

**EMS CONTINUITY OF
OPERATIONS PLANNING (COOP)**

Arthur H. Yancey II, MD, MPH
Section of Prehospital and Disaster Medicine
Department of Emergency Medicine
Emory University School of Medicine
Atlanta, Georgia

**EMS COOP
Conflicts of Interest**

- NONE!

**EMS COOP
Objectives**

- To convey the rationale for COOP
- To delineate the elements of COOP
- To discuss each element in context of EMS
- To reference Web sites on COOP geared to EMS

EMS COOP

- Public Health
 - One population (EMS care givers) ensuring continuity of care delivery to another population
 - Both populations at same risk, simultaneously
- Crises
 - Contagious disease (pandemic, bioterrorism)
 - Weather event (hurricane, tornado, flood, earthquake)
 - Multiple/wide-spread explosions (intentional, non-intentional)

EMS COOP

Homeland Security Council, *National Strategy for Pandemic Influenza: Implementation Plan* Program Elements

• Planning	• Human Capital
• Essential Functions	• Training (on plan)
• Authority Delegation	• Devolution
• Succession Planning	• Reconstitution
• Alternate Physical Facilities	• Logistics/Supplies (suggested)
• Effective Communications	• Financial Continuity (suggested)
• Record keeping	

EMS COOP
Program Elements

- Planning (objective)
 - “...provide for the continued (time span) performance of an organization’s essential functions (mission) under all circumstances (scope).”
 - “...to minimize the health, social, and economic impact of a pandemic on the United States.”

EMS COOP
Program Elements

- Essential Functions
 - Provide vital service
 - Exercise civil authority
 - Maintain safety/wellbeing of populace
 - Sustain economic base during crisis

EMS COOP
Program Elements

- Specific Essential Functions
 - Maintain 9-1-1 integrity & alternatives for the public to access EMS
 - Maintain a system to determine & triage callers' problems → designate/dispatch appropriate medical response (on-line service, alternate on-site service response, ambulance)
 - Maintain working order of vehicles/equipment
 - Maintain workforce to respond to calls

EMS COOP
Program Elements

- Specific Essential Functions (continued)
 - Enabling legislation for EMS to function effectively (i.e., reimbursement for care at point-of-patient contact)
 - Financial support to maintain system (i.e., suspension of response time fines, emergency govt. subsidy)
 - Medical direction & oversight (i.e., individual patient on-line determination & pronouncement of death in the field, crisis standards of care in surge: no invasive airway device use/assisted ventilations)
 - Communications systems (i.e., workforce expertise availability, reconfiguration for combining mult. Service communications resources)

EMS COOP
Program Elements

- Specific Essential Functions (continued)
 - Public Education
 - public interactive on-line web-based tool for diagnosing ILI and determining indication for hospital evaluation & care
 - relationships with media for scripted messages on home precautions, care instructions, & altered standards of care education

EMS COOP
Program Elements

- Delegation of Authority
 - Who has what authority for what functions?
 - Span of that authority over what personnel
 - NIMS & ICS compliant
- Succession Planning
 - Personnel replacement at each level of authority and function
 - Level-appropriate leadership training of mid- & upper-level supervisory staff

EMS COOP
Program Elements

- Succession Planning (continued)
 - Appropriately credentialed medical director replacement personnel (i.e., EMS fellow, ED colleague)
 - Training in standard operating procedure alterations (?on-scene/transport nebulizations in respiratory Flu pandemic, change in PPE's in nuclear fallout from dirty bomb)
 - Scope of practice adjustments (?invasive airway device use & artificial ventilation in pandemic, cardiac arrest in patient with known heavy radiation exposure)

EMS COOP
Program Elements

- Alternate Physical Facilities
 - Investigate replacement facilities
 - That could best replace the operations of the evacuated one(s) (assuming physical damage: i.e., bomb, earthquake, tornado, flood)
 - That allow splitting staff to serve social distancing (may decrease workforce attrition from contagious infection: i.e., Flu, bioterrorism)

