



CLEAR THE WAY!

Inform yourself at nsc.nasa.gov and watch the video!



WHAT HAZARD PLAGUES BOTH THE CHIEF EXECUTIVE AND THE NEW HIRE? THE YOUNG AND THE OLD?

WHAT HAZARD PRESENTS ITSELF EVERY STEP WE TAKE, EVERY TIME WE TURN A CORNER, GET UP OUT OF A CHAIR OR CLIMB A SET OF STAIRS?

WHAT IS NASA'S PRIMARY SOURCE OF INJURIES?

IN FY 2010, 27% OF ALL NASA INJURY AND ILLNESS MISHAPS, AND 40% OF NASA'S LOST TIME INJURY MISHAPS WERE RELATED TO SLIPS, TRIPS AND FALLS.

Even under perfect conditions, a misplaced foot can begin a tumble that ends in the emergency room. You would think that after years of practice our perambulation would be flawless, but most of us have our own painful memories of gravity-induced humiliation.

Slips, trips and falls are the Agency's greatest source of injury. We at the NSC want to share some of the hard truths about slips, trips and falls at NASA in hopes that in the course of your day—as you look ever-forward to the farthest reaches of the universe—you'll recall some of your earliest lessons and walk with extra care.

IN FY2010

SLIPS, TRIPS AND FALLS'...

¹Statistics based on FY2010 incidents recorded in NASA's Incident Reporting Information System (IRIS) between October 1, 2009 and September 30, 2010. This study examines incidents that fall under three "Event or Exposure" categories defined by the Bureau of Labor Statistics (BLS): "Falls: Fall to a Lower Level" (BLS 110-129), "Falls: Fall on Same Level" (BLS 130-139), and "Bodily Reaction and Exertion: Slip, trip or loss of balance--without fall" (BLS 215). Precise definitions of these categories are available on the BLS website at http://www.bls.gov/iif/osh_oiics_2_4.pdf.



