PRIMA'S 2017 RISK MANAGEMENT
WEBINAR SERIES

Successful Methods for Reducing Slips, Trips and Falls

Marilyn L Rivers, CPCU ARM AIC
Director Risk and Safety
City of Saratoga Springs, NY

Learning Objectives

- Identify facility issues associated with general liability exposures
- Utilize standardized techniques for maintenance programming to facilitate accountability
- Design and develop parameters that are effective measurements of facility liability
- Understand the mechanics of slips, trips, and falls in your claims profiling

Liability…

can be defined as a legal responsibility for another person's injury or damages

Reality Disclaimer

The material being provided in this presentation is for your general information, and is not a substitute for legal advice. Consult your entity's attorney for advice concerning specific situations.

National Safety Council STnF Statistics

Falls are the third leading cause of unintentional death in the U.S., accounting for nearly 32,000 deaths in 2014, according to Injury Facts 2016®. The risk of falling rises with age. In homes and communities, more than 31 ,000 people died in a fall in 2014. In the workplace, nearly 600 people died and 47,000 were injured in 2013.

http://www.nsc.org/NSCDocuments_Advocacy/Fact%20Sheets/Slips-Trips-and-Falls.pdf

Risk mitigation is a process…



Public Places

- Bike Lanes
- Elevators
- Parking Lots
- Parking Garages
- Roadways
- Sidewalks
- Stairways



Recreation

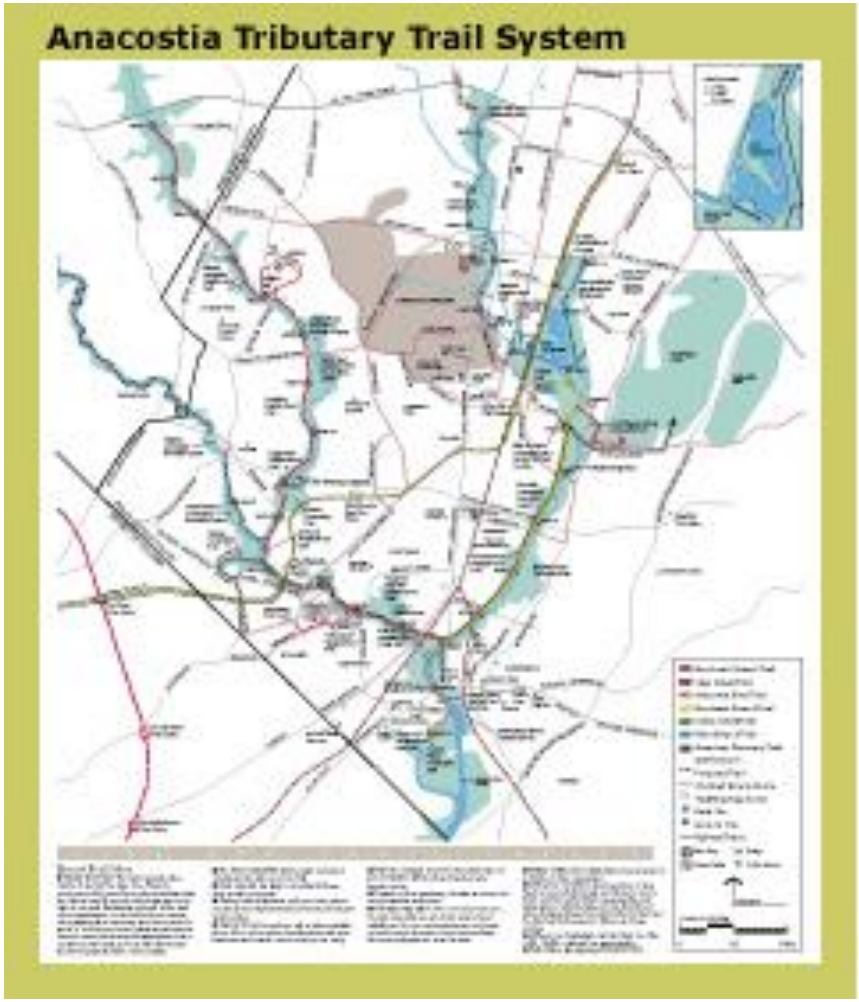
- Fields
- Gymnasiums
- Ice Rinks
- Picnic Areas
- Trail Systems



Recreation Waterfronts



Trail Systems



Healthcare Facilities

- Cafeterias
- Elevators
- Flooring
- Parking Garages
- Parking Lots



Educational Facilities

- Auditoriums
- Cafeterias
- Classrooms
- Flooring
- Laboratories
- Parking Lots
- Restrooms
- Sports Facilities