EMS COOP
Program Elements

- Alternate Physical Facilities (continued)
 - EMS-specific facility types
 - 9-1-1/Emergency medical dispatch centers
 - Administrative/record storage offices
 - Ambulance garage/repair facilities
 - Crew & logistics shift change bays/areas
 - Hospital ambulance bays/intake triage areas

EMS COOP
Program Elements

- Effective Communications
 - Objectives
 - Minimize (social contact) risk of contagious spread to asymptomatic employees
 - Isolate symptomatic employees from workplace while maintaining communication with them
 - Identification of critical systems that prevent person-to-person contact (i.e., cell, radio, satellite phone, walkie-talkie)
 - Capacities (?cell phone & radio traffic)
 - Availabilities (? Sat phone)
 - Redundancies (?cell-radio)

EMS COOP
Program Elements

- Effective Communications (continued) Nodes
 - Into 9-1-1/EMD → call taking
 - Out of 9-1-1/EMD → dispatching
 - Responder-to-responder coordination on-scene
 - Into medical control (care coordination)
 - Into destination facility (report of patient care)
 - Out to special populations (i.e., dialysis)
 - Warning/education to the public (public relations)

EMS COOP
Program Elements

- Record Keeping (electronic & paper)
 - Objective
 - Protect & ensure integrity, security, & access
 - Mission
 - Ensure system (electronic) integrity
 - EMS record systems
 - 9-1-1/EMD/CAD
 - Patient identification & care
 - Billing
 - Compliance (i.e., HIPAA, Medicare/Medicaid)

EMS COOP
Program Elements

- Human Capital (workforce protection)
 - Primary threat to COOP success!!!
 - Interventions
 - Education/training
 - nature of threat
 - PPE use
 - Infection control (hand-washing, sneezing/coughing prevention)
 - Enforcement!!!
 - Vaccinations/administration of anti-viral medication
 - Emotional/social support of personnel

EMS COOP
Program Elements

- Absenteeism (40% for 2 weeks at Flu peak!!!)
 - Addressing anticipated personnel absences
 - Modify state certification & licensing requirements to allow out-of-state providers (Flu knows no borders!!!)
 - Modify state regulations to broaden relevant providers' scope of practice standards
 - Reassign relevant providers from non-emergency positions to EMS work
 - Create curriculum/train non-medical support workers
 - Adequate provisions for provider families
 - Design systems for advance registration/credentialing of clinicians to augment workforce

EMS COOP
Program Elements

- Absenteeism (continued)
 - Prospective absentee estimates per free on-line CDC tool www.cdc.gov/flu/tools/fluworkloss/
- Training
 - Essential to test, train, and exercise plans (i.e., sustainable social distancing techniques in epidemic/pandemics)
- Devolution
 - Transfer of authority/responsibility of essential function(s) from primary operational staff to that of another department/organization for prolonged time

EMS COOP
Program Elements

- Reconstitution
 - Process by which resumption of normal operations takes place
- Logistics & Supplies (suggested)
 - Arrangements to protect/ensure supply chain
 - Threat: just-in-time inventory practices → immediate vulnerability to shortages
 - Solution: stockpile critical materiel as individual service vs. as regional cartel (with vendor managed inventory)

EMS COOP
Program Elements

- Financial Continuity (suggested)
 - Strategies
 - Federal Government: Stafford Act (must involve other sources)
 - Mutual aid agreements/contracts for emergency reimbursements
 - Patient billing hinges on service documentation capabilities (not likely in crises)
 - Compensatory legislative action

EMS COOP
Web Site References

- Homeland Security Council. ONLINE. 2006. *National Strategy for Pandemic Influenza: Implementation Plan*. The White House. Available: <http://www.pandemicflu.gov/plan/federal/index.html> [20 March 2007]
- EMS Guidelines for Pandemic Influenza – NHTSA www.nhtsa.gov/people/injury/ems.../Task61136Web/PDFs/AppN.pdf

EMS COOP
Web Site References (cont.)

- Public Health Department – Santa Barbara County Continuity of Operations Plan (COOP) template www.countyofsb.org >...>Emergency Preparedness Program
- Continuity of Operations (COOP) for EMS Agencies www.nysvara.org/pulseCheck/2011/materials/Reissman_COOP_2011.pdf