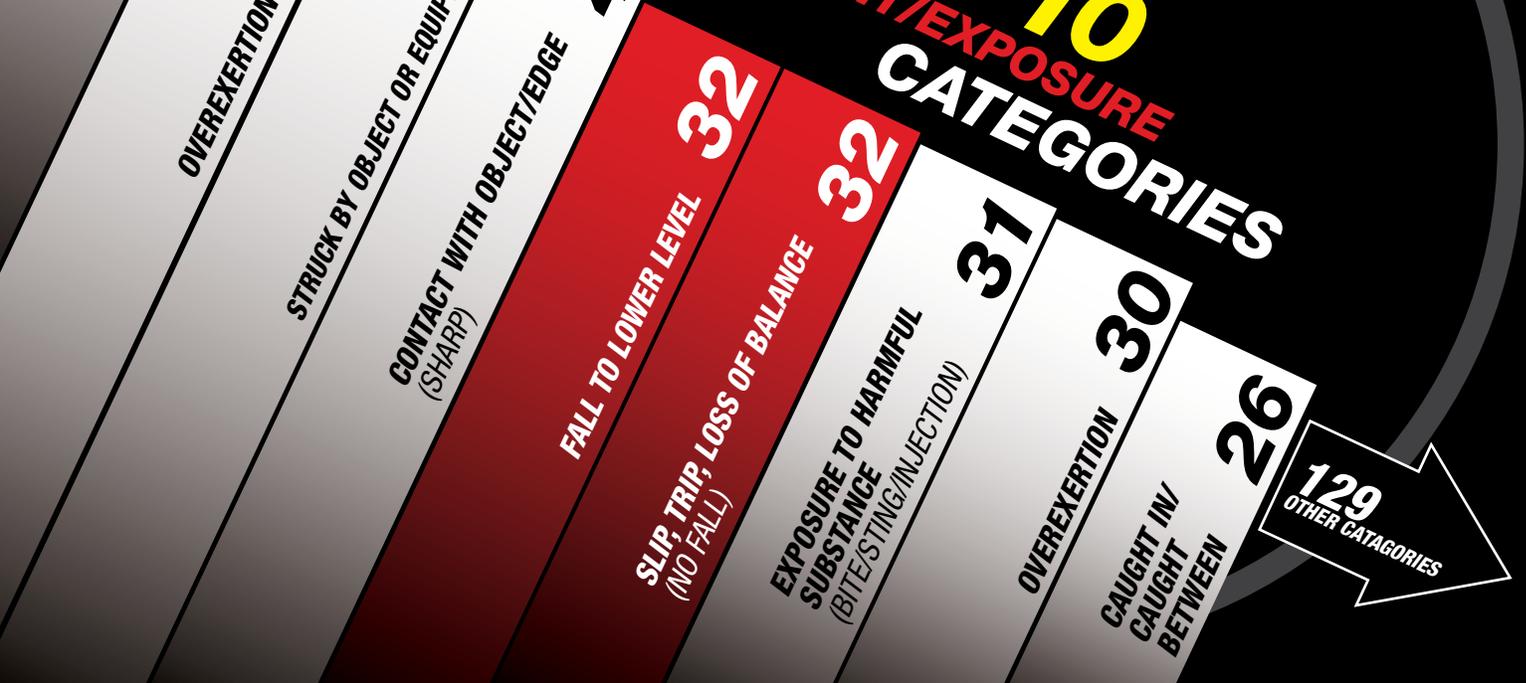
CAUSED 27% OF ALL OF NASA'S INJURIES

- NASA experienced 588 Type A-D injuries. Slips, trips and falls caused 159 of those injuries.
- Slips, trips and falls are by far the greatest single cause of injury in the Agency.



CAUSED 40% OF NASA'S LOST TIME INJURIES

Slips, trips and falls caused 49 of 122 lost time injuries.



NASA FY2010 **TYPE B** INJURIES

5
FALL, SAME
LEVEL

4
FALL TO LOWER
LEVEL

CAUSED MORE THAN HALF OF NASA'S FY2010 TYPE B INJURIES

Of 16 total Type B injuries, 9 were falls

- 4 “falls to a lower level”
- 5 “falls on the same level”

NASA groups injuries into four categories, Types A-D. Type A injuries are the most severe, and the most rare; NASA experienced 0 Type A injuries in FY2010. Type B injuries are the next level down, resulting in permanent partial disability or hospitalization of one or two people within thirty days of the injury.

WERE 50% MORE LIKELY TO BE SEVERE THAN THE AVERAGE NASA INJURY

- 30% of Slips, trips and falls required lost time, compared to only 20% of all NASA injuries.
- Slips, trips and falls are approximately 1.5 times more likely to result in lost time injuries than the average NASA injury/illness mishap.
- Approximately 1 in 3 slip, trip or fall injuries were severe enough to require victims to miss time from work for treatment or recovery.

1
EXPOSURE TO
TEMPERATURE
EXTREME

1
EXPOSURE
TO PRESSURE
CHANGE

1
TRANSIT
ACCIDENT

2
CONTACT WITH
OBJECT/EDGE
(SHARP)

2
CAUGHT IN/
BETWEEN

NASA FY2010 SLIPS, TRIPS AND FALLS* DANGER ZONES

10% OF ST&F MISHAPS WERE RELATED TO

PARKING LOTS & VEHICLES

- Scenarios include parking lots, parking garages, and getting in and out of vehicles
- 25% of all vehicle and parking area related ST&F mishaps required time away from work for treatment and recovery

15% OF ST&F MISHAPS OCCURRED ON THE

STAIRS

- 25% of all stair- or step-related incidents were on the first or last step (or involved a single step rather than a set of stairs)

MANY PEOPLE TRIPPED OVER PERMANENT OBSTACLES SUCH AS

SIDEWALKS & CURBS

- ST&F mishaps involved permanent obstacles or trip hazards 15% of the time
- 40% of these obstacles were curbs and parking stops

