed in fire tanker collision with logging truck
12/15/2014	**Ricky Jones**	59	Truck driver	Knox	Heart attack
12/15/2014	**Miguel Nave**	60	Heat & air employee	Knox	Suffered heart attack on the job
12/15/2014	**Jason Webb**	35	Utility worker	Shelby	Severely burned in gas explosion
12/18/2014	**Allen Cotton**	44	Cell tower climber	Greene	Fell 105 feet from cell tower

Harold Ledford

1962 - 2014

Harold Ledford worked as a maintenance technician at C. G. Roxane Water Company in Benton Tennessee. On Feb. 28, 2014 he was repairing a hydraulic leak in a fork lift. In order to reach and replace a faulty hydraulic valve, Harold and a co-worker lifted the vehicle's prongs approximately eight feet. They believed that the prongs rested securely on the top of a shipping container, but when Harold removed the valve, disconnecting the hydraulic system, the prongs slipped off of the container and hit Harold in the back. He died in the hospital later the same day.

Harold Ledford grew up in a tight-knit family in Old Fort, Tennessee, just above the Georgia state line, where his parents and many siblings still live. He graduated from Polk County High School in 1980. Harold was a devoted family man; he and his wife, Anita, had two daughters, Jennifer and Michelle, who were 28 and 23 years old at the time of Harold's death. His step-son, Daniel, was 31 when Harold died. Harold and Anita shared a love for hunting and fishing. Anita said that Harold especially loved trout fishing in the nearby Ocoee River. Harold and his mother, Ruth, were avid flower gardeners. Ruth reported that Harold would bring her wild flowers whenever he walked in the woods.

Harold was very active in his community. He was a deacon in Calvary Church of God in Greasy Creek, Tennessee, and ran the church's sound system. His favorite charity was "People Helping People", which provided resources for needy families and individuals. Anita and Ruth said that Harold had a natural mechanical ability. He could fix anything, and he offered that talent to his neighbors in need. His energy and devotion to community work is sorely missed by his neighbors in Polk County.

TOSHA's investigation cited Harold's employer for four "serious" safety violations that were involved in his death, including failure to develop and follow specific procedures for the control of stored energy while workers performed maintenance work on industrial trucks, and allowing employees to work under improperly secured equipment. TOSHA investigators also cited C. G. Roxane for six "non-serious" violations that reflected a sloppy and dangerous work environment in their Benton, Tennessee facility. The company was fined a total of $11,500.

Fatalities in 2015: *A Partial List*

Date	Name	Age	Occupation/Employer	Location	Incident
1/6/2015	**Frankie Woodard**	31	Forklift driver	Robertson	Crushed when forklift tipped
1/27/2015	**Roderick Shoemaker**	30	Truck driver	Claiborne	Found dead in sleeper of his truck
1/30/2015	**Michael Starrett**	54	Police Officer	Campbell	Struck by vehicle while responding to fatal accident
2/3/2015	**Wallace Scarbro**	54	Operator in candy factory	Hamilton	Crushed in machine without good lock-out/tag-out
2/17/2015	**James Currier**	38	Poultry plant worker	Bedford	Fell & caught in auger while cleaning poultry machine
2/23/2015	**Daniel Word**	64	Factory electrician	Blount	Struck by crane while working on unguarded platform
3/3/2015	**James Ankrom**	62	Truck driver	Hamilton	Struck by vehicle while walking on side of road
3/3/2015	**Wade Morgan**	31	Demolition employee	Montgomery	Fell through hole in roof during building demolitiion
3/5/2015	**Ricky Adams**	57	Truck driver	Out-of-state	Heart attack while on the road
3/7/2015	**Larry Hill**	56	Truck driver	Shelby	Slipped on ice during stop for fuel
3/9/2015	**Ronald French**	61	County employee	Knox	Heart attack in parking lot of detention center
3/11/2015	**Marcelo Vasquez**	41	Farm worker	Robertson	Fell from greenhouse roof during construction
3/16/2015	**Bobby Joe Green**	69	Roofer	Hardin	Fell from roof while shingling cabin at state park
3/17/2015	**Dale Reynolds**	43	Truck driver	Haywood	Died in head-on collision followed by fire
3/17/2015	**Ricky Seals**	55	County highway worker	Bledsoe	Found dead of natural causes on the job
3/18/2015	**Fred Cain**	60	Business owner	Knox	
3/23/2015	**Virginia Dorris**	53	Bank employee	Madison	Shot by estranged boy friend at bank
3/26/2015	**Robert Brown**	44	Management consultant	Loudon	Found unconscious at hotel gym
4/5/2015	**Lorin Mierzwa**	65	Retail pharmacy worker	Davidson	Collapsed with chest pain in break room
4/14/2015	**Roy Culver**	57	Restaurant worker	Wilson	Died of apparent heart attack
4/15/2015	**John Laws**	67	Human resources staff	Washington	Hit head-on while in vehicle on company business
4/21/2015	**Frank Wade**	55	A/C maintenance	McMinn	Fell when welds on ladder's grab-rails failed
5/3/2015	**Chris Blankenship**	41	Firefighter	Madison	Struck by falling tree while on duty with burning car
5/3/2015	**Kelvin Butler**	55	Federal Express	Shelby	Died of stroke at work
5/8/2015	**Billy Whaley**	69	L.J. Pallet Inc.	Bradley	Killed in motor vehicle accident
5/25/2015	**Terrance Pryor**	48	Firefighter	Shelby	Heart attack within hours of last emergency call
5/30/2015	**Chukwuemeka Eke**	55	Atco Industries	Rutherford	Collapsed while at work
5/31/2015	**Shelia Walton**	51	Federal Express	Shelby	Struck by heart attack while at work
6/1/2015	**Eddy Lee Glenn**	58	Truck driver	Davidson	Lost control of semi at curve on highway
6/1/2015	**Cody Thorp**	24	Groundskeeper	Rutherford	Crushed under ATV that flipped
6/5/2015	**Randy Daughtery**	64	Iron worker	McMinn	Fell 40' from unguarded platform of crane
6/6/2015	**Joshua Mabe**	34	Family farmer	Hancock	Struck by tractor's loader while baling hay
6/14/2015	**Beatha Galloway**	53	Truck driver	Out-of-state	Truck jack-knifed on highway in heavy rain

6/15/2015	**Keith Bell**	42	Saw mill worker	Warren	Electrocuted at contact with ungrounded machine
6/17/2015	**Rowdy Kevwitch**	38	Storm clearance worker	Cumberland	Killed when drive shafts broke on heavy equipment
6/23/2015	**William Ferguson**	68	Retail clerk	Anderson	Suffered heart attack while serving customer
6/24/2015	**Anthony Chadwick**	56	Utility employee	Henry	Collision while passenger in vehicle on way to customer
6/24/2015	**Robert Howard**	62	Federal Express	Shelby	Suffered massive heart attack
6/25/2015	**Andrew Ludwig**	25	Craghopper's	Out-of-state	Killed when vehicle ran off road on way to customer
6/25/2015	**Danny Sweat, Jr.**	27	Highway line painter	Benton	Struck by asphalt truck while painting shoulder line
6/26/2015	**William Knight**	68	Internat'l Industrial	Multiple	Long-term asbestos exposure
6/27/2015	**Alvin Charles**	68	Construction	Shelby	Died of natural causes while sitting in water truck
7/14/2015	**Chandler Harris**	19	Sanitation worker	Davidson	Knocked off back of garbage truck and run over
7/16/2015	**Carson Holmquist**	25	Marine Sergeant	Hamilton	Shot while guarding military recruiting station
7/16/2015	**Thomas Sullivan**	40	Marine Gunnery Sergeant	Hamilton	Shot while guarding military recruiting station
7/16/2015	**Squire Wells**	21	Marine Lance Corporal	Hamilton	Shot while guarding military recruiting station
7/16/2015	**David Wyatt**	37	Marine Staff Sergeant	Hamilton	Shot while guarding military recruiting station
7/17/2015	**Eddie Ray Haga**	42	Truck driver	Blount	Killed when his truck hit TDOT bushhog on shoulder
7/18/2015	**Randall Smith**	26	Navy Logistics Specialist	Hamilton	Shot while guarding Navy Reserve Center
7/23/2015	**Doyle Wright**	34	Tree cutter	Knox	Struck by tree his crew was felling on KUB site
7/24/2015	**Christa Farmer**	31	Phelbotomist	Rutherford	Collision on I-24 on way back from nursing facility
8/1/2015	**Sean Bolton**	33	Police officer	Shelby	Shot when he interrupted a drug deal
8/19/2015	**Brandon Duncan**	32	Satellite installer	Knox	Fell from homeowner's roof while installing satellite
8/31/2015	**George Adams**	70	Parks & rec worker	Gibson	Struck by branch of dead tree while clearing brush
9/2/2015	**Adron Williams**	63	County employee	Cannon	Killed when truck turned onto side, slid into bank
9/21/2015	**Earl Morgan**	65	Painter	Hamilton	Fell while painting TVA office building
9/21/2015	**Arnold Russell**	44	Temp agency worker	Davidson	Crushed by machine at Southland Brick & Block
9/22/2015	**Gary Osborne**	28	Bell Partners, Inc	Davidson	Fell off ladder and suffered multiple head injuries
9/28/2015	**Rosemary Vela**	24	Sheriff's deputy	Madison	Ran off road in rain while responding to back-up call
10/2/2015	**Billy Lowe**	59	Middle Tn Recycling	Davidson	Struck by excavator while in its unguarded swing path
10/3/2015	**James Donaldson**	68	Corrections Corporation	Hardeman	Died while monitoring floor and watching door
10/5/2015	**Forrest Perry**	19	Roofing contractor	Out-of-state	Fell through building while installing skylight in AL
10/7/2015	**Jeffrey Hensley**	26	Furniture worker	Hamblen	Electrocuted on assembly line at furniture factory
10/7/2015	**Antonio Smith**	47	Firefighter	Shelby	Found dead less than 24 hours after emergency call
10/13/2015	**Antonio Thompson**	36	Heavy machine operator	Shelby	Killed by dirt compactor that flipped over
10/16/2015	**Charles Fultz**	59	Water well driller	Claiborne	Died of heart attack while installing pump
10/22/2015	**Joseph Brady**	69	Roofing supply driver	Tipton	Thrown when powered industrial truck tipped
10/25/2015	**James Wallen**	54	Park ranger	Hamilton	Died years after severe brain injury in car wreck
10/27/2015	**John Valentine**	55	Insurance appraiser	Out-of-state	Heart attack while on business trip
10/31/2015	**David Campbell**	60	Dienamic Tooling	Davidson	Killed in collision with truck on highway

