



SWANA[®]
SOLID WASTE ASSOCIATION
of North America

Industry Safety Update



SAFETY  MATTERS



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Why Safety Matters?

**Waste & recycling
collection has the
5th highest fatality rate
of any job in the U.S.**

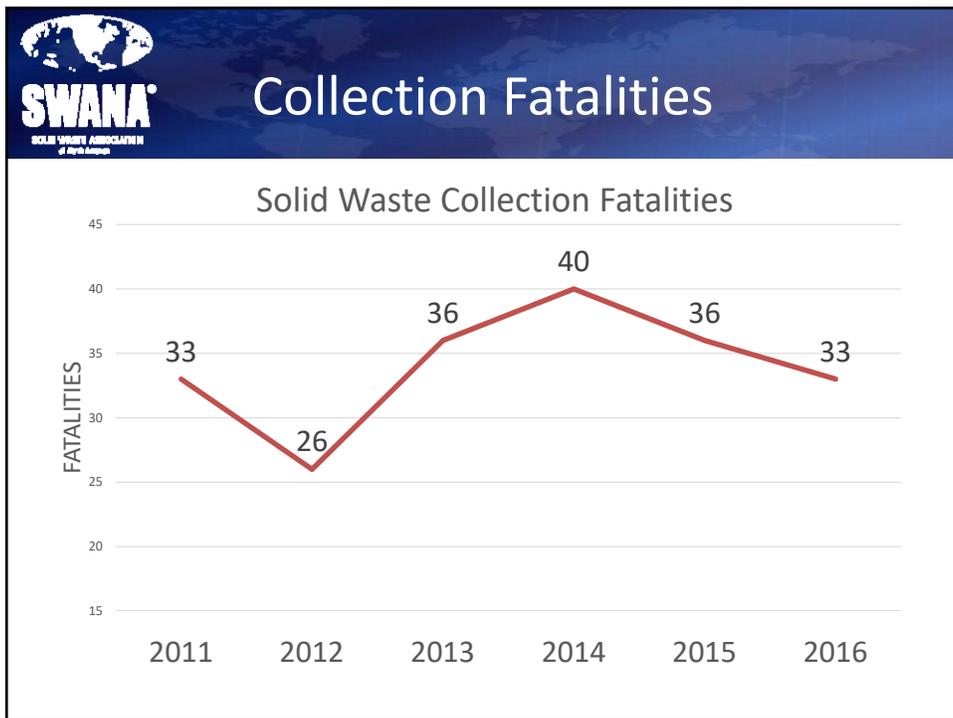
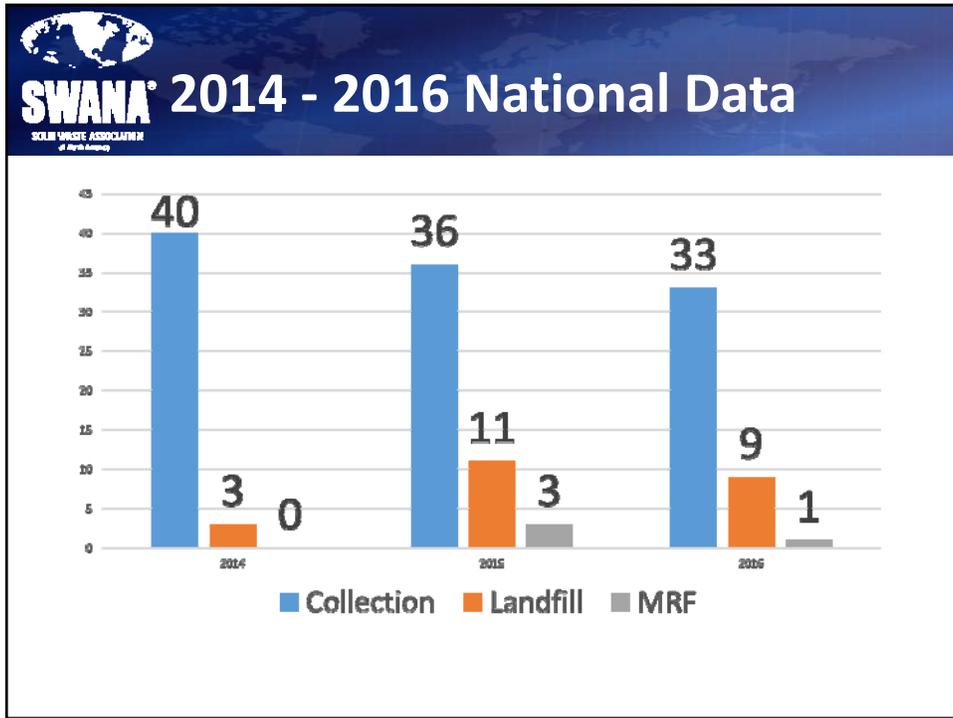
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Why Safety Matters?

