



The Balance Zone: Preventing Slips, Trips, and Falls

Senior Management ViTS Meeting

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Question:

What's
the
SINGLE
GREATEST
Cause
of Injury
at NASA?



Answer:

Slips,
Trips,
and
Falls!

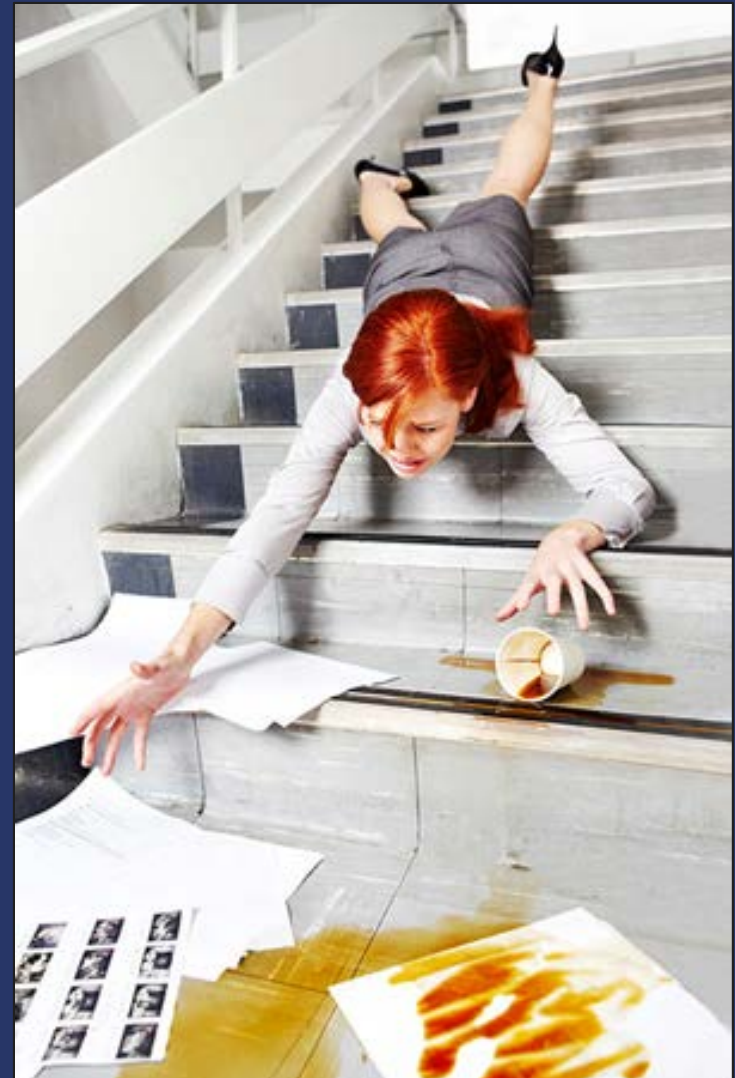
The greatest cause of injury at NASA



We Are Not Alone



- Falls account for over 8 million hospital emergency room visits each year, representing the leading cause of emergency room visits (21.3 percent).
- Slips, Trips, and Falls (STFs) cause 15 percent of all accidental deaths, which is second only to motor vehicles.
- In addition to the cost and loss of productivity, these injuries can lead to a lifetime of pain.





KSC Slips, Trips, and Falls Initiative



What is the same?

Continue traditional efforts to ensure a safe work environment.

What is different?

Also focus on the employee's responsibility.

HAZARDS
Learn about the hazards we encounter when walking



DATA
See how this problem affects KSC

PREVENTIVE
Things you can do to avoid a fall



BALANCE
Learn how to improve your balance and avoid injury.





Balance Theory



- Have you ever learned to play a sport, kick or throw a ball, skate, dance, or ski?
- A learned, rapid response to an unstable surface or situation prepares the body to react better to a slip or trip without falling.

**This can help
almost anyone
improve their
balance!**

Education * Hands-On Training * Research





Education and Hands-On Training



Education

- Classroom training, materials, and brochures
- Web pages and emails
- Speaker series

Hands-On Training

- Three Balance Zones (BZs) with balance equipment
- BZ Facilitators (health professionals and volunteers)
- Individualized training
- Stretching classes





Balance Research

The Biodex Balance System Fall Risk Screening Protocol can

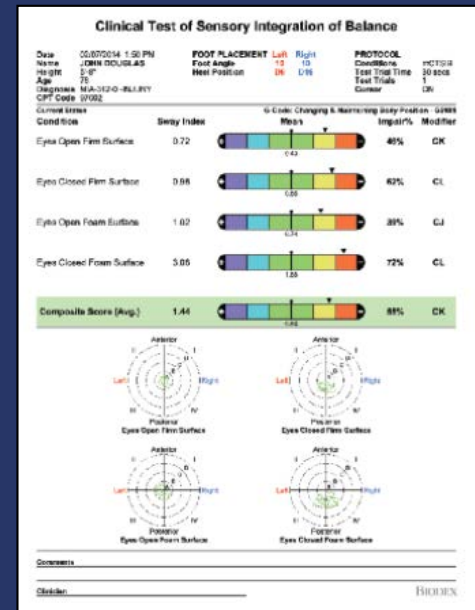
- Identify a potential problem in just 5 minutes
- Gauge the progress and impact of training on BZ participants

Kennedy Space Center (KSC) Balance Research

“Establishment of Normative Data for the Biodex Fall Risk Balance Test in Adults 40 to 70 Years of Age”

Results

- Employees self-report improvement in balance when they practice
- Preliminary data suggests improvement in balance





Timeline



- 2013: - Proof of concept with safety employees
- 2014: - Developed four-part model
- Purchased equipment
- 2015: - Opened first BZ to KSC employees
- Tested and trained two classes
(Developed the testing protocol and educational materials)
- 2016: - Partnered with the Biodex Company to collect balance data
(Biodex provided two balance systems)
- Staffing three BZs with employees and volunteers
- Opened first “mini-BZ”
- Sharing STF initiative information with other Centers
- 2017: - Plan to open new BZ’s
- Increase Web page balance videos
- Develop a public Web site, outside the NASA firewall





Get Started Today



Get Balanced

- Reduce your chances of an injury due to STFs
- Go to the KSC Balance Zone Web page:
http://sma.ksc.nasa.gov/kscsafety/stf_initiatives/balancezone.html
 - Take the Quick Five-Point Fall Risk Assessment
 - Test your balance
 - Practice balance drills
- Go to the KSC Balance Zone or start one at your Center

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Resources:

- KSC Slips, Trips, and Falls Initiative:
http://sma.ksc.nasa.gov/kscsafety/stf_initiatives/stf_initiatives.html
- Video with Astronaut Cady Coleman discussing the KSC Balance Zone:
<http://www.youtube.com/watch?v=8UbafiFEs7M>

Preventing Slips, Trips, and Falls