Public Private Transitions

- Exterior Art Exhibits
- Landscaping
- New Construction
- Street Openings
- Street Paving
- Water and Gas Excavations



Nature's Contributors to STnF

- Dirt
- Fruit Trees
- Ice
- Sand
- Snow
- Stone
- Tree Roots
- Water



Manmade Contributors to STnF

- Food
- Footwear
- Grease
- Lighting
- Metal shavings
- Oil
- Wax
- Wear and tear



NIOSH's Top 10 STnF Hazards

- Contaminants on the Floor
- Indoor Walking Surface Irregularities
- Outdoor Walking Surface Irregularities
- Weather Conditions: Ice and Snow
- Inadequate Lighting
- Stairs and Handrails
- Stepstools and Ladders
- Tripping Hazards: Clutter, Loose Cords, etc.
- Improper Use of Floor Mats and Runners
- Poor Drainage: Pipes and Drains

Human Factors of STnF

- Health and physical condition can impair a person's vision, judgment, and balance.
- Carrying or moving cumbersome objects, or too many objects, that obstruct your view impair your balance and prevent you from holding onto handrails
- Inattentive Behavior: walking, distractions (e.g., using cell phone, talking and not watching where you're going, etc.)
- Taking shortcuts; not using walkways or designated, cleared pathways; being in a hurry, rushing around

https://www.osha.gov/dte/grant_materials/fy07/sh-16625-07/slipstripsfalls.ppt

Assessment Parameters

- Property Use
- Population of Use
- Identification of Population Parameters
- Funds Available for Maintenance and Upkeep
- Housekeeping Surface Requirements
- Capacity to Document
- Understanding of Maintenance

Property Use

- Interior
- Exterior
- Mixed Use
- Private
- Public
- Surface Transitions



Population Use

- Children
- Adults
- Disabled
- Infirmed
- Elderly







Uniformity

- Checklists
- Facility Inspections
- Process Mechanics
- Risk Mitigation Surveys
- Roadway Standards
- Standardized Details
- Street Opening Permits



Internal Stakeholders

- Building and Zoning
- Code Enforcement
- Engineering
- Planning
- Public Works



External Stakeholders

- Builders and Developers
- Chambers of Commerce
- Public Private Partners
- Specialized Business Districts



Americans With Disability Act

- National mandate for the elimination of discrimination against individuals with disabilities
- Strong, consistent, enforceable standards addressing discrimination against individuals with disabilities
- Ensures that the Federal Government plays a central role in enforcing the standards established in this chapter on behalf of individuals with disabilities

OSHA Walking and Working Surfaces Standard: Subpart D 1910.22: Housekeeping…

Requires that all places of employment be kept clean, orderly and in a sanitary condition.



National Floor Safety Institute

White Paper Technical Specifications on:

- Walkway Slip Resistance
- Common Hard Surface Floor Materials
- Wet Barefoot Conditions
- Floor Covering Traction Studies
- Commercial Entrance Matting
- Floor Mat Backing Materials
- Interior/Exterior Pedestrian Trip Hazards on Walking Surfaces, Stairs, Steps and Ramps

NFSI.org

International Code Council

The *International Building Code* (IBC)

- foundation of the complete Family of International Codes®
- strives to preserve public health and safety that provides safeguards from hazards associated with the built environment
- addresses design and installation of innovative materials that meet or exceed public health and safety goals

https://www.iccsafe.org/codes-tech-support/codes/2015-i-codes/ibc/

Municipal Street Opening Permit Basics

- Work must commence within 48 hours after Estimated Start Date and be finished within 48 hours after Estimated Completion Date. Changes to Start and Completion Dates must be pre-approved by the Department of Public Works.
- Excavators must contact the underground locating company at least two working days PRIOR to actual street excavation.
- Excavators are responsible for replacing clean backfill material and proper compaction of all street repair work.
- Restoration of an emergency street opening is to be accomplished by placing clean fill and rubble, properly compacted and surface patched with a minimum of 6” (six inches) of Flowable Fill or acceptable cold patch material.
- The following should serve as a guideline in undertaking all trench and blacktop street repairs:
  - All asphalt pavement excavations are to be SAW CUT allowing for a more uniform edge to facilitate repair of the blacktop surface.
  - Sub-grade backfill material shall be placed by the contractor that meets minimum requirements for properly compacted trench backfill material.
  - Stone rubble sub-base gravel material shall be placed and compacted to a minimum depth of 12” (twelve inches) by the contractor. (rubble may be furnished by the City).
  - Top Course Hot Mix Asphalt Material shall be placed and properly compacted to a minimum thickness of four (4) inches.
- Plumbers are required to use compression fittings. Use of compression fittings will avoid a poor flaring and are easier to work with during emergency repairs.
- Plumbers must submit a detailed drawing on the attached form of all new services (both water and sewer) showing measurements to curb box, point of connections and point of entry into house.
- Excavators will be required to secure any excavation left overnight using their own equipment (lanterns, barricades, signs, etc.) and will be responsible for excavation until all work is completed.
- Applicants must notify the Fire Department, Police Department, Emergency Corps and School Bus Garage when CLOSING a street.
- Insurance Certificates must be provided each year prior to any work commencing on a City Street naming the City as an Additional Insured prior to any work commencing.