11/1/2015	**Michael Mitchell**	63	Bunge North America	Out-of-state	Died of heart attack
11/10/2015	**Johnny Massingille**	51	Sanitation worker	Overton	Killed when pickup crashed into garbage truck
11/10/2015	**Andre Pruitt**	50	Construction worker	Shelby	Fell after chest pain while putting up scaffold
11/10/2015	**Anthony Toney**	22	Sanitation worker	Overton	Killed when pickup crashed into garbage truck
11/13/2015	**Shawn Wyatt**	46	Maintenance man	Madison	
11/22/2015	**Christopher Higginbotom**	39	Federal Express	Shelby	Killed in accident involving tug vehicle and trailer
11/23/2015	**John Rasnussen**	67	Triple B	Hamilton	Heart attack while in company office
11/24/2015	**Lloyd Leake**	42	Tree cutter	Carter	Struck by tree while clearing power-line trail
12/7/2015	**Donald Orsburn**	76	Sanitation worker	Decatur	Fell of garbage truck when it hit a bump
12/11/2015	**Jacob Sullivan**	25	Construction	Out-of-state	Fell 40 feet from roof of tobacco warehouse in Ky
12/18/2015	**Juan Rodriguez**	39	Roofer	Rutherford	Fell 25' through open roof panel, no fall protection
12/18/2015	**Michael Shirah**	42	Southern Electric	Madison	Electrocuted while servicing light pole
12/21/2015	**Keith McGehee**	57	Lumber yard worker	Henry	Caught in unguarded conveyor belt at lumber yard

The information sources available to us, as to other advocates around the country, are incomplete and sometimes difficult to work with, especially in the first year or two after a fatality. We hope that reporting systems soon improve in ways that will help us to produce more prompt, complete and accurate In Memoriam lists in the future. We sincerely apologize if your co-worker, employee or loved one was omitted from this list despite suffering an occupational fatality in 2014 or 2015, if any name was wrongly included, or if other details are in error. Please help us correct the record. Send accurate information to <fran.ansley@gmail.com>.

Tennessee Worker Deaths: An Overview

Names and Human Beings

We do the work to build this list because we believe it is important to name these names and to mark each death individually. Each entry represents a person with his or her own story, someone torn too soon from family and friends.

Eventually, in its Census of Fatal Occupational Injuries (CFOI), the U.S. Bureau of Labor Statistics will release more extensive information it has been able to gather on 2014-15 deaths, and federal statisticians will be able to analyze the data and compare them to the record in other states and to that of the nation as a whole. Eventually as well, the Tennessee Occupational Safety and Health Administration (TOSHA) will post a list of specific Tennessee fatality investigations it undertook in 2015, along with summary descriptions of these investigations.

However, much of the data eventually released will be purged of names. And much of it will come too late to provide much comfort to those suffering recent loss. So we work as best we can to put together a timely list. We also join others around the country in calling on federal and state authorities to find more prompt and helpful ways of making this important information available to the public. (In the meantime we congratulate the National Council on Occupational Safety and Health (National COSH) for the work it has done in the past year to gather and make accessible the most complete record available to date of workplace fatalities presently identifiable by name for 2014 and 2015. National COSH's database can be viewed by the public at: http://www.coshnetwork.org/fatality-database.)

We hope that the Tennessee *In Memoriam* list, and the handful of personal stories included at other spots in this Report, will provide a more concrete sense of some individuals and of those they left behind. The costs of such losses can and should be counted in dollars, but each life lost was also priceless, and none can rightly be summed up in numbers alone.

Numbers and Patterns

Nevertheless, in order to reduce the toll of workplace hazards in the future, it is also important not only to memorialize, but also to count and analyze. Taken as a group, and scanned for patterns, these cases as a whole, though incomplete, may help us to identify what hazards are harming workers in our state, and what can be done to eliminate or better control them. So this section will undertake a quick scan, focusing primarily on the types of incidents and hazards the list reveals.

Note that the Bureau of Labor Statistics, in its Census of Fatal Occupational Injuries (CFOI), already reports 124 (nameless) fatalities in Tennessee for 2014 (preliminary data), compared to only 93 that we have been able to identify by name from that year for the In Memoriam list above. When the CFOI numbers for 2015 are eventually released, they too will almost certainly be higher than the 83 names for 2015 reflected in the list above. Incomplete though it is, the tally above contains a total of 176 occupational fatalities -- 93 identified for 2014 and 83 for 2015. Demographic distribution of these injuries by gender and ethnicity reflects national trends.

1. Motor vehicle accidents and workers struck by vehicles

As usual, the largest category of occupational fatalities captured by this list – 42 in all, or some 24% of the total -- involved a motor vehicle incident on a public road. Sometimes these cases involved persons on a business trip away from their more regular duties, but most often those who die on the road at work are truckers or other professional

drivers. (In either case, TOSHA typically does not investigate the deaths of workers killed in or by vehicles on public highways, leaving those investigations to other authorities. So these deaths do not show up on its annual list of fatality investigations.)

A related but different category of transportation deaths happen to those driving through or laboring in loading areas or highway work zones. Work zones are filled with danger from vehicles merely passing through, as well as from vehicles carrying out tasks in the zone -- from repaving to mowing, utility work and more, and three men on this year's In Memoriam list died in construction zones. ***Tennessee has a higher-than-average fatality rate in work zones. The CDC has reported that over the 11 years from 2003 through 2013, Tennessee had the fifth highest number of worker deaths in highway work zones of all states in the country*** (CDC 2015).

2. Falls

We identified nineteen Tennessee workers who died from fatal falls in this period, about 11% of the total. A majority involved falls from heights in construction. Federal OSHA recognizes the magnitude of the problem for the construction industry, where falls are the leading cause of death. (OSHA 2016f)

Five men on the list fell from roofs. Clear standards are supposed to govern work at elevation, as OSHA explains on its website:

> Workers who are six feet or more above lower levels are at risk for serious injury or death if they should fall. To protect these workers, employers must provide fall protection … For roof work, there are many ways to prevent falls. If workers use personal fall arrest systems (PFAS), provide a harness for each worker who needs to tie off to the anchor. Make sure the PFAS fits, and regularly inspect all fall protection equipment to ensure it's still in good condition and safe to use. (OSHA 2016f)

One of the roof fall fatalities in 2015, that of Bobby Joe Green, took place at a state park where a contractor and subcontractor were involved in putting shingles on a cabin roof. The TOSHA investigator's report from the cases paints a stark picture of one work site:

> No one working at the site was wearing or had worn fall protection while completing roof work at this construction site. … Some employees did state they had been shown how to put on a harness at another construction site, by another contractor; not their current employer. Employees stated they had not received any safety training at all from [the employer] other than him telling them to "Be careful." (TOSHA Inspection # 1047445)

Falls occur outside construction as well. One worker on our list fell from a communication tower, part of an epidemic that has accompanied the explosion of wireless communication (Knudson and Day 2012; Day 2012). Others – including Gary Reedy, whose story appears elsewhere in this Report -- stepped into elevated holes that had been left unguarded.

Meanwhile, job sites exist all over the state of Tennessee where known safety measures -- such as designing hazards out or using guardrails, safety nets, or personal fall arrest systems properly tied off -- are either absent altogether, or improperly employed. TOSHA has had a special-emphasis program on falls for some years, but the impact of the program is limited when the number of inspectors remains so low in proportion to the number of worksites where fall hazards exist.

3. Encounters with Machinery

A significant number of cases in 2014 and 2015 involved some problem with machinery or its operation, sometimes in factories or lumber yard settings, sometimes at excavation and earth-moving sites. Five men were killed in incidents involving forklifts or powered industrial trucks, and seven died when the various machines they were operating flipped over.

In one case the drive shafts on a piece of heavy equipment failed. In one, a man was crushed between a bridge and an aerial lift. One man was killed when unsecured forks fell from a lift. In another, a man was struck by a crane whose travel radius extended into an unguarded pinch point during one part of its path. Circumstances vary, but indications are that proper training on safe operation and adequate maintenance of this equipment are often lacking. Several men were pulled into moving machinery like augers or conveyor belts when machines were improperly guarded or when crucial and well-established lock-out/tag-out procedures were not followed.

5. Violence

The year 2015 brought nationwide attention to a particularly dramatic case of worksite violence in Tennessee. In July, five men – four Marines and a Navy logistics specialist – were killed by a lone gunman wielding an AK-47-style weapon in an attack on two different military facilities in Chattanooga. The men killed were Carson Holmquist, Randall Smith, Thomas Sullivan, Squire Wells, and David Wyatt.

Obviously this case involved a number of issues that extend well beyond more ordinary cases of workplace hazards. But one simple fact of the story is that they were workers carrying out assigned tasks at their worksite. These were men whose job was providing security to the facilities they were guarding and to the general public, and they gave their lives carrying out that job. As one news story described their conduct on the day of the attacks,

> Some of the five servicemen who were fatally wounded effectively sacrificed themselves during the assault on Thursday, diverting the gunman from a larger group of potential victims, according to a law enforcement official briefed on the investigation into the killings. "This could have been a lot worse," said the official, who did not want to be identified because he was not authorized to discuss the investigation. (Faucett et al 2015)

Beyond this shocking and well-publicized instance, several other workers in Tennessee suffered death from more "ordinary" violence in their places of work. For instance, in 2014, Paul Shepherd, a Knoxville man employed in the taxi business – an industry infamous for its rate of injury and death -- was killed by a robber after working only two days on the job (WBIR; Taxi Driver Memoriam). In that same year, Gordon Schaffer, a 22-year-old worker at a fast-food restaurant in Columbia was assigned to work alone on night shift in a high-risk part of the city. He was shot and killed in the course of a robbery (Apel).

Then in 2015, Virginia Dorris, a bank teller, died when her former boy friend came into the bank, shot her at close range, and then killed himself. The story was heartbreaking. The man who killed her had been threatening Ms. Dorris ever since she had broken up with him the previous fall. Fearing for her life, she had obtained a temporary order of protection. Because her attacker lived within two miles of her, she had also been unsuccessfully attempting to sell her home. (Faris 2015).

