COMMAND AND CONTROL
HEALTH AND SAFETY

STUART WEISS, MD, CBCP
CEO, MEDPREP GROUP
MEDICAL DIRECTOR, NEW YORK ROAD RUNNERS
DEPUTY INCIDENT COMMANDER, TCS-NYC MARATHON

COURTNEY ARBOUR
MANAGER, EVENT MANAGEMENT & LOGISTICS
NEW YORK ROAD RUNNERS
Stuart B. Weiss, MD, CBCP
Medical Director
CEO, MedPrep Group
sweiss@MedPrepGroup.com
212-401-4000
It’s a beautiful November day...

- 50,000 runners are excitedly waiting
- The city streets are swept and dressed in their finest Sunday attire
- A million spectators are grabbing their signs and heading out
- The largest annual police deployment is in place
- The Race Command Center is abuzz with 130 people at their stations
Little did we know that the perfect tech storm was on the horizon
<table>
<thead>
<tr>
<th>ALERT LEVEL</th>
<th>EVENT CONDITIONS</th>
<th>RECOMMENDED ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTREME</td>
<td>EVENT CANCELLED/EXTREME AND DANGEROUS CONDITIONS</td>
<td>PARTICIPATION STOPPED/FOLLOW EVENT OFFICIAL INSTRUCTIONS</td>
</tr>
<tr>
<td>HIGH</td>
<td>POTENTIALLY DANGEROUS CONDITIONS</td>
<td>SLOW DOWN/OBSERVE COURSE CHANGES/FOLLOW OFFICIAL INSTRUCTIONS/CONSIDER STOPPING</td>
</tr>
<tr>
<td>MODERATE</td>
<td>LESS THAN IDEAL CONDITIONS</td>
<td>SLOW DOWN/BE PREPARED FOR WORSENING CONDITIONS</td>
</tr>
<tr>
<td>LOW</td>
<td>GOOD CONDITIONS</td>
<td>ENJOY THE EVENT/BE ALERT</td>
</tr>
</tbody>
</table>
The Outcome

- 50,000 runners had an excellent life changing experience as they crossed the finish line.
- We provided world-class medical care to the 5200 patients who sought care with no fatalities.
- Command staff had a few more gray hairs.
Previous learning opportunities
2014 TCS NYC Marathon

- High winds exceeded our safety thresholds
- All branding taken down
- All non-directional signage taken down and most directional as well
- All sponsor activations at start taken down
- All hospitality at start canceled
2012 ING NYC Marathon

- Due to Hurricane Sandy – Race Cancelled
2014 Brooklyn Half Marathon

- Unexpected gust of wind picks up 120 foot finish line medical tent and blows it off the boardwalk
- 10 hours later, 25,000 runners scheduled to start the largest Half Marathon in the US
Run to Breathe race (5K runners, 4 mile)

- Sudden lightening right on top of race resulting in immediate race evacuation
- Unannounced visit from President Barak Obama

Run for Parks (5K runners, 4 mile course)

- A warehouse truck bursts its brake line dumping brake fluid on the start
- Truck stuck right in front of the corrals
Other issues - general

- Vendor truck crashes through park benches
- Critical vendor is delayed or doesn’t show up
- Sprinklers come on during pre-race baggage drop-off
Other issues – animal related

- Loose horse running around course
- Wild rampaging cows
- Dog chasing leading youth runner at kid’s event
- Snakes
- Jellyfish
If practice makes perfect..

Then we are experts!
How do you organize and practice Command and Control

Health and Safety
What is Business Continuity?

- Business Continuity Management (BCM) is a management process that:
  - Identifies risk, threats and vulnerabilities that *could* impact an entity's continued operations
  - Provides a framework for building organizational resilience and the capability for an effective response.
- Internationally recognized framework
BCM: 6-Step Process

- Current State
- Threat & Risk Assessment
- Gap Analysis
- Risk Mitigation Strategies
- Continuity & Contingency Planning
- Training, Exercising, Reassessing
Continuity of Operations Plan

2015

Continuity of Operations Plan

Effective 10/24/15
Master Security Plan

TCS
NEW YORK CITY MARATHON
TATA CONSULTANCY SERVICES

2015
MASTER SECURITY PLAN
November 1, 2015

New York Road Runners
10/6/2015
# Pocket Guide

![Pocket Guide Image](image)

---

**TCS New York City Marathon**

**NYRR Run For Life**

---

## Emergency Pocket Guide

**November 1, 2015**

<table>
<thead>
<tr>
<th>Emergency Contacts</th>
<th>Staff Accountability</th>
<th>CPR and AED Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race Pause Procedure</td>
<td>Race Diversion</td>
<td>Medical/Water Station Locations</td>
</tr>
<tr>
<td>Unattended Package</td>
<td>Runner Down</td>
<td>Emergency Alert System (EAS)</td>
</tr>
<tr>
<td>Start Evacuation</td>
<td>Course Evacuation</td>
<td>Finish Evacuation</td>
</tr>
<tr>
<td>Race Timer Emerg. Procedures</td>
<td>Credentials</td>
<td>Radio Procedures</td>
</tr>
<tr>
<td>Bag Tags</td>
<td>Vehicle Placards</td>
<td>Family Reunion CPW Map</td>
</tr>
</tbody>
</table>
New York City Marathon