Housekeeping Checklists



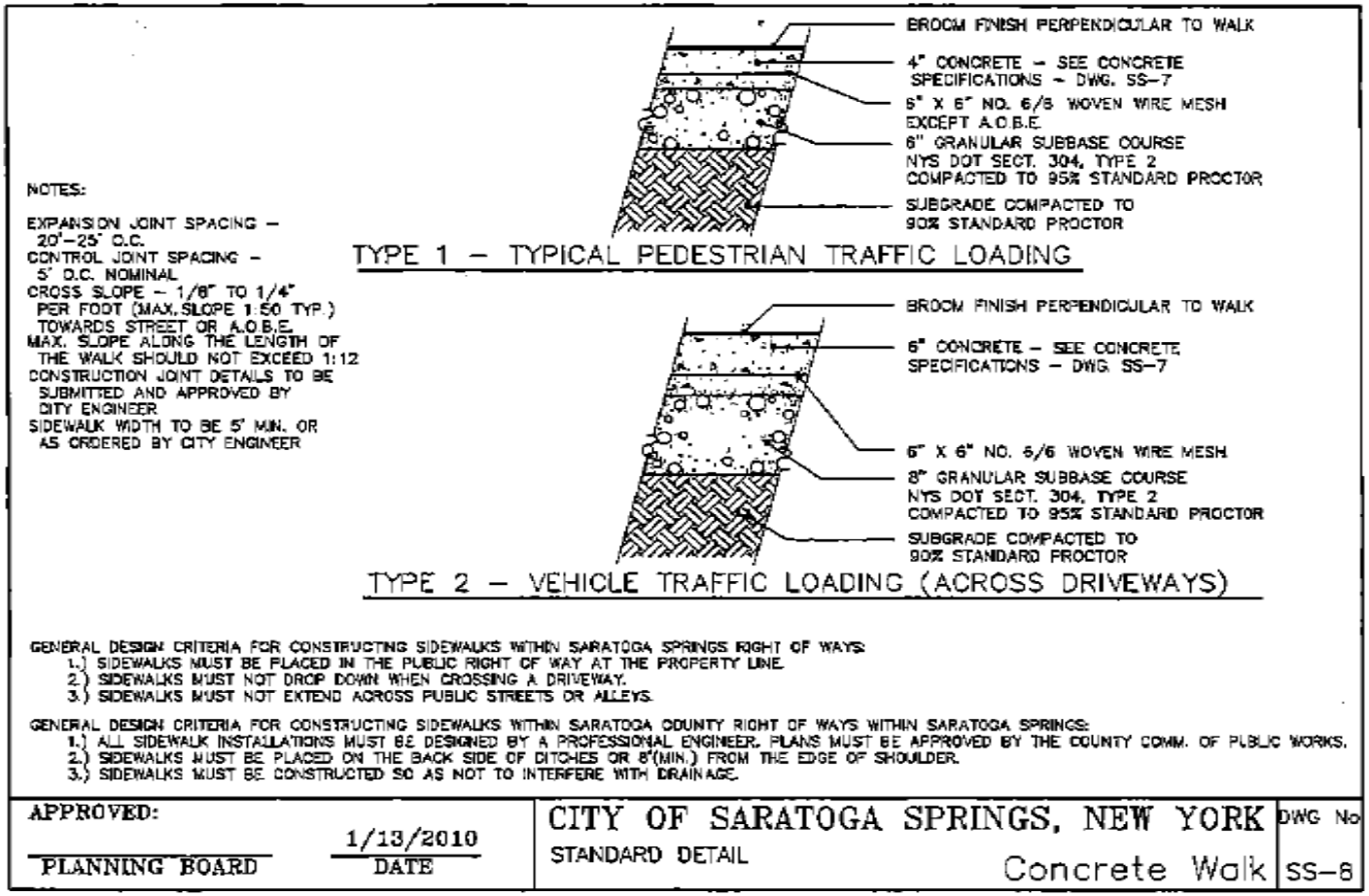
- Dust and Dirt Removal
- Sanitation
- Vermin Control
- Walkway and Working Surfaces
- Lighting
- Control of Spills
- Storage and Maintenance of Tools and Equipment
- Waste Disposal
- Material Handling and Storage

https://www.osha.gov/dts/maritime/sltc/ships/housekeeping/checklist.html

Code Enforcement Compliance

- Sidewalk Ordinances
- Maintenance and Upkeep
- Right of Way:
  - Tree Growth
  - Obstructions
  - Parking
  - Basketball hoops
  - Art