Virginia Dorris (Photo: Facebook)

National studies indicate that Ms. Dorris's case was not an aberration with regard to violence against women in the workplace. A large proportion of worksite homicides committed against women -- unlike those committed against men -- are perpetrated by intimate partners. One researcher with the National Institute of Occupational Safety and Health explained it this way:

> A woman who gets ready to leave a partner who is being violent with her can move out of a house, move into different situations, but a lot need employment, so they stay in the same job … That makes the workplace a very easy target. (quoted in Covert 2014)

Other researchers have pointed out that workplaces open to the general public, especially with jobs (like that of bank teller) where workers interface directly with customers, can put a woman at particularly high risk. In these situations it is quite easy for an attacker to enter the premises and gain immediate access to the victim. (Tiesman et al 2012)

As the above cases illustrate, violence on the job is a matter to be addressed by the criminal justice system -- or in some cases even by systems aimed at combatting the effects and influence of terrorism. But in some industries and some settings, violence at the worksite is known to be a particularly likely risk, and there are steps that employers can and should take to protect workers from them. As Gordon Schaffer's sister, Devan Cronin, poignantly observed after her brother was killed on his fast-food job, "Local businesses need to rethink their policies of employees working alone in high-risk areas." (Apel 2014)

Effective prevention measures vary with the context and with the type of violence involved. Although TOSHA does not ordinarily investigate cases of criminal assault, there are instances where the agency now considers investigation appropriate, and the agency has adopted specific procedures for when and how it should investigate cases of workplace violence. (TOSHA 2012).

6. Heart attacks and other sudden illness

Cases of sudden illness or collapse at work number 48 cases on this year's In Memoriam list. As in former years, they add up to a significant portion of the whole, this year about 27%.

Many of these sudden-onset cases were not likely to be related to work in any significant way other than the victim's simple presence at the worksite. Accordingly, many of these specific fatalities should be set aside when it comes to seeking patterns that could point the way to better practices in workplace safety. As with motor vehicle accidents and cases of homicide, this questionable connection to employer practice is a reason TOSHA does not typically investigate these kinds of fatalities.

On the other hand, working conditions are likely to have played a major role in some of these cases. For instance, three of these deaths were of firefighters – one who died while deployed to a wildland fire, and two who died within 24 hours of responding to an emergency call. For multiple reasons, firefighters are known to suffer a highly elevated risk of injury and death from heart disease, a condition that kills more firefighters than burns and smoke inhalation combined. Effective strategies for reducing these risks are and should be under investigation. (Kales et al 2007)

Similarly, six of the sudden-onset cases were truck drivers who appear to have died of heart attacks while on the job -- often alone and far from home. Like firefighters, truck drivers -- especially those who drive long distances over the road -- are also known to carry a higher-than-average risk of heart disease and a number of other conditions or illnesses. (Sieber et al 2014) For instance, one team of researchers found in a survey of long-haul drivers with over five years of experience that:

> 83.4% were overweight/obese, 57.9% had sleeping disturbances, 56.3% fatigue, 42.3% musculoskeletal disorders, and about 40% cardiovascular disease concerns. About 33% had no health insurance, 70% had no regular healthcare visits, 24.4% could not afford insurance, and 42.1% took over-the-counter drugs when sick, while 20.1% waited to reach home for medical care. Exercise facilities were unavailable in over 70% of trucking worksites and 70% of drivers did not exercise regularly. (Apostolopoulos et al)

7. Other circumstances

Other fatalities on the In Memoriam list span a range of circumstances. The number of fatalities in these categories is smaller than in those mentioned above, but they are worthy of notice because the hazards they highlight are continuing and serious, sometimes posing risks that could reach catastrophic proportions for workers and for surrounding communities.

Electrocutions. Six men were electrocuted on the job during this two-year span, two of whom were assigned to work with improperly grounded equipment.

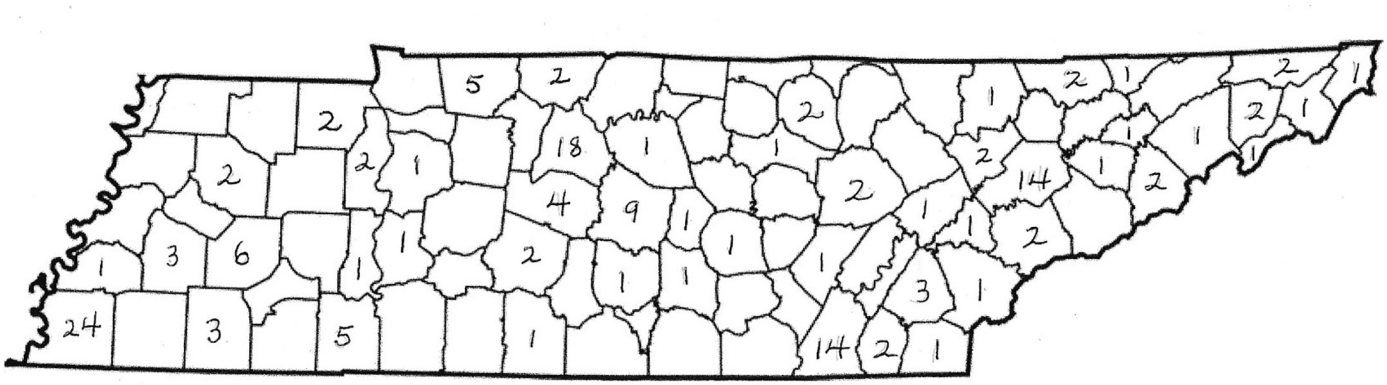
Flash fires and explosions. As described in more detail in last year's report, three workers were killed in flash fires or explosions in 2014. As TOSHA's investigator observed in the post-incident report for one of these cases:

> During the inspection it was determined that the employer was lacking in most of the required programs for their particular industry … The employer had conducted little or no training for the employees on the hazards and/or safe handling of the gun powder they were exposed to on a daily basis … The employer had conducted no process hazard analysis nor implemented the necessary safe operating procedures outlined in the … standards. (TOSHA Inspection #317741270.)

Places

Workplace fatalities are spread unevenly across the state, with the largest number of cases clustered of course around major population centers. Shelby County continues its record as by far the most deadly county in the state for workers, with 24 fatalities, or 14% of the total. Fifteen Tennessee workers on this list died out-of-state. Totals by county are shown on the map below.

Figure 1. Fatalities from In Memoriam List, by Tennessee county



Comparisons

To make valid comparisons over time, and to compare Tennessee to the rest of the country, we must move from the In Memoriam list of named Tennessee fatalities compiled specifically for this Report, and turn instead to federal data. The Bureau of Labor Statistics (BLS) provides information on fatalities, fatality rates, deaths by industry, and much else.[2]

Trends over time. The total number of Tennessee fatalities in 2014 as reported by the BLS in the most recent releases from the Census of Fatal Occupational Injuries (CFOI) was 124. (Numbers for 2014 are still preliminary.) That total is a significant jump from the 95 cases reported for 2013. Higher than all but two of the preceding seven years, it represents a reversal of an encouraging trend that had seen the number steadily dropping since 2010. (Table 1). Different from the total number of fatalities is the fatality rate. Tennessee's overall job fatality rate had also been declining modestly since 2010. When CFOI publishes a rate for 2014 after the final figures are in, it will be possible to see whether or not Tennessee's 2014 fatality rate jumped as significantly as its 2014 fatality number.

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2. Bear in mind that because of differences in data collection and in criteria for inclusion, this report's In Memoriam list includes deaths excluded by the BLS and vice versa.

How Tennessee compares to other places. Tennessee's fatality rate has been higher than the national rate for the whole period tracked in Table 1.[3] On the bright side, Tennessee's fatality rate sank closer to the national average each year from 2008 to 2013, with the degree of difference varying from 9% to 50% higher than the national rate during the period. It is unclear at this point what effect the 2014 uptick in Tennessee fatalities will have on its fatality rate.

Table 1. Fatality Rates* in Tennessee and U.S. 2008 to 2014

	Total Fatalities	Tennessee Rate	National Rate	TN % above National Average
2014	124	---	---	---
2013	95	3.6	3.3	9%
2012	101	3.8	3.4	12%
2011	120	4.5	3.5	29%
2010	138	5.4	3.6	50%
2009	111	4.5	3.5	29%
2008	135	5.1	3.7	38%
7-year total	824			
6-year average rate		4.5	3.5	28%

* Per 100,000 full-time-equivalent workers (an hours-based rate) Source: CFOI (data for 2014 preliminary)

3. State rates have not yet been reported for 2014 because data for that year are still preliminary. Final numbers of fatalities captured by CFOI for 2014 will not be released by the Bureau of Labor Statistics until April 2016, and BLS does not calculate state fatality rates until that time -- too late for inclusion in this Report.

Positive Developments

Sometimes people speak of workplace injury and death as a phenomenon that is unavoidable – something that somehow is a natural feature of the economy or even of human life, a fact that may be tragic but will always be with us. Experience in the real world proves otherwise, however.

The system of standards and enforcement established by the Occupational Safety and Health Act has saved the lives of thousands of workers since it was instituted in the 1970s. Similarly, strong apprenticeship and training programs radically reduce injury and death even on the most dangerous jobs. Organizations in the public and private sectors that get serious about instituting a culture of safety have shown that they can produce real results. Dedicated safety staff and other leaders within businesses and labor unions, passionate investigative journalists, conscientious inspectors at enforcement agencies, elected officials who press for stronger laws, and workers themselves who get the facts and take a stand for themselves and their co-workers – all these human beings can and do make a difference. Policy matters (Steinzor et al). Preventable deaths do not have to continue.

If such things are indeed within human control to an important degree, then improvements are worth celebrating and analyzing, so we can see how to get more of the same. Accordingly, we highlight here several positive developments that have occurred since last year.

More Signs of Progress at TDOT

Publication of this annual Report was originally prompted by a string of five worker deaths and then the near-death of two passing motorists – all of these taking place over the course of seven years, all on bridge projects funded by the Tennessee Department of Transportation (TDOT) and carried out by a set of closely affiliated construction companies including Mountain States Contractors and Britton Bridge LLC. Moved by this shocking train of events, each edition of Tennessee Workers Dying for a Job has focused attention on the question of public contracting in construction, and each Report has called for stronger prequalification and assessment systems that could better assure safety for both workers and the general public on construction sites where taxpayer-funded infrastructure is being built and maintained through publicly awarded contracts.

In both 2014 and 2015, bills were introduced into the Tennessee legislature by Rep. Mike Stewart (D-Nashville) that would have required certain agencies in Tennessee to find better ways of screening construction contractors for safety. (The 2014 bill was addressed to a broad range of state agencies, while the 2015 bill focused solely on TDOT.) Although neither bill ended up coming to a vote in committee, each prompted productive conversations among lawmakers, agency staff and other concerned parties.