Total Positions: 130

COMMAND STRUCTURE ORG CHART REMOVED DUE TO CONFIDENTIAL INFORMATION
COMMAND STRUCTURE ORG CHART REMOVED DUE TO CONFIDENTIAL INFORMATION
Weekly Races

- Incident Commander
- Event Manager
- Medical Director
Race Command and Control

- Incident Management Structure
- Risk Assessment
- Planning
- Training
- Exercising
INCIDENT COMMAND SYSTEM (ICS)

INCIDENT COMMANDER AND COMMAND STAFF FUNCTIONS
Incident Commander (IC)

- The Incident Commander is responsible for all ICS management functions until delegated.
Top priorities for the IC

- People (life safety)
- Facilities and Brand (reputation)
- Communication (internal and external messages)
- Mission Critical Activities at Risk
- Technology (IT, scoring, Radio, etc)
Expanding the Organization

- Incident Command
  - Legal Officer
  - Public Information Officer
  - Safety Officer
  - Liaison Officer

- Operations Section
- Planning Section
- Logistics Section
- Finance/Admin Section
- Security & Intelligence Section (if needed)
Senior Executives

Strategic

Incident Commander

Tactical

Incident Management Team

Operations
- Backbone functions that support event

Logistics
- Care of people in Race Command
- Radio Systems
- Supply chain

Finance
- Contracts
- Insurance

Planning
- Planning
- Subject matter experts

Policy & oversight
- Approve high cost tasks
- Interface to key stakeholders

Legal
- PIO
- Safety Liaison
Race Command and Control

- Incident Management Structure
- Risk Assessment
- Planning
- Training
- Exercising
Risks

- Terrain
  - Mountainous
  - Hilly
  - Flat
  - Uneven roadway
  - Construction
Risks

- Terrain
- Weather
  - Very Hot
  - Very Cold
  - Tornados
  - Water Spouts
  - Earthquakes
# Wet Bulb Globe Temperature

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>86 Degrees</td>
<td>Consider shutting down activities</td>
</tr>
<tr>
<td>84 Degrees</td>
<td>Slow folks down, implement mitigation strategies</td>
</tr>
<tr>
<td>82 Degrees</td>
<td>Assess situation, think about heat mitigation strategies</td>
</tr>
</tbody>
</table>
Risks

- Terrain
- Weather

- Mitigation strategies
  - Early start
  - Course cuts
  - Misting Stations
  - A/C busses, ambulances, vehicles, building
  - Fans in medical tent
  - Event Alert System (EAS) Flags to Yellow
  - Participant communications
Risks

- Terrain
- Weather
- Altitude
Risks

- Terrain
- Weather
- Altitude
- Dangerous Wildlife
Risks

- Terrain
- Weather
- Altitude
- Dangerous Wildlife

Community Characteristics

- Size of EMS System, hospitals
- Transport time to hospital
- Closest Trauma Center and Cardiac Catheterization Lab
Grandma EMS rule for small towns
Risks

- Terrain
- Weather
- Altitude
- Dangerous Wildlife
- Community Characteristics

Health and Safety Risk Assessment

Mitigation and Response Plans
Race Command and Control

- Incident Management Structure
- Risk Assessment
- Planning
- Training
- Exercising
Essential Emergency Operations Plans

- Severe Weather
  - Extreme Heat
  - Extreme Cold with frostbite
  - Lightning
  - High Winds
Monitor storm closely
Consider cancellation
Take immediate action
Monitor storm closely
Essential Emergency Operations Plans

- Severe Weather
- High Wind event

Tornado Forming in Spring Hill, Tennessee [HD]
# Event Alert System

<table>
<thead>
<tr>
<th>ALERT LEVEL</th>
<th>EVENT CONDITIONS</th>
<th>RECOMMENDED ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTREME</td>
<td>Event Cancelled/ Extreme and Dangerous Conditions</td>
<td>Participation Stopped / Follow Official Instructions</td>
</tr>
<tr>
<td>HIGH</td>
<td>Potentially Dangerous conditions</td>
<td>Slow down / Observe course changes / Follow official instructions / Consider stopping</td>
</tr>
<tr>
<td>MODERATE</td>
<td>Less Than Ideal Conditions</td>
<td>Slow down / Be prepared for worsening conditions</td>
</tr>
<tr>
<td>LOW</td>
<td>Good Conditions</td>
<td>Enjoy the event / Be alert / Listen to your body</td>
</tr>
</tbody>
</table>
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Infrastructure Failure or Collapse
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills (for Triathlons, Mud runs)
  - Surface rescue
  - Submerged victim rescue
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills
- Course Sweep Procedure
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills
- Course Sweep Procedure
- Lost Child Procedure
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills
- Course Sweep Procedure
- Lost Child Procedure
- Non-controlled Fire
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills
- Course Sweep Procedure
- Lost Child Procedure

