

EMERGENCY OPERATIONS CENTRES AND DISASTER PREPAREDNESS IN KENYA

Daniel Wako

CDC-Kenya

17/11/2015

Presentation Outline

- Definition of an Emergency Operations Centre (EOC)
- Why have an EOC?
- Challenges faced in an emergency
- Functions of an EOC
- Basic structure of an EOC
- An effective EOC's basic requirements
- 3 Events with EOC's supporting IPC actions
- Lessons Learnt

Emergency Operations Centre

Emergency-A serious unexpected and potentially dangerous situation requiring immediate action



Operation-An active process; a discharge of a function



Centre –The point from which an activity or process is directed



The **Emergency Operations Center (EOC)** is an essential facility for the coordination of emergency related preparedness and response activities to ensure that all tasks are accomplished, minimizing duplication by ensuring that:

1. Decision and policy makers located together,
2. Personnel and resources can be used efficiently..



Challenges in emergencies

1. Poor communication/confusion
2. Terminology problems.
3. Lack of an orderly, systematic planning process.
4. No common, flexible, predesigned management structure.
5. No predefined methods to integrate interagency requirements into the management structure and planning process.
6. Lack of accountability, including unclear chain of command and supervision.

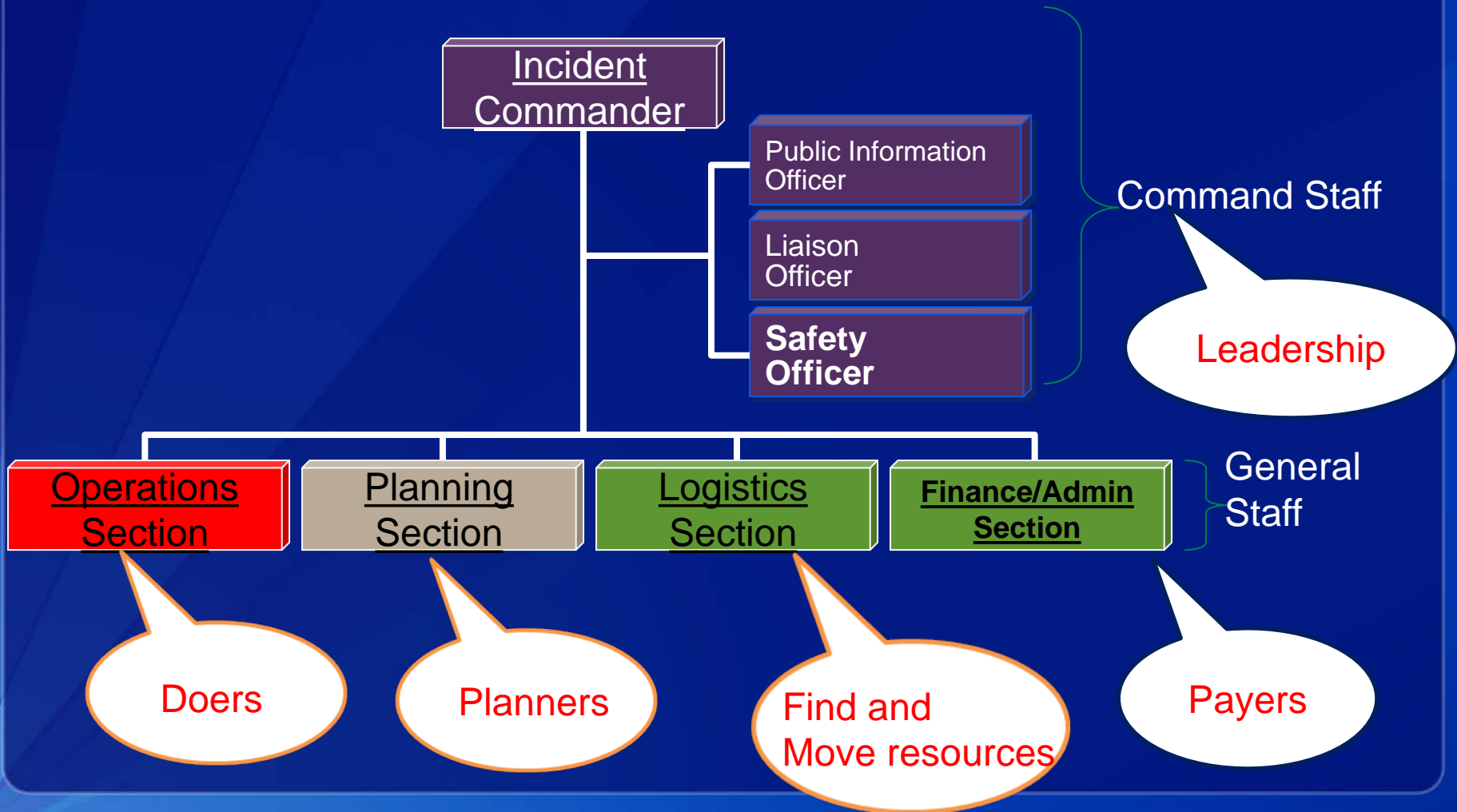
Why have an EOC?