Last year we reported that in the course of this dialogue TDOT had communicated its intention to research options for a system that could better evaluate the safety capacity of companies seeking to bid on contracts with the agency, as well as more rigorous safety standards in the contract specifications that set forth how the work itself on the jobsite is be conducted. This year we are pleased to say that progress toward development of more rigorous contract specifications has been achieved, and these new specifications are due to be implemented in the spring of 2016. In addition, TDOT is strengthening within the agency the human resources focused on worker safety concerns, as noted below.

TDOT has made good on its agreement to meet periodically with stakeholders, both to keep them informed and to receive their input, and these meetings are presently on-going. The agency has also gone beyond conversation to concrete action, creating a substantial new position, a Director of the Health & Safety Division. This Director will hire eight or more new staff who will be based in the regions. The reporting relationships of these regional safety

Dewey W. Duncan

1913 - 1984

Worker deaths that result from exposure to toxic working conditions are far more difficult to document than accidental deaths. Many workers sicken after prolonged exposure to toxins and die after long, debilitating illnesses. In order to avoid health care costs and disability payments, employers routinely deny that their employees become ill and die as a result of toxic working conditions. Yet investigators estimate that for every worker killed in a workplace accident, at least ten die as a result of working conditions that undermined their health and sent them to an early grave.

Dewey Duncan was a Tennessee coal miner who died of black lung disease (pneumoconiosis), a respiratory illness caused by breathing coal dust. He was born and raised in Duncan Flats in Anderson County, on the edge of the coalfields. He entered the mines when he was still a teenager. In 1938 he married Marie Wright. Dewey and Marie raised eleven children. For years Dewey worked in the Beech Grove coal mine in Anderson County, where his family lived in a company coal camp. The eighth of Dewey's children, Patti Ford, remembers her father coming home from work covered in coal dust, with only his eyes and teeth still white. In the winter months, Patti said, her father reported to work before dawn, toiled in the dark of the mine shafts all day, and emerged from the mine after dark. All told, Dewey worked in the mines for about 32 years. By 1958, when he quit coal mining, his health was already failing.

Dewey was, above all else, a family man. When he was young there were few alternatives to coal mining if you were to support your family. Dewey loved to whittle and to work with wood. He made baseball bats, and tool handles, and often got in trouble with Marie for whittling in the kitchen. Dewey's children remember their father's singing and his beautiful voice. Dewey and Marie both sang in the Beech Grove Baptist Church choir. At home the family would read and study Scripture together.

Dewey served for many years as president of United Mine Workers District 19. He was an early recipient of black lung disability payments when the federal government finally established a black lung disability program. As a union activist he helped many of his fellow coal miners apply for and receive black lung disability payments. Dewey's nephew, Freddie Wright, credits his uncle's influence as a major reason why he chose a career as a United Mine Worker organizer.

In his last years Dewey was confined indoors and eventually to his bed. He was in and out of the hospital. Patti has terrible memories of her father coughing up blood and black matter, the result of decades of breathing coal dust. Like all sufferers from black lung disease, Dewey continually struggled to breathe. Finally his lungs failed him and he died in July of 1984.

hires are an issue of concern. The Director will lead the development and implementation of a system to prequalify bidders, assess their safety performance on real-world TDOT projects, and rank them through the use of indicators designed to look back at the past but also forward toward the future. Actual work on this enhanced pre-qualification system has yet to be initiated.

Much remains to be seen about the practical effects of this effort, but the Knox Area Workers' Memorial Day Committee and its partner groups are encouraged at the progress to date, although critical decisions and considerable work remain. We also appreciate the opportunity we have been afforded to participate in important conversations about safety in TDOT contracting, and we look forward to seeing how the new initiative develops over time.

As TDOT moves to complete the design of this new system and to phase in its operation, we continue to call on the agency to treat with special seriousness the need to assure that the voices of workers themselves are recognized and protected. Workers need to know that their participation is genuinely valued -- by contractors, by sub-contractors,

and by TDOT itself. Most fundamentally, they need to know that they do not need to fear retaliation if they raise matters of health or safety. Those familiar with real conditions on real jobs know that the achievement of a climate that actually offers this kind of assurance is a tall order, but it is nonetheless indispensable. Nothing could more hamper efforts to create a true climate of safety on a construction site than fear of retaliation by workers who are directly on the line.

Modest increase in OSHA penalties enacted by Congress

One serious weakness in the system of OSHA enforcement is the shockingly low ceiling for penalties even in cases of serious and willful violations. Back in 1990 Congress passed a law requiring most federal agencies to keep their penalties in line with inflation. OSHA and a small number of other agencies were excepted from this rule, however, and until recently Congress had taken no steps to adjust OSHA's penalty structure, one already weak at its inception, but even weaker due to erosion from inflation in intervening years.

An unexpected provision in Congress's Bipartisan Budget Act of 2015 moved at last to bring OSHA into line at least with the inflation-tracking rule at most other agencies. OSHA penalties are to be updated in 2016 and then periodically adjusted to keep pace with future inflation. The new 2016 rates will not be determined precisely until later this year, but predictions are that the adjustment will lift the maximum fine for "willful" or "repeat" violations to $125,000 from the current $75,000 level, and the maximum for "serious" violations to $12,500 from the current $7000.

As an article in the Wall Street Journal observed, these changes should be seen in perspective:

> [E]ven after an expected increase of as much as roughly 80%, OSHA fines will remain tiny compared to those issued by many other regulatory agencies, such as the Environmental Protection Agency. . .
>
> Even one prominent lawyer who has represented industry interests in workplace-safety issues for decades said he couldn't argue with the increase.
>
> "It's very difficult to defend the present penalty structure," said Baruch Fellner, who has long represented industry interests on OSHA issues. "If you look at OSHA penalties in the context of other programs, they are in fact for individual items minuscule comparatively speaking. For larger corporations it can be a cost of doing business. (Berson 2015)

Breakthrough with new silica standard at OSHA

Silica dust has long been known as a serious workplace hazard that can lead to silicosis, lung cancer, other disabling diseases, and death. Crystalline silica is a basic component of soil, sand, granite, and many other minerals, and when workers chip, cut, drill, or grind this substance, the particles created can become fine enough to breathe.

Sandblasters, rock drillers, and many other workers in construction, foundries and shipbuilding are particularly likely to work around silica dust, and thousands of workers get sick from these exposures each year. OSHA mentions abrasive blasting with sand to remove paint and rust, jack hammering, rock and well drilling, concrete mixing, concrete drilling, brick and concrete block cutting and sawing, tuck pointing, and tunneling as typical and widespread activities that can lead to silica exposures. (OSHA 2002)

Although OSHA has had a silica standard for decades, it lagged far behind the scientific evidence on the consequences of different exposure levels, and it was far too weak to protect workers. In fact, the stalled effort to achieve an adequate silica rule is regularly cited as a prime example of the dysfunction of OSHA's standard-setting process, one so mired in regulatory delay and subject to such untoward industry pressure that new standards are almost impossible to achieve, even when the evidence of their need is overwhelming. (Rabinowitz 2012)

Accordingly, public-health experts and worker advocates were heartened by the announcement in March 2016 that OSHA had at last succeeded in issuing new and tougher silica rules, hailing them as "the most significant OSHA standards issued in decades" (American Public Health Association 2016, AFL-CIO 2016). The new rules cut permissible dust exposures in half for manufacturing workers and even more for construction workers, although the new standard still falls short of that already in effect for years in many provinces of Canada. The rules require employers to control dust through common-sense measures like ventilation and water, to monitor exposures, train workers and conduct medical exams.

Predictably, the same industry groups that fought adoption of the new standard have now filed a lawsuit challenging it. Meanwhile several labor unions and the AFL-CIO have also joined in litigation arguing that some provisions of the standard do not go far enough. (Rolfson 2016, Wheeler 2016)

It should not take such prolonged and heroic effort to achieve safer standards for disease-causing substances like silica dust. But when these heroic efforts at last bear rare fruit, it is cause for celebration. By next year, it is to be hoped that the new standard will be at work better protecting workers in Tennessee and elsewhere from the all-too-common hazard of silica dust.

Other persistent efforts despite challenging times

Though Federal OSHA still remains largely hamstrung when it comes to adopting new or updated enforceable protections, the agency has sought other ways to address on-going hazards and other needs. Some noteworthy examples follow.

a. Guidance for employers interested in systemic approaches

The OSH Act does not require employers to implement an Injury and Illness Prevention Program, although most occupational health and safety experts agree, and common sense surely indicates -- that such programs are essential. OSHA has considered adopting such a standard for many years, but consistently faces industry opposition, and the present proposal continues to languish at an early stalled stage in the process.

One recent move intended to encourage program planning by employers was OSHA's issuance of draft guidelines on safety and health program management in 2015. The guidelines build on an earlier 1989 document and provide valuable information and advice about a systemic approach toward building a culture of safety, with attention to all levels of an enterprise or project (OSHA 2015a).

This kind of approach is widely recognized as the best hope for achieving significant hazard control and prevention, so OSHA is to be commended for trying to advance awareness. Of course a well-designed standard with real teeth would have more impact.

b. Better gathering of information about worker injuries

For years the only times that OSHA required employers to affirmatively report worker injuries to occupational health and safety authorities were in cases where a worker was killed or where three or more workers were hospitalized. Obviously this system meant that many very serious injuries to workers went entirely unreported and were not available to federal or state OSHA agencies or to researchers investigating patterns of workplace hazards and harms.

In 2015 OSHA instituted a new rule requiring that any injury, even to a single worker, involving hospitalization, amputation, or the loss of an eye must be reported to OSHA authorities. Under our state plan, TOSHA moved promptly to adopt this rule, which has now been in effect in Tennessee for a year.

A report from federal OSHA describing its own first-year experience with the program reveals that employers reporting directly to federal OSHA (that is, those not in state-plan states like Tennessee) notified the agency of 10,388 incidents involving severe work-related injuries, with 7,636 hospitalizations and 2,644 amputations. OSHA says

the new reporting requirement has already helped it to identify hotspots and to target assistance and enforcement accordingly. Nonetheless, the agency also concedes that the program's approach of voluntary self-reporting means many serious injuries and illnesses are still not being captured. (Michaels 2016; Davidson 2016)

c. Guidance on whistleblower retaliation

The OSH Act prohibits employers from retaliating against employees for exercising their rights under the Act. In addition to its "in-house" responsibility to enforce this OSHA-specific provision, OSHA has also been tasked by Congress with enforcing the whistleblower protection provisions of over twenty other statutes relating to a range of settings where concerns for protecting whistleblowers have arisen, from asbestos in schools, to food safety, enforcement of securities laws, and more. As a result, OSHA has unusually broad first-hand experience with both the importance and the difficulty of assuring what it has begun to call an "anti-retaliation culture."