An Example of Standard Details



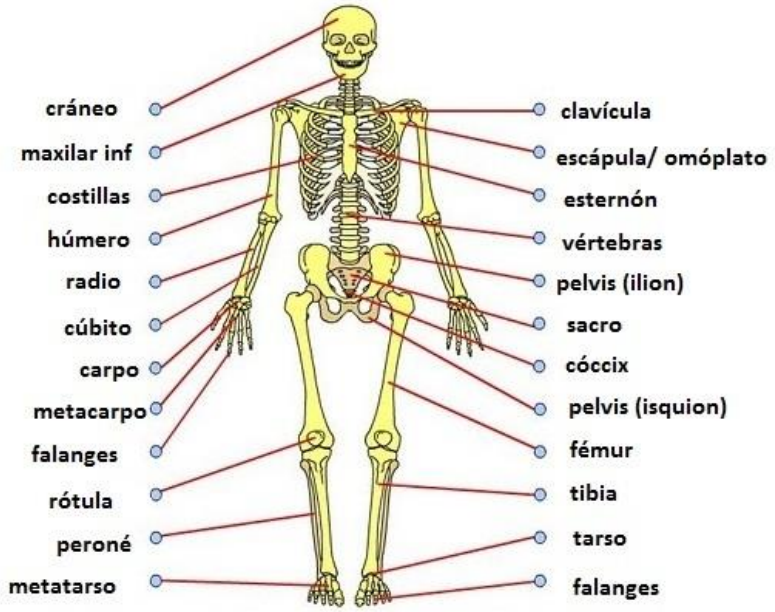
Common Injuries

- Sprains and muscle strains
- Bruises, cuts and contusions
- Fractures
- Broken teeth



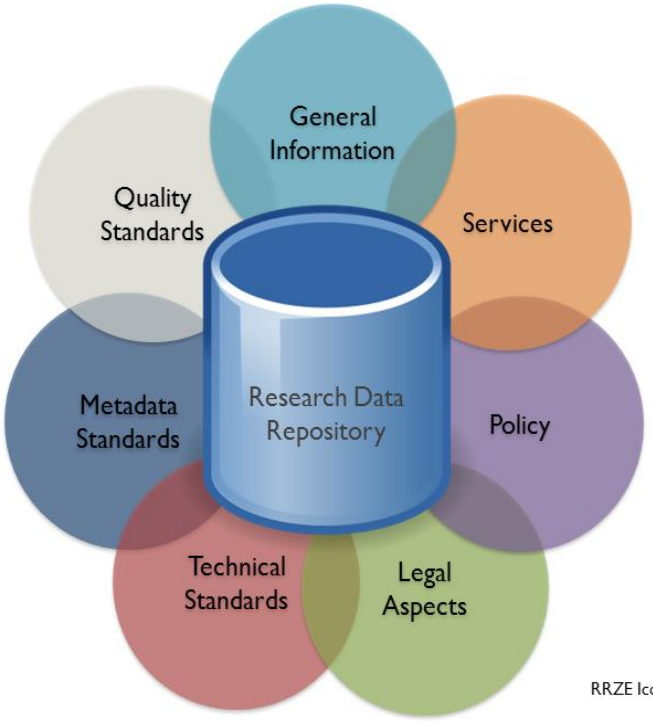
The Anatomy of It All

- Hip, knee, ankle and/or foot
- Finger, hand, wrist, elbow and/or arm
- Back
- Shoulder
- Head
- Mouth and/or teeth



Data Crunching

- Claims databases
- Building usage
- Infrastructure
  - public
  - private
- Standards
- ADA mandates
- Budgeting



Claim Profiling Causation

- Activity
- Age continuum
- Attendance at public gatherings
- Law enforcement history
- Seasonal trends - weather
- Special event obstacles
- Sport venue specialties
- Underlying medical issues



Important Tools for Prevention

- Building dynamics
- Population use
- Housekeeping protocols
- Reporting criteria
- Active enforcement
- Due diligence
- Education and training
- Safety Committee leadership



Thank you!

Marilyn.Rivers@Saratoga-Springs.org

(518) 587-3550 extension 2612