



OFFICE OF
PREPAREDNESS
AND EMERGENCY
MANAGEMENT

119th Boston Marathon Health & Medical Deployment

Public Health Council

May 13, 2015



The historic course starts on Main Street in the rural New England town of Hopkinton and follows Route 125 through Ashland, Framingham, Natick, and Wellesley to where Route 125 joins Route 76. It continues along Route 76 through Newton Lower Falls, turning right at the fire station onto Commonwealth Avenue, which is Route 30. It follows Commonwealth through the Newton Hills, bearing right at the reservoir onto Chestnut Hill Avenue to Cleveland Circle. The route then turns left onto Beacon Street continuing through Kramers Square, and under Massachusetts Avenue. The course turns right onto Harvard Street (NOTS) against normal traffic flow then left onto Baylston Street, finishing near the John Hancock Tower in City Square.

NOTE: All rights reserved. No portion of the map may be reproduced without permission of the Boston Athletic Association, Boston Marathon, B.A.A. Runners™, and the U.S.A. Triathlon League. All trademarks are the property of their respective owners. Use of these trademarks without written permission from the Boston Athletic Association is prohibited.



BOSTON MARATHON Official JetBlue Course Map

KEY

- Mile Marker
- MRTA Subway Station
- Shirlington-Framingham line
- MRTA Commuter Rail Station

Gatorade and Poland Spring are available to runners at every mile mark along the course and at the finish line.

ENDURANCE **Poland Spring**
100% Natural Spring Water



Medical Assumptions

- 26.2 mile course
 - 30,000+ runners (registered + bandits)
 - 500,000 - 1,000,000 spectators
- Expect 1,000-2,000 runners & spectators will require medical care
 - Dehydration
 - Blisters
 - Exercise-related heat illness –cramping, heat syncope, exhaustion, heat stroke
 - Over hydration
 - Debilitating Muscle Spasms
 - MI
 - Stress Fractures
 - Intoxication



Marathon Medical Resources

- Medical & support services from Hopkinton to Boston
- 26 medical tents along course
 - 11 enhanced tents on course with ambulance support
 - 16 Red Cross first aid stations
 - Tents A & B at finish line
- 49 hydration stations
- MCI trailers positioned mid-course
- Medical sweeps buses connected by radio communications
- 5 ambulance strike teams staged along route



MDPH & Boston Marathon

- Coordination of public health & medical operations
 - Situational awareness – Web EOC
 - Coordinate resource requests
 - Staff deployed & ready to respond if needed
- Annual Large Event/Mass Casualty Drill
 - Opportunity to train & drill staff
 - Opportunity to refine protocols
 - Implement improvements from previous AAR



Improvement: Increased Staffing

- 49+ staff from across DPH & partner agencies deployed
 - BID, BEH, FHN, Commissioner's Office, Communications, OPEM, Worcester Public Health
- Multi-Agency Coordination Center at MEMA
 - Unified Coordination Group
 - ESF-8 (health & medical services)
 - OPEM
 - OEMS
 - OCME
- Start & Finish lines
- Medical Tents 5 - 26
- Newton Wellesley Hospital
- Boston Medical Intelligence Center
- Boston Athletic Association Operations Center

