

# Global Disease Detection – Beyond Public Health

CAPT Scott F. Dowell, MD MPH

Director, Division of Global Disease Detection and Emergency Response



Center for Global Health

Division of Global Disease Detection and Emergency Response (GDDER)



# Two Ebola Outbreaks

## ❑ Gulu, Uganda 2000

- Ebola subtype Sudan
- Recognition 2 months after first transmission
  - Amplification in hospitals, funerals
- 425 cases, 224 deaths

## ❑ Kibaale, Uganda, 2012

- Ebola subtype Sudan
- Recognition 3 weeks after first transmission
  - Early local investigation
  - Laboratory confirmation in Uganda
  - Infection control protocols in place
- 24 cases, 17 deaths

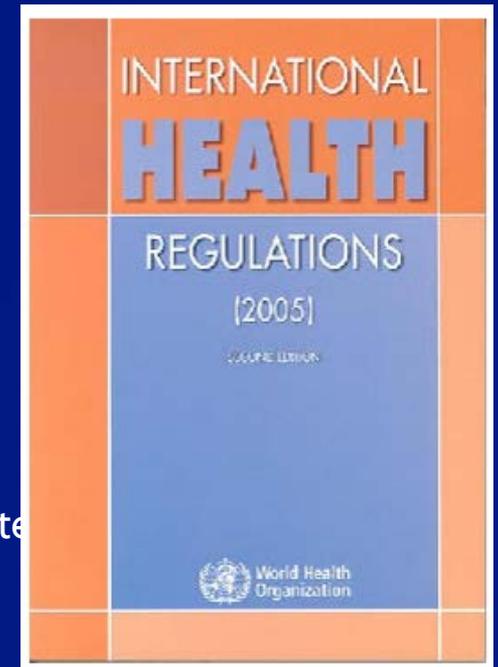
# International Health Regulations (2005)

## □ First significant revision since 1969

- Require disease detection and confirmation
- 194 member states signed on
- Most lack capacity to comply

## □ Inter-agency guidance and principles

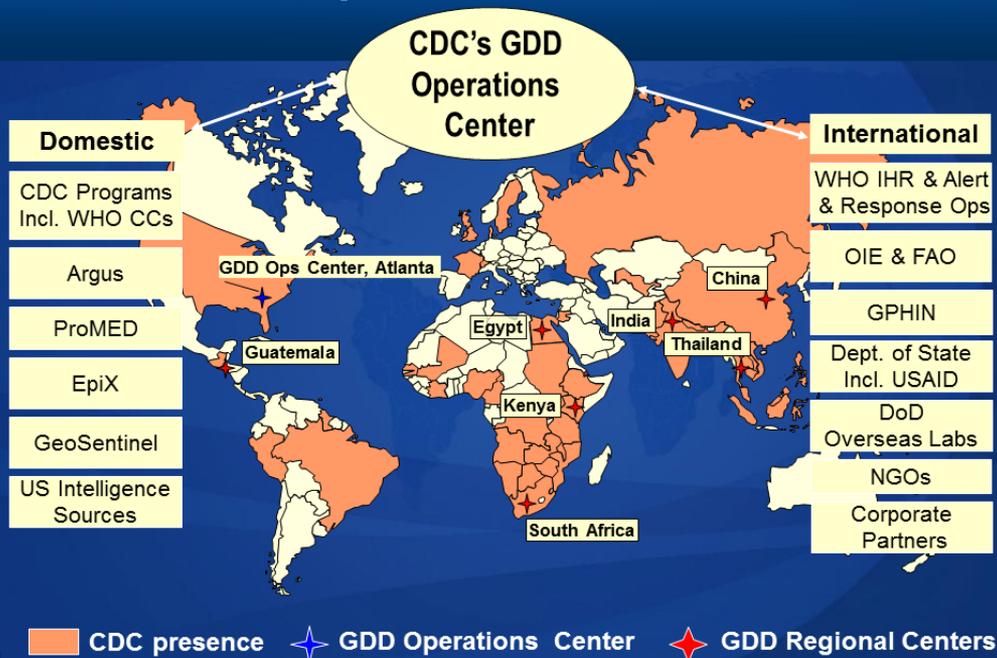
- Several USG agencies frame work around IHRs
  - CDC's Division of GDDER is a WHO Collaborating Centre for IHR surveillance and response capacity building
- Simple goals and targets \*



\* Ijaz et al. IHR - What Gets Measured Gets Done. EID 2012;18:1054-7

# Global Disease Detection Operations Center

## GDD Operations Center Network



## Since 2006:

- Deploying CDC expertise
- Diseases: Ebola, Marburg, H1N1, H5N1 Influenza, Cholera, Monkeypox, Plague, RVF, Zika, DEG, Typhoid, Lead poisoning, and others
- Outbreak responses from headquarters: 47+
- Countries: 25+
- ~\$ 3.5 million

# Global Outbreak Alert and Response Network (GOARN)

- WHO serves as Secretariat
- Collaboration of human and technical resources for the rapid identification, confirmation and response to outbreaks of international importance
- CDC is a member of GOARN

