

# RISK

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SCHEDULE

A different perspective...

Brian Avery

# RISK MANAGEMENT

## Theme Park Perceptions...

### First Impressions...

- Where have you been?
- Comparison of parks
  - *one thing in common?*
- *Our industry is always under a microscope*

*Water slide*







# Industry Snapshot

- Fixed site amusement parks & attractions
  - 30 billion
  - 275,000 employed
  - 400 million visitors
  - Dominated by Disneyland & World
  - 10,000+ attractions

# RISK MANAGEMENT

## Brief History...

- 1893 World Columbian Exposition
- 1875 Coney Island (Flip Flap ride)
  - 1897 Steeplechase Park
- 1889 First coaster
- 1915-20 Start of decline
- 1929-33 Market crash

# RISK MANAGEMENT

## Phase 2...

- 1929, state of Wyoming Regs.
- 1955 Disneyland, \$17 million, 3.8 million visitors
- 1961 Six Flags Texas, 1.3 million visitors
- 1971 Disney World, \$250 million
  - OSHA
- 1990's Roller coaster arms race





# The industry fractured

- Permanent – fixed site facilities
  - Self regulatory
- Temporary – mobile
  - CPSC 1972

## Regulations



# Associations & Standards

- ASTM
  - Self regulatory
- NAARSO
- AIMS
- AREA
- IAAPA

Industry push to blame the patrons

## Regulations



## We Have Standards!

NFPA 101

OSHA

NFPA 730

ASTM: Surfaces

ANSI

ServSafe

IBC

ASTM F24

NFPA 102



# RISK MANAGEMENT

## Regulations...

- ASTM Committee F24 on Amusement Rides and Devices
- Americans with Disabilities Act
- American Industrial Hygiene Association
- American National Standards Institute
- American Society of Mechanical Engineers
- ATF Bureau of Alcohol, Tobacco and Firearms
- U.S. Consumer Product Safety Commission
- Department of Justice
- Department of Labor
- U.S. Department of Transportation
- Environmental Protection Agency
- Federal Aviation Administration
- Food and Drug Administration
- Federal Emergency Management Agency
- Institute of Electrical and Electronics Engineers
- National Electric Code
- NFPA Provides fire, electrical and life safety information
- National Swimming Pool Foundation
- OSHA Occupational Safety and Health Administration
- SAE Society of Automotive Engineers
- Underwriters Laboratories Inc.
- U.S. Coast Guard
- United States Department of Agriculture
- U.S. Fish and Wildlife Service



Many believe we have a bad rap... State of Florida as an example

# **SAFETY OF AMUSEMENT RIDES AND DEVICES?**

# RISK MANAGEMENT

## Risk! *Employee & Guest...*

- Operations
  - Rides, devices & attractions
  - Crowd control
- Entertainment Venues
  - Explosives
  - Animal exposures
  - Guest interaction
- Food & Beverage
  - Food safety
- Merchandise
  - Product liability
  - Theft
- Horticulture
  - Equipment
  - Obstructions
- Park Services
  - Sharps
  - Lifting
- Traffic
  - Hydration, etc.
  - Theft
  - Vehicles
- Maintenance
  - Rides, devices & attractions
  - Facilities, vehicles, etc.
  - Gas storage, disposal
- Shipping/receiving
  - Mail handlers
- Water Quality
  - Chemical exposure
  - Outbreaks
- Health Services
  - Bloodborne pathogens
  - Response
- Police/Fire/EMS
  - Access





# RISK MANAGEMENT

## Our process...

- Starts with the manufacturers
- Internal policies and procedures
- Regulations and standards
- Training
- Inspections
- Monitoring



# Risk Identification & Analysis

## Identify

- Risk identification consists of determining and documenting internal and external risks that will likely have an impact on the event.
- Continuing process that should be done periodically throughout the event.

## Analyze

- Each risk is analyzed based on an assessment of likelihood and impact. Numerous activities are used to analyze risks and obtain a complete risk assessment to aid in developing risk management and control strategies.

# RISK MANAGEMENT

## Hazard Analysis

### Hazard Analysis

- Systematic process for identifying hazards and recommending corrective action.



### Preliminary Hazard Analysis

- Identify potential hazards and prioritize them according to the likelihood of an accident or injury severity of injury, illness and/or property damage.





# RISK MANAGEMENT

Phase 3...

# Accidents

# RISK MANAGEMENT

FINANCIAL ANALYSIS MITIGATION EDIT MAY  
PROCESS THREATS OFTEN POTENTIAL AVAILABLE MANAGING SECURITY  
PLAN IMPACT BUSINESS OCCURRENCE INSURANCE

Things can and DO go wrong...