In November 2015, OSHA issued a draft document aimed at helping employers to develop programs that provide protection from retaliation for workers who raise concerns about workplace conditions or activities that could harm other workers or members of the public. Specifically covered are sections on ensuring leadership commitment at a management level, responding to reports of retaliation, conducting anti-retaliation training, and monitoring progress. (OSHA 2015b and Whistleblower Protection Advisory Committee (2015).

Of course voluntary guidance is only effective with a company that has a genuine interest in creating a climate that encourages workers to come forward. Nevertheless, broad distribution of best practices does represent a step in the right direction on this crucial issue.

Selected Areas of Concern

Despite the varied pieces of good news reported above, many concerns persist.

Enforcement tools remain weak.

Agencies charged with enforcement need adequate resources. At current levels, the AFL-CIO estimates it would take TOSHA's inspectors 85 years to inspect all the workplaces that are supposed to be within that agency's jurisdiction (AFL-CIO 2015). Tennessee is better off in this regard than many states, but that is surely small comfort in view of the potential human damage at stake.

Despite the modest improvements enacted last year by Congress and discussed above, penalties for OSHA violations remain too small to create serious disincentives for those employers who -- wisely or not -- see cutting corners on safety as a viable option for controlling costs. Meanwhile many OSHA standards are badly out of date, while no standards at all have been adopted in many important areas, despite years of effort.

As a result, occupational health and safety authorities are often left with little power to move real change. They can implore businesses to do the right thing; but they have few tools at their disposal beyond the issuance of voluntary guidelines, checklists and other advisory documents; and too few resources even to properly disseminate those sorts of materials or to provide the kind of effective education to both employers and workers that should serve as an important but complementary pillar to the work of enforcement and penalty. The progress that has been made since the 1970s is real, but it should not blind us to the distance that remains before American workplaces are safe and healthy for workers.

Occupational disease is still largely an untold and costly story.

Professionals knowledgeable about occupational health and safety consistently caution that any attempt to count the cost of occupational harm to the physical well-being of workers will be wildly off the mark if it fails to include the cost of illness and disease.[4] Each year the authors of this Report point out that our own In Memoriam lists, like the statistics reported in the Census of Fatal Occupational Injuries, are skewed heavily toward deaths from trauma or sudden-onset illness and are therefore radically incomplete.

Such skewed data fail to recognize the many workers who die each year from past on-the-job exposures to toxic dusts and chemicals or from the accumulated effects of repeated stresses, sometimes suffered over the course of many years. Further, such data fail to provide a full picture of the measures needed to assure that workers and their families, as well as society at large, are not burdened with the heavy costs of preventable disease and disability.

Accordingly we urge readers to note what a small proportion of occupational illness case we have been able to capture in our In Memoriam list, and again we express regret. For instance, not a single death from silica exposure is on our list, yet we know that absence cannot reflect the reality of loss in our state. The holes in our list reinforce similar holes in public awareness about the extent and impact of fatal or disabling occupational disease.

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4. For instance, a 2011 study by economist J. Paul Leigh of the University of California-Davis estimated more than 53,000 U.S. deaths in 2007 from respiratory, cardiovascular and renal diseases, cancer and other conditions that can be linked directly to workplace exposure (Leigh 2011). That figure is far in excess of the 4,405 U.S. fatalities from acute traumatic injury reported by the Bureau of Labor Statistics in its preliminary data for 2014. Another recent study (Takala et al 2014) looked at global deaths "for reasons attributable to work," and found 2.3 million such deaths worldwide in 2012, a full 2 million of which were caused by disease rather than by traumatic injury. The study also found the proportion of work-attributable deaths from disease to be greater in developed countries than in developing ones.

EDWIN "EARL" MORGAN

1950 - 2015

On the morning of Sept. 21, 2015, Edwin "Earl" Morgan, a resident of Hamilton County, was painting the exterior of a TVA office building in Ooltewah. He was working twenty feet above ground when he lost his balance and fell into a concrete culvert. He died of his injuries later the same day.

Edwin "Earl" Morgan had worked in the construction industry for almost fifty years. He had a reputation among his co-workers as a careful, conscientious worker. He was a devoted family man. The accident in Ooltewah took him from his wife, Marilyn, four children, twelve grandchildren, and two great grandchildren.

Earl Morgan's employer, Total Building Maintenance, has a long record of safety violations. In the decade culminating in his death, the company was cited for 10 serious safety violations, most of them for failure in its duty to provide fall protection devices and to require their use. Less than a year before Earl Morgan's death, Total Building Maintenance was fined nearly $10,000 for its failure to provide fall protection. In all, Total Building Maintenance has been fined a total of $31,445 for its failure to protect its workers from falls, including $9,800 for violations relating to Earl Morgan's death.

A small group of cases involving asbestos-related disease have come to our attention, and they are included on this list. They include Earl Bailey, a retired iron worker from Knoxville who died in 2015 of mesothelioma, a rare but deadly cancer caused almost exclusively by exposure to asbestos.

The deadly nature of asbestos has been clear for decades, and stronger protections do exist than in the past. Although many industrialized countries have banned the use of asbestos, the United States has still not banned all uses, a fact that comes as a surprise to many. (National Cancer Institute 2009) In a resolution calling for a U.S. ban on the manufacture, sale, import or export of asbestos, the American Public Health Association in 2009 reported that

> The government estimates 2,200 metric tons of asbestos is used annually in U.S. manufacturing, and scant data are available on the amount of asbestos imported into the United States in the form of asbestos-containing products manufactured elsewhere.
>
> In addition, despite active removal efforts, an estimated 1.3 million construction- and general-industry workers in the United States potentially are exposed to asbestos each year, mainly from manipulation of asbestos during renovation or demolition activities….
>
> In addition, at least 125 million people across the globe are currently exposed to asbestos at work or in their communities. Moreover, countries such as Canada mine and manufacture asbestos for exportation to developing countries, while banning it for local use because of its health hazards.

Far from strengthening the law in Tennessee when it comes to reducing asbestos exposure or improving the chance that asbestos disease sufferers will be compensated for their losses, the General Assembly this past session passed HB 2234/SB 2062. This measure -- like similar initiatives elsewhere, all energetically backed by the National Chamber of Commerce and by asbestos manufacturers -- will make it more difficult for those who suffer from work-related asbestos exposure to win compensation from asbestos manufacturers who supplied the products that led to those exposures.

Asbestos is not the only substance or process that causes occupational disease. Worker deaths from other causes are even less likely to make it into public view than are those caused by asbestos.

Deaths on public works continue.

It is not possible for us to identify from among the fatalities on the In Memoriam list for 2014 and 2015 all those that involved workers who were employed by contractors engaged in the public's work. Sometimes the available background information is sufficient to allow a determination, but in other cases that level of detail is unknown. Although the names below are likely an incomplete list of workers killed on public contracts, they are at least a start.

José Barcenas worked for Dement Construction Company, the general contractor on a TDOT bridge project in West Tennessee. In 2014, Barcenas was pinned and crushed between an aerial lift and a beam of the bridge under construction. A TOSHA investigator inspected the site, interviewed witnesses, and concluded that Barcenas was a carpenter who had not been trained in proper operation of the aerial lift. The company was assessed a $3600 penalty for this serious violation of safety standards. (TOSHA Inspection # 317-585-545)

Luis Berrocal was a foreman with Payne Steel Erectors, a sub-contractor to Dement Construction, on a TDOT job in 2014 where he was helping to repair the I-40 bridge spanning the Mississippi River. Mr. Berrocal and another employee got onto an aerial work platform and were lifted up to the bridge, where Berrocal stepped from the lift and onto a wooden form. Neither of the men was tied off or otherwise protected from falling at that point. Berrocal leaned over and fell from the bridge to his death some fifty feet below. Heat stress may have played some role in the fall. Federal OSHA conducted an investigation and cited the employer for the lack of fall protection, assessing a $7000 penalty for the serious violation. (OSHA inspection # 992-190.)[5]

Bobby Joe Green worked for Heavener Roofing, a company that was sub-contracted to LMR Construction to do roofing work on a cabin at Pickwick Landing State Park. On March 16, 2015, he fell over the edge of the roof, suffering multiple broken bones in his chest, and died later the same day. TOSHA found a complete absence of fall protection on the job, and cited the sub-contracting employer for three serious violations, proposing a penalty of $5700. From information posted on federal OSHA's website at this writing, over a year after Green's death it appears this fine has not yet been paid. (OSHA Establishment Search Page, 2016.)

Ricky McCurry worked as a carpenter/operator for Robert S. Biscan and Company, on a public school construction project in Rutherford County. He had been working for the company for only two weeks at the time of his death in September 2014. He was found crushed between the ground and the canopy of a back hoe that was not even equipped with a seat-belt. The company was cited for a number of related violations. (TOSHA Inspection # 100-4075)

Edwin Earl Morgan fell 20 feet to his death on September 21, 2015, while working for Total Building Maintenance on a contract with TVA in Chattanooga. Federal OSHA conducted the investigation into Morgan's death, presumably because TVA, a federal agency, was the contracting entity. Its investigation was completed too late for details to be available to this Report. However, it appears from OSHA's website that the agency found two serious violations on this job, one related to worker training and one related to lack of fall protection. Further, the same website also indicates that Total Building Maintenance had already been found in serious violation of OSHA's fall protection standards on numerous other occasions in numerous other settings. (OSHA

5. Because he was killed on the Arkansas side of the river and lived in Mississippi, Luis Berrocal did not meet the criteria for inclusion in our In Memoriam list. However, we include a description of his case in this section of our Report because of its connection to a TDOT contract and because of our long-standing concern about safety on TDOT construction projects. Counting the 2014 death of Mr. Barcenas above, and that of Mr. Berrocal, the list of contracted workers the Knox Area Workers' Memorial Day Committee has thus far identified as having been killed on TDOT bridge projects since 2005 now numbers seven. Six of those men were Latinos.

Establishment Search Page, accessed April 2016; see also WRCB 2015) At the very least this raises serious questions about TVA's decision to grant a contract to this enterprise.