MOMENTS OF TRANSITION

TRIGGERED 19% OF ST&F MISHAPS

- SCENARIOS INCLUDE
- Moving from inside a building to outside a building
 - Stepping on or off a staircase
 - Sitting down in a chair

FALLS ON THE SAME LEVEL

ACCOUNT FOR OVER HALF OF ST&F MISHAPS

- 55% of ST&F mishaps were falls on the same level
- 20% were falls to a lower level
- 25% were slips or trips that did not result in a fall

*ST&F = SLIPS, TRIPS AND FALLS

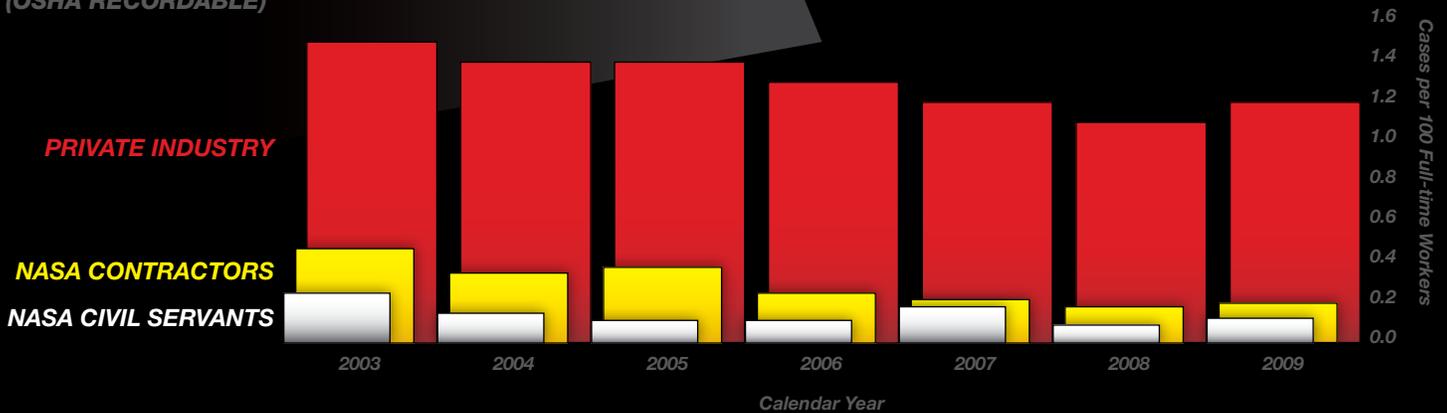
NASA AND PRIVATE INDUSTRY

Slips, trips and falls are a concern in every industry. On average, approximately 25% of industrial lost time injuries are related to slips, trips and falls. In FY2010, 41% of NASA's lost time injury mishaps were due to slips, trips and falls. NASA's 41% is higher than the percentage of injuries due to slips, trips and falls in all major industry sectors, which range from 18% of all injuries in Manufacturing to 34% in the Information field.

Fortunately, NASA's overall injury mishap rates are much lower than injury rates in private industry. NASA's relatively high percentage of slips, trips and falls indicates that NASA manages other hazards much better than many other industries; many of our injuries - such as slips, trips and falls - cannot be entirely eliminated by engineering controls.

Read the NASA Benchmarking Report on the **NSC Metrics Page** (nsc.nasa.gov/metrics) for more on how NASA's safety record compares to other organizations.

LOST TIME CASE RATE (OSHA RECORDABLE)



Sources: U.S. Bureau of Labor Statistics (BLS) and IRIS, Injury/Illness Module, Case Statistics Report, Lost Time Rate
Note: BLS collects data reported on OSHA Form 300 in its Survey of Occupational Injuries and Illnesses.