- Events requiring response are on the increase
- There is significant cross border travel and the globalization of trade.
- There is an exponential increase in the interdependence of people, institutions, societies and nations as a product of industrialization;
- Urbanization, particularly urban congestion;
- Most emergency responses are **multi-sectional**, with the health component providing very specific functions related to the post-rescue triage, stabilization, transportation and treatment of casualties.

The Functions of an EOC

- The main function of an EOC is to coordinate incident information & resources for management of the incident.
- The EOC must enhance
 - 1) Decision making,
 - 2) Communication,
 - 3) Collaboration, and
 - 4) Coordination.

Basic EOC Structure



An Effective EOC MUST :

1. Be based on an all-hazards approach
2. Be Modular, scalable or adaptable organizational structures
3. Support joint engagement of multiple jurisdictions/organizations in management decisions
4. Have clear lines of accountability
5. Clearly define roles and responsibilities, consistent with normal roles and are supported by training
6. Clearly articulate procedures for activation, escalation, and demobilization of emergency capacities
7. Have common functional groupings using consistent terminology
8. Be integrated with stakeholder agencies
9. Have mechanisms for the involvement of all stakeholders and users of the EOC in its design, operational planning and evaluation.
10. Have provisions of the capacity to manage public communication opportunities as part of the emergency response

EOC Response Supporting Infection Prevention and Control

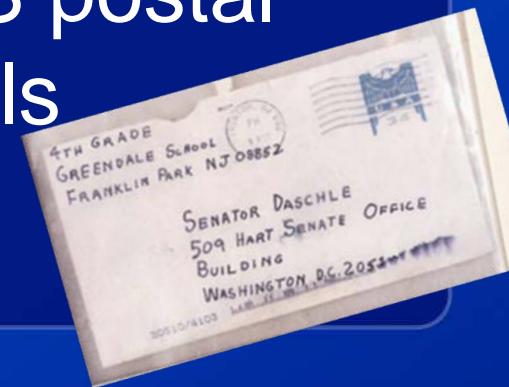
- I. Anthrax letters- 2001 (USA)
- II. Ebola Response- 2014 (Nigeria)
- III. Ebola preparedness- 2015 (Kenya)



Event I: The Anthrax Letters (2001)



- **Event type:** Terrorist Attack
- **Specific Event:** Anthrax Letters
- **Year :**2001
- **Location:** USA
- **Background:** Letters containing Anthrax spores were sent through the US postal service to targeted public officials



The Anthrax Attack

BREAKING NEWS



Police officers gather outside the offices Friday as they investigate a powdery substance sent to a representative.

Six D.C. postal workers treated for suspected anthrax

October 24, 2001 Posted: 12:16 p.m. EDT (10/24/01)



James Manley, press secretary for Sen. Edward Kennedy, arrives at work on Capitol Hill at the Russell Senate office building, which reopened Wednesday after being shut down for a search for anthrax contamination.