Doyle Wright was struck and killed by a tree. He was employed by Trees, Inc., on a contract with the Knoxville Utilities Board, working to clear property at the utility's Cheowa Wastewater Pumping Station. TOSHA conducted an investigation and cited Trees, Inc. for a serious safety violation because Wright was standing in the danger zone during the tree-felling process. The agency recommended a $4000 penalty, and the company has appealed. A check of OSHA's website reveals that no fewer than four employees of Trees, Inc., were killed in a two-year period from 2014-2015, in Connecticut, Michigan, Tennessee and Texas. (OSHA 2016d)

As the above probably incomplete tally shows, government agencies at the federal, state and local level need to pay serious attention to weeding out unsafe contractors and to responsibly monitoring health and safety practices on publicly funded construction projects. TDOT's recent steps in this regard are hopeful signs, but that agency is still at the beginning phases of its initiative, and the program's effectiveness is yet to be tested. Meanwhile many other agencies across the state engage in contracting for work done on high-risk projects.

Because they hold the purse strings on public funds, and because of the still scandalously low penalty levels that constrain OSHA and TOSHA responses to workplace safety violations, contracting agencies often have far more power than health and safety authorities to affect contractor behavior in a real way and to raise the level of safety on public projects. These agencies should use that power to save lives and prevent other costly losses both to workers' families and to taxpayers.

One resource that may prove helpful to public entities interested in the better screening, assessment, and oversight of contractors is a draft checklist created to assist federal agencies involved in construction procurement. Like OSHA's other guidance and advisory documents, this checklist creates no enforceable protections, but it does provide sound advice put together by a range of stakeholders, including representatives of both employers and employees. (OSHA Advisory Committee on Construction Health & Safety 2012).

Worker vulnerability undermines efforts toward job safety.

The overwhelming majority of deaths and serious injuries on the job are preventable. And in many cases the measures needed to save lives and prevent disability are not overly complex or technical. Often what such measures cost in the short run is exceeded by what they save in the long run. So why has it proved so difficult to achieve cultures of safety in more of America's workplaces?

A major reason why a genuine culture of safety is hard to achieve is workers' fear that they will suffer reprisal if they speak up about hazards on the job. The hesitancy to make waves is widespread among all kinds of workers, especially when unemployment and job insecurity are such prominent worries for people across a range of occupations. Of course the more precarious a worker's standing, the more difficult the individual or family circumstances, and the fewer employment options a worker can confidently entertain, the more acute is the fear of reprisal for speaking up. (OSHA 2015c) Two types of especially vulnerable workers are highlighted below.

1. The contingent workforce

Across the national and global economy the relationship of workers to employers has been undergoing rapid change for decades. The changes are complex, but one clear pattern has been the growth of arrangements that weaken the traditional employment relationship so that those who do the work of an enterprise are positioned farther and farther away – whether in terms of geographic location or legal accountability – from those who make the decisions and who are in a position to capture most of the value of the product or service being made or delivered.

Practices range from the boom in "temporary" employment brokered by staffing agencies, to the proliferation of contracting out of many tasks that were formerly conducted within a given business or institution, multiple layers of

sub-contracting, the use of day laborers, the bringing in of temporary seasonal guestworkers from other countries, or the creation of far-reaching global supply chains made up of multiple linkages between separate legal entities. Many of these practices are not new, but in recent times the patterns have grown in impact and have spread into new industries. (Weil 2014)

These new ways of fracturing and distancing the relationships workers bear to those whose business they are carrying out can come with significant problems. These developments often mean fierce downward pressure on labor costs, thereby contributing to income inequality.

But of particular relevance for this report, firms positioned within these fractured settings tend increasingly to cut corners on safety. Even in situations where no such intentional shortcuts are taken, splintered employment structures can create dangerous cracks in responsibility, coordination and accountability for health and safety. (Childress 2012; Ruckelshaus and Goldstein 2002) Some of the people on this year's In Memoriam list – certainly more than we can know for sure – were working for sub-contractors, situated at several removes from those whose projects they were working on, and those who ultimately controlled the purse strings.

One category of contingent workers are so-called temporaries– that is, workers supplied to a host employer and paid by a staffing agency, whether or not their job is actually temporary. Such people make up a growing proportion of the U.S workforce.[6] In theory, temporary workers have the same right to a safe and healthy workplace as those who are "permanent." (NIOSH 2013). But it can be difficult for temporary workers even to access information about their rights, much less to exercise these rights effectively. Although exact counts among temp workers are seldom possible, it is clear deaths and injuries among this group exceed the norm. (Pierce 2013; Grabell 2013b) OSHA has explained some of the factors that led it to identify temp work as a special problem for job health and safety:

> OSHA has concerns that some employers may use temporary workers as a way to avoid meeting all their compliance obligations under the OSH Act and other worker protection laws; that temporary workers get placed in a variety of jobs, including the most hazardous jobs; that temporary workers are more vulnerable to workplace safety and health hazards and retaliation than workers in traditional employment relationships; that temporary workers are often not given adequate safety and health training or explanations of their duties by either the temporary staffing agency or the host employer. (OSHA, 2016e; see also OSHA 2014).

The American Public Health Association emphasizes that the underlying logic of temporary staffing is partly responsible:

> The expansion of the temporary staffing industry is, in part, due to the adoption of a "liability model of employment" whereby workers are seen by the client firm and the staffing agency as temporary and disposable rather than as assets to employers. This model elevates the risk of workplace exposures, injury, and illness given the limited incentive to train or provide other health and safety protection for workers who may spend only limited time on the job. (American Public Health Association 2014b)

If temporary workers are made vulnerable as a result of the precarious nature of temp jobs, it is also true that many workers find themselves in temporary positions because they come from vulnerable populations to begin with. For instance, temporary workers tend to be disproportionately black or Latino, foreign-born, young, and to have less secondary or post-secondary education than those in permanent positions. (Grabell 2013a)

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6. Estimates and counts vary, but all agree the trend is upward. Tennessee is not an execption. In fact, Bureau of Labor Statistics data indicate that among U.S. counties with more than 100,000 workers, Shelby County, Tennessee, in 2012 had one of the highest concentrations of temporary help service workers (5.8%) in the country. Nationally overall the proportion in that year was 2.2%. (Grabell 2013a).

Information available does not allow us to determine all of the fatalities on this year's In Memoriam list that involved a worker who was in some sense "contingent." But certainly many of those who died would fall into that varied category. For instance, some of the people on our list for 2014 and 2015 worked for employers with names like "Industrial Staffing of Tennessee" and "Professional Personnel Services," although they lost their lives on the premises of a host enterprise.

How best to protect temporary workers from workplace hazards is still the subject of debate and experimentation. Investigative reporters and documentary filmmakers have begun shining a light on safety problems in the temporary services industry, and some people are taking notice (Grabell, 2013b, Garcia and DeSario 2015). A few states have taken steps to assure more accountability from both the staffing agencies and host employers, and advice to employers and workers from federal agencies and others is available (Grabell 2013c, NIOSH 2014, OSHA 2016d). Nevertheless, the U.S. generally lags behind other industrialized countries in addressing these problems (Grabell 2014), and in many states little has been done to address the problem.

2. Immigrant workers

In previous years this Report has called attention to the disproportionate rate of injury and death suffered by Latino workers nationally and within our own state. Causes for this pattern are complex, and the category "immigrant" covers a wide range of people and situations. But clearly there are some special vulnerabilities that are at work when it comes to the health and safety of immigrant workers, and especially those in the low-wage occupations, to which so many immigrants are confined.

Employers may fail to provide needed training events and materials in a language and format that is accessible to all workers at a site. Immigrants may lack the kind of background knowledge of our legal system or employment relations to understand when they have rights at all, when those are being violated, and what to do about it. If a particular worker or someone in his family has a questionable immigration status, then the fear of being exposed to immigration enforcement often acts as a powerful deterrent to any effort to bring hazards to the attention of employers or authorities. This is especially the case in situations where unscrupulous employers intentionally play – subtly or not so subtly -- on that fear (Smith and Cho, 2013).

The Missing Voices of Guestworkers

Immigrants with legal status are not exempt from vulnerability just because they have papers. One story we had hoped to feature in this Report involved an agricultural guestworker, brought into the United States on a special temporary work visa. In a recent year this man was asked by an employer in this state to "walk down the grain" in a silo without any protection. Walking down the grain is a practice that should never happen without strict protocols, and failure to use such protocols has caused many deaths from entrapment when grain gives way, and workers are buried alive in a quicksand-like avalanche. (Holly 2013; OSHA 2011)

Luckily the worker in this case was not injured when he followed his employer's orders, but we thought we might try to tell his story here because it highlights a special kind of temporary employment arrangement that is now present in Tennessee's labor market, one that can create special problems for health and safety. However, the worker who had this experience was afraid of losing the opportunity to return to work in the United States for the following season, and he decided that sharing his story might lead to his losing that chance. Of course we want to honor his instinct in this regard, but it means his story is not available for this report.

Like any other worker, of whatever immigration status, a guestworker is supposed to be protected by U.S. law from retaliation against him for exercising his right to speak up about job hazards. But in this man's judgment, that law would have been unable to save his place in the guestworker program. And the sad truth is, he may be right. Advocates have pointed out repeatedly the many pressures that can be brought to bear on guestworkers – from the ever-present possibility of deportation in the event of firing, or the annual threat of non-renewal, to the leverage provided by the heavy debt load often taken on just to get into the program. In fact, in some cases pressure points on guestworkers have extended even to the threat of harm to family members left back home. (Southern Poverty Law Center 2013)

Dynamics like this are far from freedom, and their existence within a labor market undermines job safety for everyone. Many legislative and administrative reforms have been proposed that could better protect workers in U.S. guestworker programs, but progress is slow. (National Guestworker Alliance 2012)

An Interagency Working Group made up of representatives from the U.S. Department of Labor, the Department of Homeland Security, the Department of Justice, the Equal Employment Opportunity Commission and the National Labor Relations Board was created in November 2014 by President Obama in recognition of the fact that immigration enforcement can sometimes seriously interfere with enforcement of workplace health and safety law. A fact sheet on the working group observed:

> Federal agencies responsible for worker protections seek to protect all workers from exploitation and workers' rights violations, regardless of immigration status. Many workers, however, are deterred or prevented from asserting workplace rights and protections. In some cases, employers may exploit immigration status to deter employees from asserting their rights. In other cases, the protections available to workers are unclear.