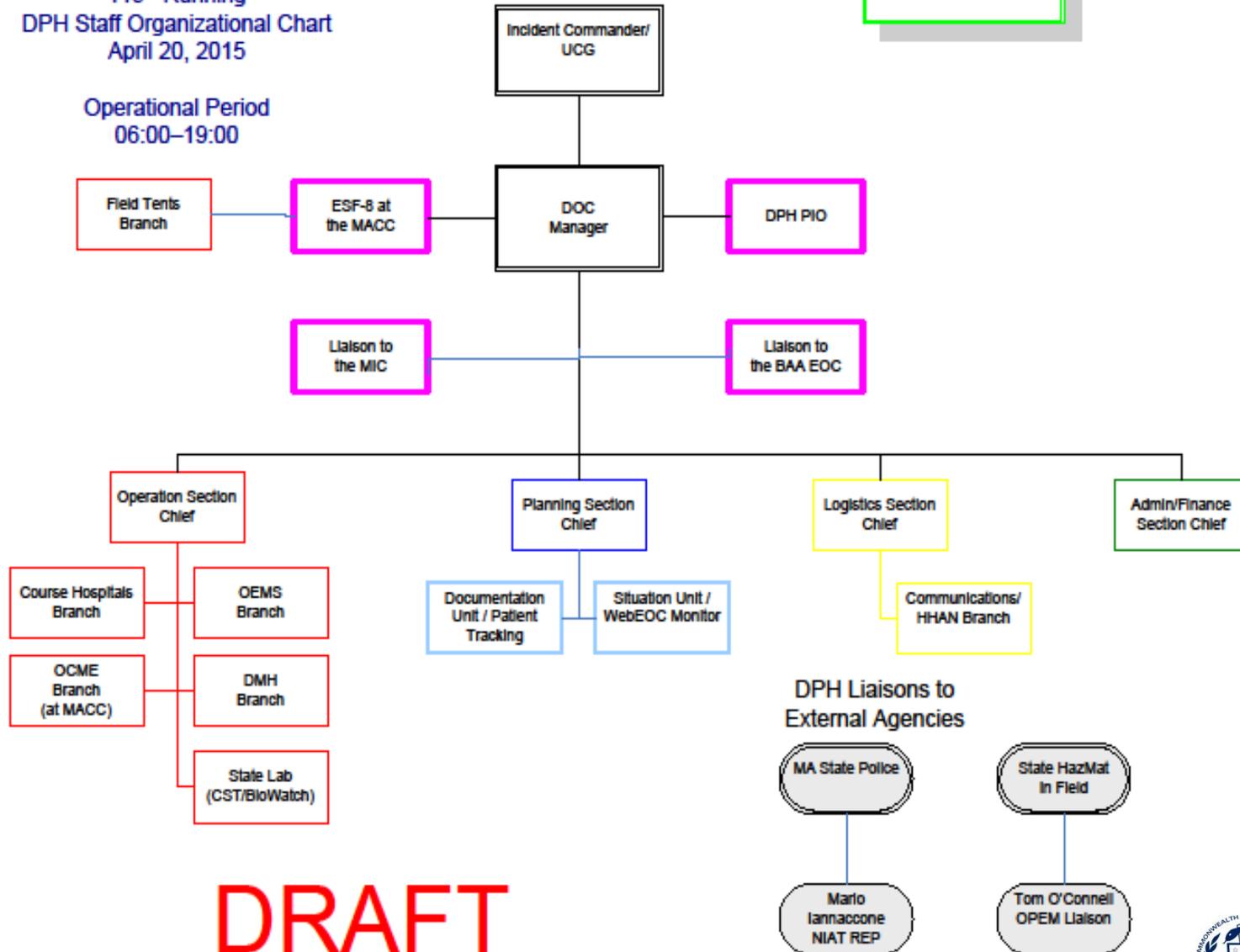


The Boston Marathon

119th Running
DPH Staff Organizational Chart
April 20, 2015

Operational Period
06:00–19:00

Commissioner
Bharel



DRAFT



OFFICE OF
PREPAREDNESS
AND EMERGENCY
MANAGEMENT

Improvement: Designated Level of Care for Tents

- **Level I**

- 4 medical tents have IV capability & an ALS ambulance staged at tent
- OEMS waivers allow ambulances to transport non-acute patients to these tents

- **Level II**

- 7 tents have IV Capability, but no ALS ambulance staged at tent
- Ambulances are not authorized transport patients to these tents

- **Level III**

- 15 tents provide basic first aid but have no IV capability or ambulance waivers



Distribution of Medical Tents

| | | |
|---------|-----------------|-----------|
| Tent 5 | Natick | Level I |
| Tent 6 | Wellesley | Level III |
| Tent 7 | Wellesley | Level III |
| Tent 8 | Wellesley | Level I |
| Tent 9 | Wellesley | Level III |
| Tent 10 | Newton | Level III |
| Tent 11 | Newton | Level II |
| Tent 12 | Newton | Level III |
| Tent 13 | Newton | Level I |
| Tent 14 | Newton | Level III |
| Tent 15 | Newton | Level I |
| Tent 16 | Newton | Level III |
| Tent 17 | Newton | Level II |
| Tent 18 | Boston/Brighton | Level II |
| Tent 19 | Boston/Brighton | Level II |
| Tent 20 | Boston/Brighton | Level III |
| Tent 21 | Brookline | Level III |
| Tent 22 | Brookline | Level II |
| Tent 23 | Brookline | Level III |
| Tent 24 | Brookline | Level II |
| Tent 25 | Boston | Level III |
| Tent 26 | Boston | Level II |





Tent 26



OFFICE OF
PREPAREDNESS
AND EMERGENCY
MANAGEMENT

Improvement: Better Information on Runners Seeking Medical Care

- Multiple tracking systems used
 - No single site to collect numbers
 - Different definitions of medical encounters
 - Not all systems tracked EMS transports
- Created WebEOC board to track real-time & cumulative numbers
 - MDPH staff in tents 5-26
 - Real time information updated every 30 minutes
 - Centralized tracking of EMS transports through MACC
 - Allowed comparison across tracking systems & within tents
- This was a quiet year
 - 419 – 610 medical encounters in route tents (still need to refine definition)
 - 30 EMS transports



Improvement: MCI Patient Tracking Protocol

- Centralizes patient tracking through MDPH in event of an MCI
- Collaboration between DPH & ARC for 2nd year
- Hospital receiving MCI patient provides identifying information to DPH DOC
 1. First Name
 2. Last Name
 3. Gender
 4. Date of Birth
 5. Nationality
 6. Hospital
 7. Hospital Point of Contact
- ARC uses its Patient Connection system to track information & match patients with those looking for them



Next Steps

- After Action
 - Review information provided by staff
 - Review any after action review of other agencies
 - Update operations plan as needed
- Work with BPHC & BAA on medical encounter definition
- Work with Red Cross to formalize MCI patient tracking

