

# Clear the Way!

## *NASA Slips, Trips and Falls, FY2010*

### **Leadership ViTS Meeting**

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**Bryan O'Connor**

*Chief, Safety and Mission Assurance*

**Wilson B. Harkins**

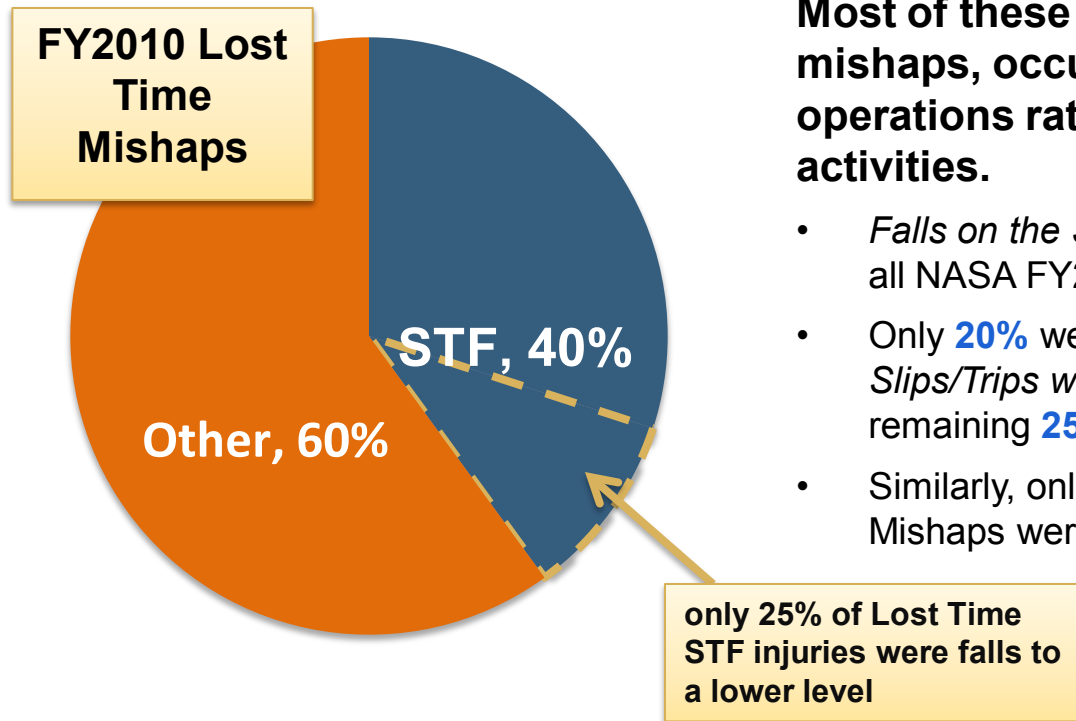
*Deputy Chief, Safety and Mission Assurance*



# THE PROBLEM

Like many organizations, NASA struggles with slips, trips and falls (STF). They are our primary source of injuries:

- In CY 2010, **27%** of all NASA injury and illness mishaps were STF mishaps.
- **40%** of NASA's Lost Time Injury Mishaps were related to STF.



**Most of these incidents are “everyday” mishaps, occurring as part of normal operations rather than high-risk activities.**

- *Falls on the Same Level* account for **55%** of all NASA FY2010 slips, trips and falls.
- Only **20%** were *Falls to a Lower Level*; *Slips/Trips without falling* account for the remaining **25%**.
- Similarly, only **25%** of Lost Time STF Injury Mishaps were falls to a lower level.