Anthrax found at offsite White House mail facility

October 23, 2001 Posted: 10:08 PM EDT (10/23/01)



"I don't have anthrax," President Bush said Tuesday.

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he said.

Anthrax confirmed in elderly Connecticut patient

November 21, 2001 Posted: 7:08 AM EST (1208 GMT)



Emergency workers stand outside the ill woman's house in Oxford, Connecticut.

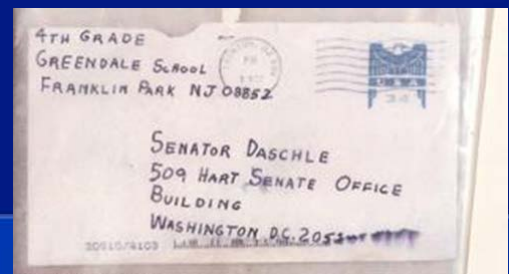
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OXFORD, Connecticut (CNN) -- A 94-year-old woman who lives alone in a small Connecticut town is in critical condition with inhalation anthrax, according to Gov. John Rowland and a spokeswoman at the hospital where the woman is being treated.

The woman had limited activity, didn't travel much and had no apparent connection with U.S. Postal Service or government facilities, which are tied to most of the previous anthrax cases, Rowland said at a news conference Tuesday. He described the anthrax case as an "anomaly."

Anthrax confirmed in NYC

- Ashcroft to public: Do not open suspicious mail; instead, leave area and call authorities
- NBC employee tests positive for skin anthrax infection; expected to recover
- FBI says it has no evidence of connection between New York and Florida cases
- Health secretary: 'No proof whatsoever' of link to terrorism
- Anthrax found in Kazakhstan lab in routine U.S. Defense Department inspection



The Anthrax Attack Cases

- 22 cases
 - 11 cutaneous
 - 11 inhalational; 5 deaths
- Cutaneous case
 - 7 month-old boy
 - Visited ABC newsroom
 - Open sore on arm
 - Anthrax positive



The Anthrax EOC Response

- CDC EOC is activated for the 1st time to respond to the anthrax letters in order to:
 1. **Coordinate** the response –
 1. with Lab/s to test and trace samples through the mail system
 2. Epi's to begin investigation/s on the case
 2. Provide **workforce support**-
 1. “Teams” with various skill sets identified for response
 - **Coverage:**
 - –24/7 coverage in person or “on call” for about 1 month
 3. **Collaborate**-The incident was a health and law enforcement issue so there was a need for Medical sector to collaborate with the forensic law enforcement sector
 4. **Decision making**- Giving guidance and public health messages to the media and public in a quick clear and concise manner
 5. **Logistics support:** the EOC supported the movement of personnel and supplies in the field

Event II :

Ebola in Nigeria (2014)



- **Event Type:** Disease Outbreak
- **Incident details:** Ebola Outbreak
- **Year:** 2014
- **Region :** West Africa
- **Background:** A confirmed outbreak of Ebola Virus Disease was declared in Nigeria on 22nd July 2014.
- The index case was an American Liberian travelling from Liberia to Nigeria and who arrived ill on 20th July 2014 the patient died on 25th July 2014

Nigeria's Cases from Ebola

- 19 laboratory confirmed cases
- 7 deaths
- 12 survived
- 894 contacts identified and follow up done on all 894 of them with the last 3 exiting follow up on October 2nd 2014

Nigeria's Response to Ebola

Government took the following actions:

- Established an Emergency Operation Centre (EOC) in Lagos
- A national state of emergency was declared by President
- An Ebola specific multi-sectoral intervention work plan developed
- A budget of N1.9 billion approved and released immediately to the MOH
 - Lagos State where the index case occurred got N200 million
- Political commitment is backed by funding. It engenders citizens' confidence that govt is out to protect their lives, removes suspicion and creates compliance with directives.

Nigeria's response cont.