- **1 U.S. waste worker died every 10 days on average in 2017**
- **Higher than police officers or firefighters**
- **Fatality rate and raw numbers have generally increased since 2009**
- **Many worker fatalities occur at small employers in the private sector**
 - Small and medium-sized haulers





2017 SWANA Data

126 Fatal Incidents

132 Fatalities

- Both workers & members of the public
- Occurred during collection, at MRFs, TS, landfills, etc.



2017 SWANA Data

38 Solid Waste Workers Died

- 23 drivers and helpers out on collection
- 8 at landfills
- 2 at MRFs
- 2 doing maintenance
- 2 at Transfer Stations
- 1 in the yard



2017 SWANA Data

94 members of the public died

- Majority were driver or passenger in a vehicle accident
- 23 pedestrians
- 8 bicyclists



2018 So Far

46 solid waste-related fatalities
[4/26/18]

- 18 solid waste workers
- 30 members of the public
- **18 fatalities in January alone**
 - One of the worst months in recent memory



2018 So Far

- **Solid waste employees**
 - 12 drivers/helpers on collection
 - 4 at landfill
 - 1 at transfer station
 - 1 at yard
- **Members of the public**
 - 26 drivers/passengers in a vehicle
 - 2 bicyclists
 - 2 motorcyclists



Mississippi Fatalities 2017

- **Greene County, MS | March 27, 2017**
 - An inmate worker was killed while working on a garbage truck
- **Lucedale, MS | July 6, 2017**
 - One inmate worker killed and another injured when SUV struck them at back of garbage truck
- **Rankin County, MS | July 27, 2017**
 - Driver of pickup killed after rear-ending garbage truck
- **Millard, MS | December 5, 2017**
 - Person struck while trying to catch roll away vehicle at a landfill

 **Fatalities**

Most common collection worker fatalities

- Backing
- Struck by
- Rollover



 **Fatalities**

Most common third-party fatalities

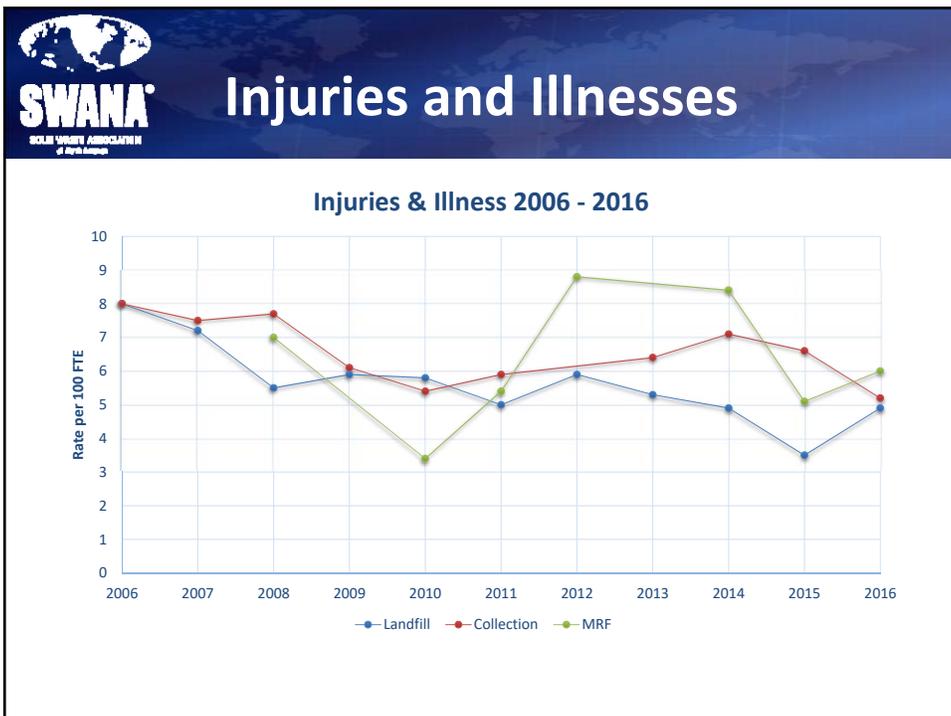
- Other driver crosses into path (head on)
- Intersections (pedestrians/other vehicles/bikes)
- Back of the truck/Rear End





Injuries and Illnesses

- **15,000+ reported injuries or illness/year in U.S.**
 - Collection injury rate is **6.6 (per 100 employees)**
 - Strains/Sprains - Lifting
 - Slips/Trips/Falls
- **2,000+ accidents/year require towed vehicle**

SWANA Solid Waste Accidents

Solid waste and recycling vehicles are involved in accidents with EVERYTHING:



The top-left photo shows a blue and orange garbage truck on the side of a road with a person standing nearby. The top-right photo shows a blue van and a red car crushed together. The bottom photo shows a white garbage truck with a red logo crashing into a brick building.