The group was tasked with meeting several objectives related to seeking a consistent and coordinated way to avoid conflicts between immigration and labor standards enforcement. Formation of the Working Group was an important executive action designed to address immigrant vulnerability to abuses on the job. One of its assigned objectives appears particularly likely to encourage the bringing forward of workplace health and safety concerns. The Working Group is to:

> Strengthen processes for staying the removal of, and providing temporary work authorization for, undocumented workers asserting workplace claims and for cases in which a workplace investigation or proceeding is ongoing. (U.S. Department of Labor 2014)

Little appears yet to have been done by the Working Group about this objective. Hopefully progress will be forthcoming.

Of course broad immigration reform enacted by Congress would be the most effective way to interrupt the dangerous dynamics that emerge when large numbers of legally precarious workers are employed in high-risk occupations like construction. Broad reform that provided a pathway to legal status and citizenship for many undocumented workers would greatly reduce the need for stop-gap executive actions aimed at reducing the contradictions bred by a broken system.

But there are other options short of that more comprehensive approach. Narrower measures have been proposed repeatedly in Congress that would target the specific problem of immigrant worker abuse and the need for protection from retaliation and intimidation aimed at immigrant whistleblowers. (See, for example, the Power Act, HR 4008, 2015.) But hope for that kind of progress will certainly be postponed at least until the 2016 presidential campaign season is over. In the meantime, the poisonous rhetoric of the current campaign already threatens to damage the prospects for reasonable legislative action in the future.

Here in Tennessee, sad to say, the General Assembly has spent more of its time scapegoating immigrants and refugees than it has on seeing that health and safety conditions on Tennessee worksites improve for all workers. The current climate of anti-immigrant agitation no doubt makes some politicians fearful. We hope more Tennessee legislators will show more courageous leadership in this regard in future sessions, and will redirect their attention to more authentic needs of real people -- such as assuring that injured workers and their families are protected from catastrophic medical or financial consequences of workplace injuries.

For now, we expect that each year we will continue to find stories like that of Juan Rodriguez and Marcelo Vasquez, two men who fell to their deaths in 2015 in separate incidents -- both from rooftops on which they were laboring without the fall protection to which all workers are legally entitled. Each year we will expect to find names like Barcenas, Badillo and Ramirez populating our fatality list in numbers and under circumstances that are cause for grave concern.

Tattered safety net

A primary goal of workplace safety and health advocates is that of prevention: the full elimination of most hazards, and an end to the heavy toll of injury and death. But until that goal is realized, we are left with the sobering fact that many workers are killed and permanently disabled each year as a result of workplace hazards. They and their families need a safety net that can provide them with medical care if required, and with a way to survive in dignity without the income that the injured worker was previously bringing in for his or her family. Unfortunately, Tennessee's safety net for killed and injured workers and their families is presently in shambles.

The first and most accessible line of help for workers hurt on the job should by rights be workers' compensation. But today, workers' compensation programs are under vigorous attack across the country (Grabell and Berkes 2015a; NESRI). Sadly, Tennessee has been in the forefront of moves to roll back the protections workers' compensation was originally designed to provide.

Workers' compensation, born in the early years of the last century, emerged as a grand compromise between the interests of employers and workers. The basic concept was a system of no-fault insurance that did not result in full compensation, but did provide additional predictability for employers and a modest cushion for workers and their families against losses suffered from work-related injury. Additionally, the system was supposed to help prevent workplace injuries and deaths by requiring employers to internalize more of the cost of worker injuries and by creating other incentives that could make workplace safety a matter of more immediate and obvious self-interest for employers.

After years of gradually whittling back the benefits available to workers under Tennessee's system, the General Assembly more recently undertook a wholesale redesign that went into effect in July 2014. Sold as a business-friendly measure that would help the state's economy, what the legislation actually did was shift costs onto those least able to bear them and least well positioned to take action to assure workplace safety for others. The new system has features that make it much harder for many workers to establish the right to compensation, as well as more difficult for them to find legal counsel to represent them even though the new administrative procedures are quite complex.

These changes have invited insurers and employers to be bolder about engaging in hard bargaining and about denying claims altogether, behaviors that take a real financial and emotional toll on families that encounter them at a moment of loss. Workers and bereaved families will pay the lion's share of the price for all this, but everyone in the community is affected when families fall into poverty after a workplace injury or death.[7]

Any discussion of workers' compensation should make clear that some workers have been excluded from its benefits from the beginning. In Tennessee, as in many other states, for instance, employers who hire "farm laborers or domestic help" are exempted from the requirement to provide workers' compensation for those workers (Tennessee Department of Labor 2016). Further, with the exception of employers in construction and coal mining, employers with fewer than five employees are likewise exempt. The impact of these exclusions falls disproportionately on men and women of color and on low-wage workers generally, people who often have the most acute need for a meaningful safety net.

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7. With the ink barely dry on the new law, even more radical proposals were introduced into following sessions of the General Assembly. These proposals would allow employers to "opt out" of workers' compensation altogether, contracting instead with insurance companies for coverage designed by employers themselves within very broad limits. (Fletcher 2015a, 2015bb; Redden 2015) The bills were promoted by an outside lobbying group that apparently targeted our state because of its reputation for hostility to workers' compensation. (Grabell and Berkes 2015b) The bills are controversial among a range of interests, and when investigative reporting helped to bring attention to severe problems with the opt-out idea, the bills did not progress to a vote on either of these first attempts (Grabell 2015; Goldberg 2016). Further, a similar bill passed in Oklahoma was eventually ruled unconstitutional in that state (Berkes and Grabell 2016). Nevertheless, those concerned about the safety net for injured workers will be watching to see if the proposals return in some form.

Whether for reasons of outright exclusion or otherwise, when a worker hurt on the job cannot access workers' compensation, he or she should be able to turn to other pieces of the safety net for help. But instead of working to strengthen the rest of the safety net, the General Assembly has seemed more intent on either ignoring its huge weak spots or affirmatively unraveling it.

In recent sessions the legislature has stuck with a stubborn refusal to adopt any program that would allow it to pull down federal dollars that are available to states under the Affordable Care Act if they expand coverage to help low-income people not previously covered by Medicaid. Its refusal has left millions of federal dollars on the table – dollars already paid to the federal government by Tennessee taxpayers – and has left many thousands of Tennesseans without coverage. Many of these people go to work every day and are therefore at risk of workplace injury that may or may not be covered or covered adequately by the frayed and skimpy workers' compensation system. The Tennessee Justice Center reports that half of the estimated 280,000 people who are left uninsured in the state are employed. (Tennessee Justice Center 2016)

We can and must do better at preventing workplace death and injury, at more fairly compensating those who suffer injury, and at making sure that workplace injuries do not cast injured workers and their families into poverty.

Gary Reedy

1962 - 2014

Gary Reedy was an employee at Erwin Resins Solutions in Erwin, a subsidiary of Energy Solutions. The company recycles, processes, and disposes of nuclear material from nuclear power plants and various medical and research facilities. Gary began employment at Erwin Resins Solutions in August, 2012, as a custodian but was promoted to technician shortly before his death on the job at age 51. On October 14, 2014, Gary fell backwards 21 feet into an open transfer vault while attempting to switch out a bull-horn attachment from the transfer bell that covered it. Gary remained conscious while on-site personnel worked on him. It was an hour and 40 minutes before the company finally attempted to transfer him to a hospital. He died from cardiac arrest in an ambulance seven minutes away from the hospital. Gary's head wound was considered "hot" and some of the emergency medical technicians had to be decontaminated after the incident.

Elbert "Gary" Reedy was born in Baltimore, Maryland, on December 30, 1962. After a brief stint in the Army, Gary moved to Erwin to raise his three children, Rocky, Jessi and Matt, as a single father with the help of his loving mother, the late Mary Lou Tilson Reedy, and other family members. He loved his children and family and adored his only grandchild, five-year-old Nalei. Gary and his fiancee, Janice Monroe, were raising two of her grandchildren, Breanna and Hannah, after their mother passed away with cancer. Gary himself had overcome two different bouts with cancer.

He attended West Park Street Church and had newly rededicated his life to God shortly before his death. According to his sister Shelby, "Gary put his heart into everything he did and was a kind-hearted and thoughtful friend. Everyone you talk to about him mentions what a great worker he was and how much they loved him, his sense of humor, and his compassion."

Gary loved sports, especially the National Football League's Baltimore Ravens. He loved to work out, to lift weights, and to run.

Management refused to clear Gary's co-workers to speak at the funeral service, but one of his co-workers wrote a private tribute to Gary:

"Gary loved working at the Erwin facility. He loved his job and the friends and family he had at work. Gary was an exemplary employee who had a fantastic work ethic. He always went above and beyond; if someone needed assistance, he was there. There were times he would come to work as early as 4 AM to get the facility ready for visitors. Or he would work night shift during outages and weekends when asked. Gary had been promoted to a process technician recently and officially moved into that role a few weeks ago. It was a well-deserved promotion. He wanted this job so badly and he was so proud of this accomplishment. The picture displayed [at the funeral] is the picture we have at work in our employee picture board. When he saw his new title displayed on his picture he was so happy."

The TOSHA investigation showed that Erwin Resins Solutions had failed to provide a safety rail along the open pit, as required, a violation deemed serious. The company was assessed a total $6,450 for the violations it found.

Recommendations

FEDERAL LEVEL

Congress should:

- Strengthen OSHA's ability to carry out its important mission.
- Enact immigration reform with protection for immigrant whistleblowers.

Interagency Working Group (Homeland Security & Labor Departments) should:

- Ease processes for granting work authorization to immigrant whistleblowers.

OSHA should:

- Continue to combat retaliation against workers who press for safety.
- Continue to move new standards on workplace hazards and safety programs.

The President should:

- Use executive power to better protect all whistleblowers.

STATE LEVEL

The Governor should:

- Champion an agenda that takes worker health and safety seriously.
- Exert stronger leadership to expand access to health insurance in Tennessee.

The General Assembly should:

- Repair past damage done to workers' compensation.
- Pass Insure Tennessee or otherwise expand Medicaid eligibility.
- Stop scapegoating immigrants and start protecting all Tennessee workers.

TOSHA should:

- Improve methods for protecting whistleblowers and assuring confidentiality.
- Launch sustained initiative to reduce death and injury of Latino workers.

TDOT should:

- Proceed with developing a new system to rank contractors on safety as part of strengthening the agency's overall commitment to achieving safer worksites.
- Establish direct channels of communication with affected workers.