% LOST TIME CASES

RELATED TO SLIPS, TRIPS AND FALLS AT NASA AND IN SPECIFIC INDUSTRIES



POINTS TO PONDER

- **How do the floor and stair conditions** in your work area affect the likelihood that you will slip, trip or fall? Are there any areas that require extra care?
- **How can you make walking easier** and slipping less likely for your employees?
- **When are you particularly in danger** of slipping or falling? Consider time of day, activities, and locations that might be more dangerous to you personally.
- **Using your eyes is essential**—when are you most likely to forget to look before you step?
- **How does your footwear** affect the likelihood that you will slip, trip or fall? The general wisdom is that greater contact area between your shoes and the floor will improve stability, as does higher friction between your shoe and the floor.
- **Think about your work area.** Do you use non-slip wax on the floors? Do you need extra rugs, mats or carpets in certain locations? Are there any obvious trip hazards that could easily be addressed?
- **Are there any fall hot spots** near your work area? If you have access to your Center's safety data, consider identifying frequent fall locations and developing plans to improve these areas.
- **How often do you walk on autopilot**, without paying attention to the ground beneath your feet?
- **Do you use handrails** and other resources available to help protect you from falling?

REDUCE PERSONAL DISTRACTIONS

WHILE MOVING/WALKING.

MAINTAIN A CLEAR PATH AHEAD

AND (LITERALLY) WATCH
YOUR STEP.

**NASA FY2010 INJURIES
CAUSED BY SLIPS, TRIPS
AND FALLS DID NOT
INCREASE IN THE
WINTER**

- In fact, in FY2010, spring saw the greatest number of slips, trips and falls.
- While snow and ice are an obvious slip hazard, they accounted for only 2% of FY2010 Lost Time STF cases, and 5% of all FY2010 STF injuries.
- It is clear that slips, trips and falls are a year-round hazard.

SOLUTIONS *A BEST PRACTICE FROM JSC*

While we can certainly introduce physical improvements to reduce falls, the true solution to this problem lies in increasing awareness and building personal commitment to serve as a constant model for safe behavior. For various reasons, people fall in “safe” environments all the time. Increasing awareness of surrounding hazards—and being “in the here and now”—can reduce these injuries. The SMA organization at JSC recently ran a successful campaign to reduce common injuries by increasing awareness of common safety hazards and unsafe behaviors.

The Center SMA Office realized that falls were the most common cause of lost time injuries at JSC, just as they are at NASA as a whole. After JSC reviewed numerous fall-related mishaps, it was evident that

many injured employees could not recall their exact circumstances at the moment of the injury. It was clear that many falls shared a common contributing factor: personnel were distracted and thinking about the next work challenge, meeting, or milestone on their mind. JSC’s “SAFE, Not Sorry” program included small signs at all building stair rails, and large signs in the ten buildings with the most fall-related close calls. These larger signs simply said, “Did you know this building has more slips, trips & falls than most?” As part of the campaign, JSC encouraged personnel to help coworkers by offering to lend a hand or urging them to slow down if they were hurrying. JSC also encouraged employees to set an example by wearing proper footwear, actively improving lighting, or clearing obstacles.

“SAFE, NOT SORRY” *RESULTS*

During “SAFE, Not Sorry” JSC experienced a record low OSHA recordable incident rate of 0.87 injuries per 100 full time employees.¹ While slips, trips and falls remain the highest category of injury at JSC, mishaps declined in all categories. This rate exceeded their aggressive incident reduction target by 10%. JSC’s results show that the slips, trips and falls disease that plagues NASA and industry alike is in fact treatable. Increasing awareness can reduce “inevitable” injuries such as falls.

¹ This number refers to the total incident rate. JSC estimates approximately 36% of all OSHA recordable injuries on site are slip, trip and fall related.

ACROSS THE AGENCY

JSC is not the only Center that is taking steps to reduce slips, trips and falls. Share information about your Centers at nsc.nasa.gov

“Safe, not Sorry” is JSC’s recent safety awareness campaign that rewards personnel for being

COURAGEOUS

- Courageous in confronting, communicating and working through a safety concern directly with those involved

PROACTIVE

- Proactive in removing or resolving an immediate hazard

POSITIVE

- Exhibited enthusiastic safety attitude that motivated their coworkers

PROMPT REPORTERS

- Promptly reported hazardous conditions

Contact David Loyd
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for more information about the
“SAFE, Not Sorry” campaign.

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