SWANA Fires Continue to be a Problem

Summer fires hit several recycling facilities

Firefighters respond to fire in garbage truck

Garbage truck catches fire, damages 4 businesses at Mendham shopping center

Plano to dump recyclables in landfill after fire destroys service center



The bottom-left photo is a video frame showing a large fire burning through a pile of debris. The bottom-right photo shows an orange garbage truck on fire on a road.



Natural Gas Truck Fires



The number of fires involving NGV garbage trucks raise public concern

EDITORIAL : Beware dangers of trucks using natural gas
NJ Observer-Tribune (Feb. 1, 2017)



Financial Costs

Major accident costs can easily exceed \$1 million (settlement/jury award; legal fees; insurance increases; management time)

- Georgia - \$11 million settlement (Nov 2016)
- Oregon - \$14 million jury award (May 2016)
- Michigan - \$14.4 million jury award (March 2015)



I'm afraid you're screwed.



Involvement Everybody

- 1. Engage Your Drivers, Operators, and Front Line Workers**
 - A majority of accidents/injuries are caused by unsafe behavior
 - **Make safety personal** for your workers
 - How do we motivate workers to change their unsafe behaviors?
 - Use photos and video to reach employees
 - Show me; don't tell me
 - Don't make me read it



Know Your Data

- 2. Review Your Safety Data**

Safety issues vary:

What are your most common injuries/accidents?

 - What are your most costly injuries/accidents?
 - Do you have more accidents on certain days/times?
 - Figure out common causes—address them
 - There is no boilerplate: different fleets, routes, people, leadership, budgets



Buckle Up

5. Safety Belts

Drivers and helpers should always wear a safety belt in the cab.

It can save a life.



New York City - August 2011



Distracted Driving

6. Distracted Driving is Dangerous!

- Cell phone
- Texting
- Food and drinks
- Have a written policy!
- Are you enforcing it?



The National Safety Council (U.S.) recently reported 27% of all crashes involve cell phone use or texting.



Improving Worker Safety

7. Focus on Backing/Rear End Collisions

- These are the two most common accidents for solid waste vehicles.
- Rushing is often a contributing factor - Why are we rushing?
- Is driver using helper/mirror/camera while backing?





Training to Reduce Injuries

8. Focus on **Lifting** and **Slips/Trips/Falls**

- Two most common injuries for solid waste workers.
- Train to lift properly
 - New hires and annual refreshers
 - Aging workforce may be more prone to injury
- Why are your workers falling?
 - Correct footwear
 - Adjusting for bad weather
 - Rushing



Photo Courtesy of: The Atlanta Journal-Constitution



Post – Collection

Transfer Stations, Landfills, and MRFs

- Equally challenging work environments
- And heavy equipment
- And customers unfamiliar with the site driving around
- And passengers – small children and pets
- And the allure of other people’s garbage – scavenging is not recycling



Tip Floor and Working Face

9. Do you?

- Have directional signage and posted speed limits
- Prohibit cell phone use by employees and customers
- Establish truck separation requirements for tipping floor/working face
- Enforce scavenging prohibitions
- Teach about areas under open tailgates and behind swinging doors
- Train employees to avoid slips/trips/falls (on/off equipment)
- Require PPE – high-viz puncture-resistant shoes, gloves, glasses, hearing protection



Facility Operations

9b. And in the facilities, among others:

- Lock-out/Tag-out
- Bale stacking
- Forklifts and skidloaders
- Sorters: hand injuries, repetitive motion, loose clothing
- Slips/trips/falls
- Storing LP cannisters
- Needle sticks





The Last Line of Defense

10. Personal Protective Equipment (PPE)

- Do the PPE analysis for each job
- It's not enough to put people in high visibility clothing
- Identify the risks, select the right protections, write it down
- Make it personal
- Enforce PPE usage
- Set a good example





SWANA's Safety Resources

- SWANA.org/SAFETY
- #SWANAsafety
- *Safety Monday*
- Slow Down to Get Around
- Fatality alerts
- Classroom safety & compliance training
- Annual Safety Summit at *WASTECON*
- Partnering with NWRA, EREF, ISWA, NGVA



Thank You

Nothing else we do is more important!



Sharon George
MS Chapter of SWANA Safety Ambassador
TCB Extreme Enterprises, Inc.
346 George Road
Ragland, AL 35131
205-812-5495
29sngeorge@gmail.com