DATA MANAGEMENT

- Use of **electronic data systems** (including mobile phone technology) enabled near real-time follow up of contacts and prompt detection of those with symptoms
- Incorporating **active rumor surveillance** and an alert investigation system
- Data management and use of data to monitor response and drive **decisions in the EOC**



Real-time contact tracing at the EOC, 11/09/2014

LOGISTICAL SUPPORT

Containment of EVD required massive logistic support. Support impacts on other aspects:

- **PPE**
- **Medical supplies**
- Vehicles for contact tracing
- Tools for thermal screening
- Reagents and supplies for Laboratory diagnosis etc.
- **Mobilizing a trained workforce**

Event III: Kenya-Ebola Preparedness



- **Event type:** Disease Outbreak Preparedness
- **Specific Incident:** Ebola Preparedness
- **Year :**2014-2015
- **Location:** Kenya
- **Background:** As the outbreak was going on in West Africa Kenya took preparedness measures to enhance its ability to detect, prevent and respond to a case locally

Preparedness Actions Taken

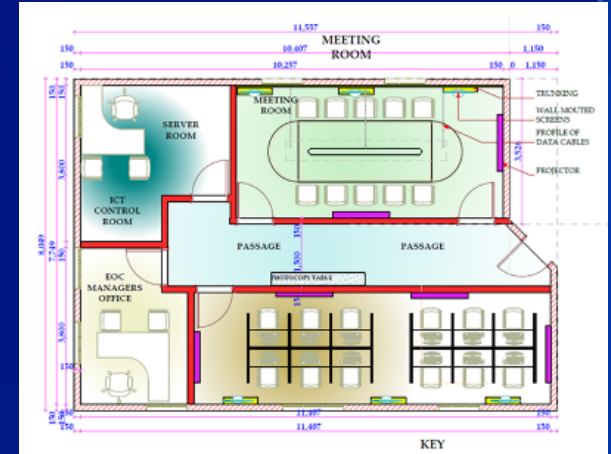
- An Ebola Task Force (ETF) was established coordinate the partners preparedness activities
- 30,000+ PPE kits were distributed to major towns
- Cancellation of some of the major flight routes to/from W.Africa
- VHF control guidelines developed with partners
- Temporary Isolation ward set up at Kenyatta National Hospital that was equipped with Isolation tent
- Staff in major facilities trained in PPE use and disposal
- Thermal scanners were purchased and stationed at all the major Points of Entry (POE) and major hospitals
- Ebola Hotlines were established for the General Public
- Posters and flyers were developed and sent out to the public
- EOC space identified and currently being worked on

Preparedness Challenges faced

- There was a lot of fear by the general public and staff
- Information about the suspected cases was coming from various sources (hospitals, airports ,hotels)
- Demand for PPE's was high, leading to stock outs by some suppliers
- Tracing some of the pre-position PPE stocks was a challenge
- Knowledge of the state of the of the pre-positioned PPE stocks was unknown
- Logistical challenges of moving some of the items to some areas of the country
- A large majority of the suspect cases were after hours and weekends which delayed some of the result turn around times

Kenya's Planned EOC (2015)

- Located in former National Aids Control Programme (Nascop) building on the Kenyatta National Hospital (KNH) compound next to Disease Surveillance Response Unit (DSRU)
- Planned to be operational in early 2016
- The facility is currently being equipped with the necessary hardware and software
- Standard Operation Procedures (SOP's) are currently being developed
- Workforce needs to be identified and trained



Lessons Learnt

- An EOC is an effective tool for a coordinated and rapid response to an emergency requiring a multi-sectoral, multi-agency response. EOC's in general facilitate:
 1. **Coordination** to ensure that:
 - Resources (time & money) can be sourced quickly and are not wasted
 - All 3 events required communication between various stakeholders
 2. **Data Management:**
 - Changes in the incident can be shared with all concerned for appropriate action
 - Tracking of supplies and patient/s should happen real time to be effective
 3. **Collaboration:**
 - In all 3 events the MoH had to work with different agencies from law enforcement, foreign affairs, tourism etc
 4. **Decision Making:**
 - The EOC's in US and Nigeria were able to make decisions with the data they gathered quickly
 - Decisions need to be made quickly using accurate information

Thank you

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Center for Global Health

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