- Non-controlled Fire
- Safe Site Driving Rules
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills
- Course Sweep Procedure
- Lost Child Procedure
- Non-controlled Fire
- Safe Site Driving Rules
- Site Evacuation
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills
- Course Sweep Procedure
- Lost Child Procedure

- Non-controlled Fire
- Safe Site Driving Rules
- Site Evacuation
- Security Threat
Essential Emergency Operations Plans

- Severe Weather
- Death or Severe Injury
- Major Traffic Incident
- Obstacle Failure or Collapse
- Helicopter Landing Zones (Helispots)
- In-water rescue drills
- Course Sweep Procedure
- Lost Child Procedure

- Non-controlled Fire
- Safe Site Driving Rules
- Site Evacuation
- Security Threat
- Emergency Communications
Race Command and Control

- Incident Management Structure
- Risk Assessment
- Planning
- Training
- Exercising
Essential Training for your Staff

- Incident Command System (ICS) training
  - FEMA IS-100, IS-200, IS-700

- TableTop Exercises
  - With senior Executives
  - With Operations Staff
  - With Community Agencies
    - Police, Fire, EMS
Exercise Planning

“The time to meet someone for the first time is NOT during a crisis”
Exercise Planning

- Invitation list
- Create scenarios based on risk assessment
  - Low hanging fruit
  - Areas that need practice
  - Thorny areas that need discussion
- Realistic story, don’t overwhelm folks
Exercise Planning

- Start with tabletop exercises
- Move to functional exercises
- If possible, full scale exercise with agency partners
Action Planning Meeting Exercise

It’s a beautiful early spring day in Yourtown, MD. The temperature should be in the high 50’s and overcast.

The Yourtown Half has been raising money for halitosis research for 5 years. There are 8,500 runners registered for this slightly hilly point to point course.

This is the biggest event in the town each year, Everyone is out to celebrate!
Procter and Gamble and its toothpaste brand Crest® announce its multiyear sponsorship of the Yourtown Halitosis Half Marathon Race.

Endurance Sportswire (ESW) is the only press release distribution service specifically for the running, cycling and triathlon industries, and your best source for endurance sports industry news, jobs and announcements.

Interested in getting your press release included on ESW? More info here. Like to read ESW, but want to receive it less often? Click here to change your frequency options.

SPONSORSHIPS

Procter and Gamble and its toothpaste brand Crest® announce its multiyear sponsorship of the Yourtown Halitosis Half Marathon Race.

Procter and Gamble – Procter and Gamble, producer of the Crest® family of oral hygiene products announces a 5 year deal to become the title sponsor of the Yourtown Halitosis Half Marathon Race through 2021.
At 9:00AM, the horn goes off and 8,000 runners enter the course. By 9:20, the start corrals have cleared and the crew is working on the wrap on the finish structure to better secure it.
At 9:20 AM, the Breakfast Bonanza catering truck backs into the finishline structure knocking it over.

The staff member working on the structure is knocked to the ground and injured.

The structure falls into the 10 x 30 foot “CREST” hospitality tent trapping three people.

Eggs and bacon are strewn everywhere.

The finish area is a mess!
CREST® Halitosis Half

- The media pre-staged at the finish are now all interrupting their event coverage to capture this breaking news
- First elite male finishers expected in 45 minutes
CREST® Halitosis Half Site Layout

Race Festival Area (Flagstone Park)
- Registration Tent
- Sponsor activations
- Entertainment & Awards Stage

NOT TO SCALE
Top priorities for the IC

- People (life safety)
- Facilities and Brand (reputation)
- Communication (internal and external messages)
- Mission Critical Activities at Risk
- Technology (IT, scoring, Radio, etc)
Action Planning Meeting

- Top Priorities in each area (given the time you have)
  - High level prioritized consistent with policies
  - Answers: What do we expect to achieve

- Goals
  - Short term (one operational period)
  - Medium term (3-4 operational periods)
  - Long term (days)

- Length of Operational Period
  - When do we need to meet again?
CREST® Halitosis Half Site Layout

Race Festival Area (Flagstone Park)
- Registration Tent
- Sponsor activations
- Entertainment & Awards Stage

NOT TO SCALE

Runner Flow
Barricades
Equipment Boneyard

Volunteer/Staff 10x30

Finish Line
Pre-planning and exercising can help you deal with adversity during your event

Utilizing ICS can help you work together with your community response agencies

Exercises are great ways to create relationships with community partners
Plan Review and Discussion

- Booth # 207
- Race plan review
- Plan audits
- Race Audits

- Group Purchasing opportunity
Thank You

Stuart B. Weiss, MD, CBCP
Medical Director
CEO, MedPrep Group
sweiss@MedPrepGroup.com
212-401-4000

Courtney Arbour
Manager, Event Logistics
New York Road Runners
carbour@nyrr.org
212-423-2279