

EBOLA: LESSONS LEARNED



NINTH ANNUAL CONFERENCE: HEALTH WATCH USA
NOVEMBER 13, 2015, LEXINGTON, KY
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EPIDEMIOLOGY



- **Total cases** **28,636**
- **Laboratory-confirmed cases** **15,246**
- **Total deaths** **11,314**
 - **Mortality rate** **90 - 23%**
- **Deployed medical teams** **50**
- **Mobile laboratories** **28**
- **Trained experts** **7,000**

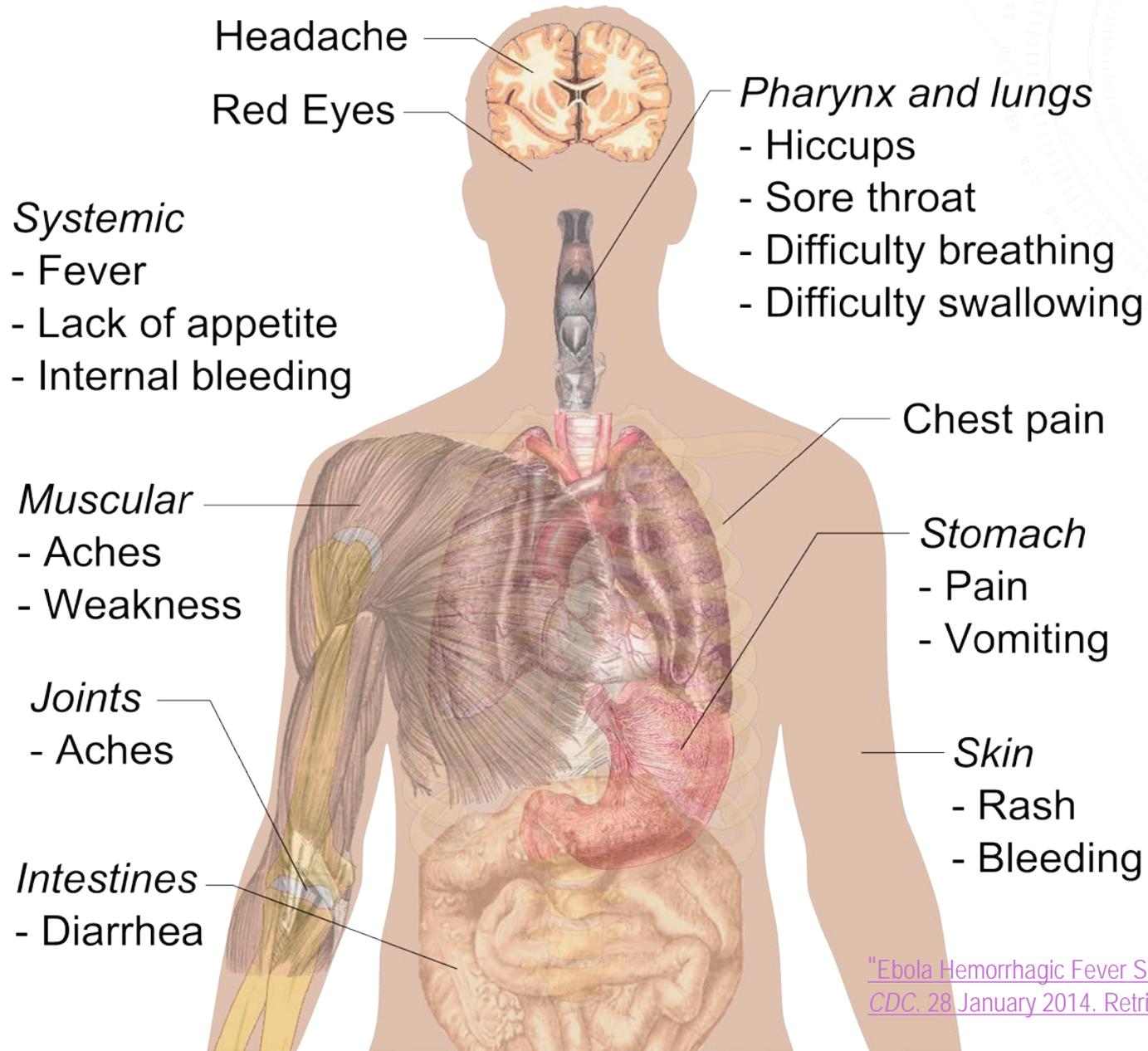
HOW DO YOU GET THE EBOLA VIRUS?



Direct contact with:

1. Body fluids of a person who is sick with or has died from Ebola (blood, vomit, urine, feces, sweat, semen, spit, other fluids)
2. Objects contaminated with the virus (needles, medical equipment)
3. Infected fruit bats or primates (apes and monkeys)

Symptoms of **Ebola**





08/08/2014
International
Ebola Emergency
Declared by the
Global Health
Security Agenda

GLOBAL HEALTH STRATEGY

Strengthen public health systems

- Prevent when possible
- Detect rapidly
- Respond effectively

Identify

Stop

Prevent

3 CORE INTERVENTIONS TO STOP EBOLA OUTBREAK

- **Exhaustive case and contact findings**
- **Effective response to patient and community**
- **Isolate and treat patients.**
- **Monitor each contact for 21 days.**

KEY PREVENTIVE INTERVENTIONS



- **Meticulous information control in healthcare setting**
- **Education of community**
 - **Cultural sensitivity**
- **Avoid handling of bush meat and contact with bats.**
- **Stringent control efforts**
- **Safe burial**
- **Vaccine**

**“Outbreak anywhere
can be a risk
everywhere.”**



Thomas Frieden, MD Director of CDC

APIC Association for Professionals in Infection Control

Nov, 4, 2015 Survey of Members on Ebola Preparedness in US Healthcare Facilities

One Year Later - 15,000 members / 981 respondents

- 92% think facilities are better prepared
- 55% facilities not provided additional resources
- 62% continue training
- 25% lack PPE per CDC guidelines
- 722,000 patients contract H/C-assc. Infection (2011)
- 53% of IPs report that they are solo physicians
- 59% of PICs cover more than one facility

LESSONS LEARNED

- Every country needs core public health functions to identify a threat when it occurs.
- Must stop outbreak by moving immediately and decisively. (HCWs 42 X ↑ vs. Non HCWs)
- Must have effective infection prevention and control procedures in hospitals and other healthcare facilities.
- Must have:
 - appropriate triage procedures
 - adequate personnel preventive equipment
 - adequate infection control practices



Study and implement CDC Guidelines in preparation for Ebola Epidemic

RECOMMENDATIONS FOR PREPARING FOR FUTURE EPIDEMICS

- Be coordinated by a global institution that is given enough authority and funding to be effective.
- Enable fast decision-making at a global level.
- Expand investment in research and development and clarify regulatory pathways for developing new tools and approaches.
- Improve early warning and detection systems, including scalable everyday systems that can be expanded during an epidemic.
- Involve a reserve corps of trained personnel and volunteers,
- Strengthen health systems in low- and middle-income countries.
- Incorporate preparedness exercises to identify the ways in which the response system needs to improve. (NEJM.org, April 9, 2015)