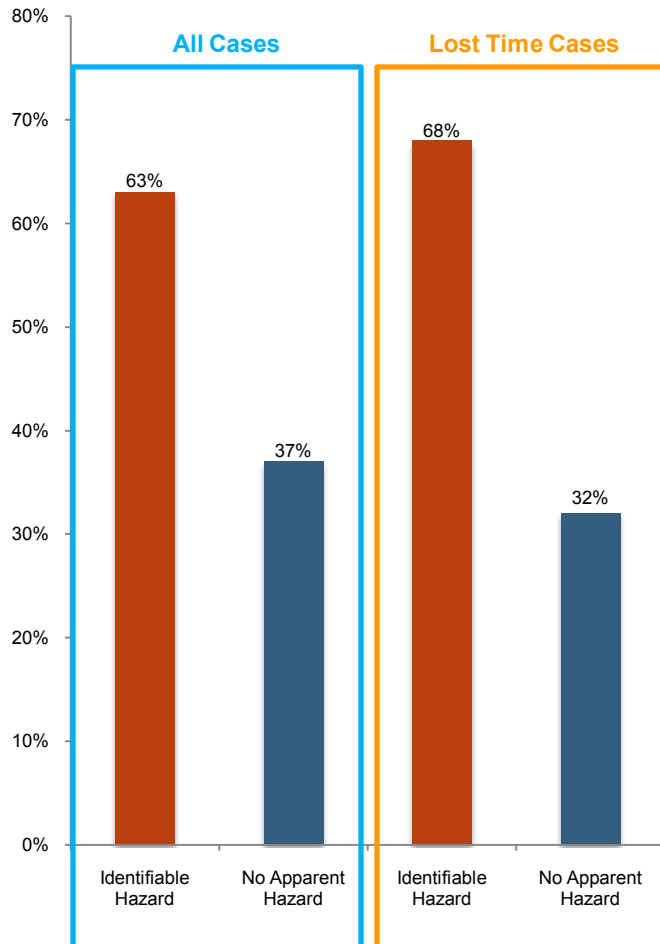
# WHAT HAPPENED?

- Many victims tripped over **permanent obstacles** such as sidewalks and curbs.
  - **15%** of ST&F mishaps involved permanent obstacles/trip hazards
  - **40%** of these obstacles were curbs and parking stops
  - **64%** involved NASA contractors (which comprised 72% of the NASA Family in 2010)
- **Moments of transition** triggered **19%** of ST&F mishaps
  - Examples: moving from inside a building to outside, stepping on/off a staircase, or sitting down in a chair
- **10%** of FY2010 ST&F mishaps occurred in or around **parking lots and vehicles**
  - Incidents include tripping in parking lots/garages or getting in and out of vehicles
  - **25%** of all vehicle and parking area 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 occurred on the first or last step (or involved a single step)
- Slips, trips and falls are a **year-round hazard**.
  - In FY2010, NASA saw more ST&F mishaps in the spring than in any other season.
  - Ice and snow accounted for only **2%** of FY2010 Lost Time ST&F cases, and **5%** of all ST&F injury mishaps.

# INITIATING EVENT

## CY2010 STF Mishaps

(slip/trip without falling, slip/trip/fall same level; excludes falls to a lower level)



- Approximately **63%** of CY2010's same level slips, trips and falls involved an identifiable hazard
  - Such as a misplaced chair, a patch of ice, or an unseen cable crossing a walkway
- The remaining **37%** presented no apparent hazards
  - i.e. mishaps with no evidence of a hazard on the walking surface, in which the victim's own bodily movement likely resulted in the fall.

# CENTER EFFORTS

- **JSC's Safe, Not Sorry Campaign**

- JSC reviewed their 'everyday' mishaps and determined that **distraction** was a primary factor. Victims were unable to remember what they had been doing when they injured themselves, or they were clearly preoccupied at the time of the incident.
- After JSC's "Safe, Not Sorry" general safety awareness campaign, the Center saw a dramatic decrease in this sort of incident.

- **JPL: Age makes a difference**

- JPL observed that older staff experienced more falls and required more recovery time than their younger counterparts.
- The Center is encouraging personnel to join their fitness and exercise programs to increase strength and flexibility, but it's too early to detect any differences in fall rates.

- **MSFC: Don't overdo it!**

- MSFC established a **hold handrail rule** and posted "hold handrail" signs on all stairways. The Center instituted many other changes, such as instituting a simple process for acquiring floor mats ("Just ask the custodial staff!").

- **KSC: Walk Up, Ride Down**

- KSC found **more risk from descending stairs** than climbing them, so advocated getting exercise on the way up, and using the elevator to ride down.

## Points to Ponder

- **How do the floor 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 will higher friction between your shoe and the floor.
- **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.
- **Do you use handrails** and other resources available to help protect you from falling?

[nsc.nasa.gov/resources/studies/SlipsTripsFalls](http://nsc.nasa.gov/resources/studies/SlipsTripsFalls)

-Videos  
-Awareness Posters  
-Case Study