LOCAL LEVEL

Local government should:

- Develop contracting policies that reward responsible contractors.
- Build worker safety into local planning, contracting and financing practices.

AT THE WORKPLACE

Employers should:

- Initiate comprehensive injury and illness prevention programs.

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https://www.osha.gov/temp_workers/Policy_Background_on_the_Temporary_Worker_Initiative.html

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Additional resources

Organizations

Alliance for the American Temporary Workforce
http://www.temporaryemployees.org/#!about/cbys

American Federation of Labor-Congress of Industrial Organizations (AFL-CIO)
http://www.aflcio.org/Issues/Job-Safety

Asbestos Disease Awareness Organization
http://www.asbestosdiseaseawareness.org

Asbestos Nation
http://www.asbestosnation.org/

Centers for Disease Control & Prevention, Highway Work Zone Safety.
http://www.cdc.gov/niosh/topics/highwayworkzones/

Hubble Foundation (support for families of cell tower climbers)
http://www.hubblefoundation.org/

Mine Safety and Health Administration (MSHA)
http://www.msha.gov/

National Council for Occupational Safety and Health (National COSH)
http://www.coshnetwork.org/

National Institute for Occupational Safety and Health (NIOSH)
http://www.cdc.gov/niosh/about.html

Office of Workers' Compensation Programs (OWCP)
http://www.dol.gov/owcp/

Officer Down Memorial Page (ODMP)
https://www.odmp.org/

Stop Construction Falls Campaign Main Page
http://stopconstructionfalls.com/

Stop Construction Falls Fatality Mapping Project
http://stopconstructionfalls.com/?page_id=1239

Taxi Driver Memoriam List
http://www.taxi-library.org/poster.htm

Truck Safety Coalition
http://trucksafety.org/

United Support and Memorial for Workplace Fatalities (USMWF)
http://usmwf.org

U.S. Fire Administration, Firefighter Fatalities
http://apps.usfa.fema.gov/firefighter-fatalities/

U.S. Worker Fatality Database of the National Council on Occupational Safety & Health (National COSH)
http://www.coshnetwork.org/fatality-database

Selected Hazard Information

NIOSH. Fall Injuries Prevention
http://www.cdc.gov/niosh/topics/falls/

NIOSH. Firefighter Fatality Investigation and Prevention Program
http://www.cdc.gov/niosh/fire/

NIOSH. Highway Work Zone Safety
http://www.cdc.gov/niosh/topics/highwayworkzones/

NIOSH. Preventing Injuries and Deaths of Workers Who Operate or Work Near Forklifts.
http://www.cdc.gov/niosh/docs/2001-109/

NIOSH. Trenching and Excavation
http://www.cdc.gov/niosh/topics/trenching/

NIOSH. Women's Safety and Health Issues at Work
http://www.cdc.gov/niosh/topics/women/

OSHA. Aerial Lifts
https://www.osha.gov/Publications/aerial_lifts_safety.html

OSHA. Communication Towers
https://www.osha.gov/doc/topics/communicationtower/index.html

OSHA. Crane, Derrick and Hoist Safety
https://www.osha.gov/SLTC/poweredindustrialtrucks/

OSHA. Crystalline Silica Exposure Health Hazard Information
https://www.osha.gov/OshDoc/data_General_Facts/crystalline-factsheet.pdf

OSHA. Dangers of Roll-overs of Riding Mowers
https://www.osha.gov/dsg/riding_mowers/

OSHA. Electrical Incidents
https://www.osha.gov/SLTC/etools/construction/electrical_incidents/mainpage.html

OSHA. Falls
https://www.osha.gov/SLTC/etools/construction/falls/mainpage.html

OSHA. Felling Trees
https://www.osha.gov/SLTC/etools/logging/manual/felling.html

OSHA. Forklifts
https://www.osha.gov/SLTC/poweredindustrialtrucks/

OSHA. Machine Guarding
https://www.osha.gov/SLTC/machineguarding/

OSHA. Powered Industrial Trucks – Forklifts
https://www.osha.gov/SLTC/poweredindustrialtrucks/

OSHA. Protecting Temporary Workers
https://www.osha.gov/temp_workers/

OSHA. Safeguarding Equipment And Protecting Employees From Amputations
https://www.osha.gov/Publications/OSHA3170/3170-02R-2007-English.html

OSHA. Struck-by hazards (includes vehicles, falling objects, masonry walls)
https://www.osha.gov/SLTC/etools/construction/struckby/mainpage.html

OSHA. Trenching and Excavation
https://www.osha.gov/SLTC/etools/construction/trenching/mainpage.html

OSHA. Workplace Violence
https://www.osha.gov/SLTC/workplaceviolence/
https://www.osha.gov/OshDoc/Directive_pdf/CPL_02-01-052.pdf

OSHA Fact Sheet – Trenching and Excavation (Spanish version listed second)
https://www.osha.gov/OshDoc/data_Hurricane_Facts/trench_excavation_fs.pdf
https://www.osha.gov/OshDoc/data_Hurricane_Facts/trench_excavation_fs-sp.pdf

TOSHA. Fall Protection Brochure
http://www.tn.gov/labor-wfd/Publications/TOSHA/TOSHA_Falls.pdf

Glossary of Acronyms and Other Terms

AFL-CIO—American Federation of Labor-Congress of Industrial Organizations

American Federation of Labor-Congress of Industrial Organizations (AFL-CIO)—An umbrella federation that brings together a large number of U.S. labor unions, and partners with worker centers and other allied organizations. Its 56 affiliated member unions represent some 12.5 million working men and women.

BLS—Bureau of Labor Statistics

Bureau of Labor Statistics (BLS)—The principal fact-finding agency for the U.S. federal government in the broad field of labor economics and statistics.

CDC—Centers for Disease Control and Prevention

Census of Fatal Occupational Injuries (CFOI)—A program that produces counts of fatal work injuries. CFOI is a Federal-State cooperative program, organized by the U.S. Bureau of Labor Statistics and implemented in all 50 States and the District of Columbia since 1992. The census uses multiple sources to identify, verify, and profile fatal worker injuries across the United States.

Centers for Disease Control and Prevention (CDC)—This network of institutions describes itself as "the nation's health protection agency." It conducts research and provides information about health threats, and responds when these arise. The National Institute for Occupational Safety and Health is a component of CDC.

CFOI—Census of Fatal Occupational Injuries

Mine Safety and Health Administration (MSHA)—The purpose of the Mine Safety and Health Administration is to prevent death, disease, and injury from mining and to promote safe and healthful workplaces for the Nation's miners. MSHA conducts regular inspections, fatality and injury investigations, develops standards, and conducts education.

MSHA—Mine Safety and Health Administration

National Institute for Occupational Safety and Health (NIOSH)—NIOSH is housed within the CDC. It conducts research and training and makes recommendations for the prevention of work-related illnesses and injuries, working with others in government, industry, labor, professional associations, academia and the media to communicate findings on workplace risks and promote prevention measures.

NIOSH—National Institute for Occupational Safety and Health

Occupational Safety and Health Administration (OSHA)—The federal agency charged with enforcing federal health and safety laws and mandating better practices in the workplace. OSHA was

created by the Occupational Safety and Health Act in the 1970s. That federal statute gave states the option of having federal OSHA administer their occupational health and safety programs or creating their own "state plan," as long as the state plans standards and procedures are equal to or stronger than federal ones. About half the states, including Tennessee, have chosen to adopt state plans.

OSHA—federal Occupational Safety and Health Administration

OSH Act—federal Occupational Safety and Health Act

TDOT—Tennessee Department of Transportation

Tennessee Department of Labor and Workforce Development—A department of state government that has responsibility for a range of workplace issues and programs, including unemployment insurance, workers' compensation, employment services, and occupational health and safety.

Tennessee Department of Transportation (TDOT)—A department of state government that has responsibility for the construction and maintenance of highways and bridges across the state, and for selection and oversight of companies that receive millions of dollars in highway and bridge construction contracts each year.

Tennessee Occupational Health and Safety Administration—TOSHA is a "state plan" created by the Tennessee General Assembly under the part of the federal OSHAct that gives states the option to enforce health and safety standards, as long as they are equal to or stronger than federal OSHA's. It is part of the Tennessee Department of Labor and Workforce Development.

TOSHA—Tennessee Occupational Safety and Health Administration

Sponsoring Organizations

Knox Area Workers' Memorial Day Committee

The Knox Area Workers' Memorial Day Committee began as a joint project of the Knoxville- Oak-Ridge Area Central Labor Council and Bridges to Justice, both described below. The Committee has taken a lead role in organizing Workers' Memorial Day observances in Knoxville since 2012 and offers technical support and assistance to other groups interested in holding observances in other parts of Tennessee. Since 2013, the Committee has been an Associate Member of the National Council on Occupational Health and Safety.

Bridges to Justice

http://www.bridgestojustice.org/

Bridges to Justice is a worker and community alliance fighting to improve safety and working conditions for those who build Tennessee's bridges and other public infrastructure. B2J was formed in response to the deaths of five men, all employed on TDOT bridge projects where contracts or sub-contracts had been awarded to Mountain States Contractors or its close affiliate Britton Bridge LLC.

Church of the Savior, United Church of Christ

934 N. Weisgarber Rd.
Knoxville, TN 37909
584-7531
http://www.cos-ucc.org/index.php

Church of the Savior is an inclusive, caring, open and affirming congregation with a special commitment to social and economic justice.

Interfaith Worker Justice of East Tennessee

934 Weisgarber Rd.
Knoxville, TN 37920
(865) 584-7531;
http://etiwj.org/

IWJ of East Tennessee is a local chapter of Interfaith Worker Justice, a coalition of faith communities that advocates for the well-being of all working people. IWJ envisions a nation where workers enjoy the rights to wages, benefits and conditions that allow them to live with dignity.

Jobs with Justice of East Tennessee

1415 Elm St.
Knoxville, TN 37921
email: jwjofet@bellsouth.net
www.jwjet

A local coalition linked to national Jobs with Justice/American Rights at Work. It is an alliance of faith-based and community-based organizations, labor unions, and individuals committed to social and economic justice for working people and their families in East Tn.

Knoxville-Oak Ridge Area Central Labor Council, AFL-CIO

1522 Bill Williams Ave.
Knoxville, TN 37917
Phone: 865-591-2300

http://tn.aflcio.org/391/

An umbrella organization that brings together local unions representing workers in different industries across 13 counties in East Tennessee. For many years it has held observances of Workers' Memorial Day to honor those killed on the job in Tennessee in the previous year.

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