

EBOLA VIRUS DISEASE UPDATE

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Ebola virus disease (EVD)

- ⊙ Ebola first appeared in 1976 in 2 simultaneous outbreaks
 - Nzara, Sudan
 - Yambuku, Democratic Republic of Congo
- ⊙ The latter was in a village situated near the Ebola River

EVD

⊙ Filoviridae family (filovirus)

- Genus Ebolavirus

- 5 species

- Bundibugyo ebolavirus (BDBV)
 - Zaire ebolavirus (EBOV)
 - Reston ebolavirus (RESTV)
 - Sudan ebolavirus (SUDV)
 - Taï Forest ebolavirus (TAFV)

- Genus Marburgvirus

- Genus Cuevavirus

EVD

- Ebola virus disease (EVD) is formerly known as Ebola hemorrhagic fever
- EVD outbreaks occur primarily in remote villages in Central and West Africa, near tropical rainforests

EVD

- The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission
- Fruit bats of the *Pteropodidae* family are considered to be the natural host of the Ebola virus
- Severely ill patients require intensive supportive care
- No licensed specific treatment or vaccine is available for use in people or animals

Signs and Symptoms

- EVD is a severe acute viral illness often characterized by the sudden onset of fever, intense weakness, muscle pain, headache and sore throat
- This is followed by vomiting, diarrhea, rash, impaired kidney and liver function, and in some cases, both internal and external bleeding
- People are infectious as long as their blood and secretions contain the virus
- The incubation period is 2 to 21 days

Diagnosis

- Ebola virus infections can be diagnosed definitively in a laboratory through several types of tests
- Samples from patients are an extreme biohazard risk
- Testing should be conducted under maximum biological containment conditions

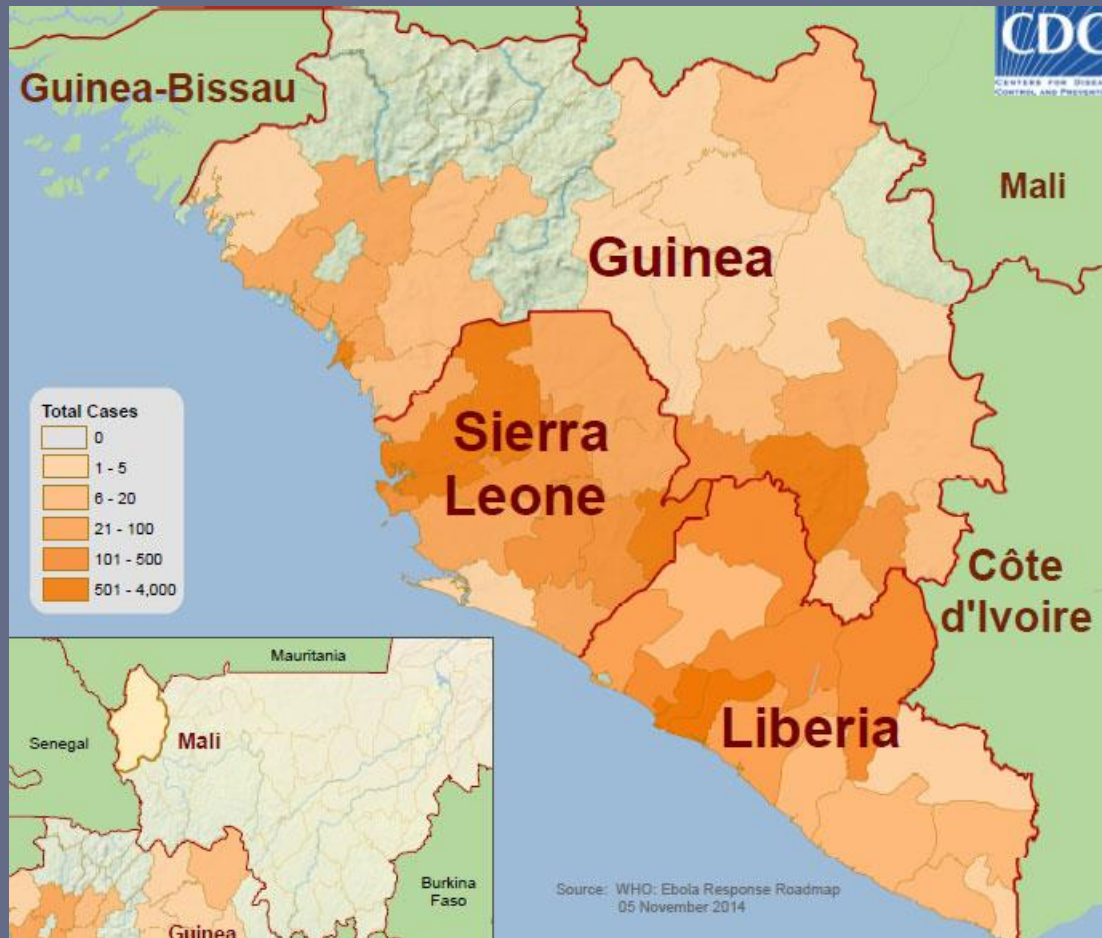
Treatment

- ⦿ Licensed vaccine for EVD is currently in development
- ⦿ Severely ill patients require intensive supportive care
- ⦿ No specific treatment is available
- ⦿ New drug therapies are being evaluated
- ⦿ **ZMapp**

Ebola in West Africa

- **Total Cases: 13,268**
- **Laboratory-Confirmed Cases: 8,168**
- **Total Deaths: 4,960**
- New cases continue to be reported from Guinea, Liberia, and Sierra Leone.
- Nigeria and Senegal have not reported any new cases since September 5, 2014, and August 29, 2014, respectively.

Hot Zone



US Cases

- ⦿ No epidemic
- ⦿ No outbreak
- ⦿ 2 imported cases
- ⦿ 2 healthcare providers infected

Ebola Plan Priorities

- ⊙ Surveillance
 - CDC Quarantine Stations
 - Healthcare Systems
 - Providers, Clinics, Hospitals
 - Regional partners
- ⊙ Isolation and Containment
- ⊙ Clinical Support
- ⊙ Healthcare System Integrity
 - All Staff Protection

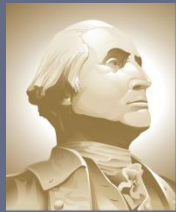
Post Arrival

- CDC Quarantine Units
- Screening
- DOH Contacted
- Isolation if needed*
- Post Arrival Monitoring
- Clinical Intervention*
- * if needed

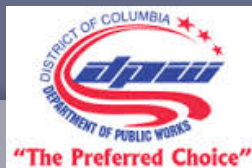
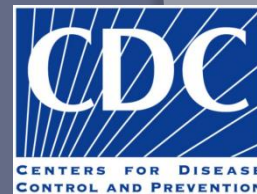


Hospital

- Screening & Placement
- Infection & Quality Control
- Monitoring & Management
- Patient Care Considerations
 - Personnel, Procedures
- Clinical Guidelines
- Waste Management & Environmental Infection Control
- Laboratory
- Staff Monitoring and Support

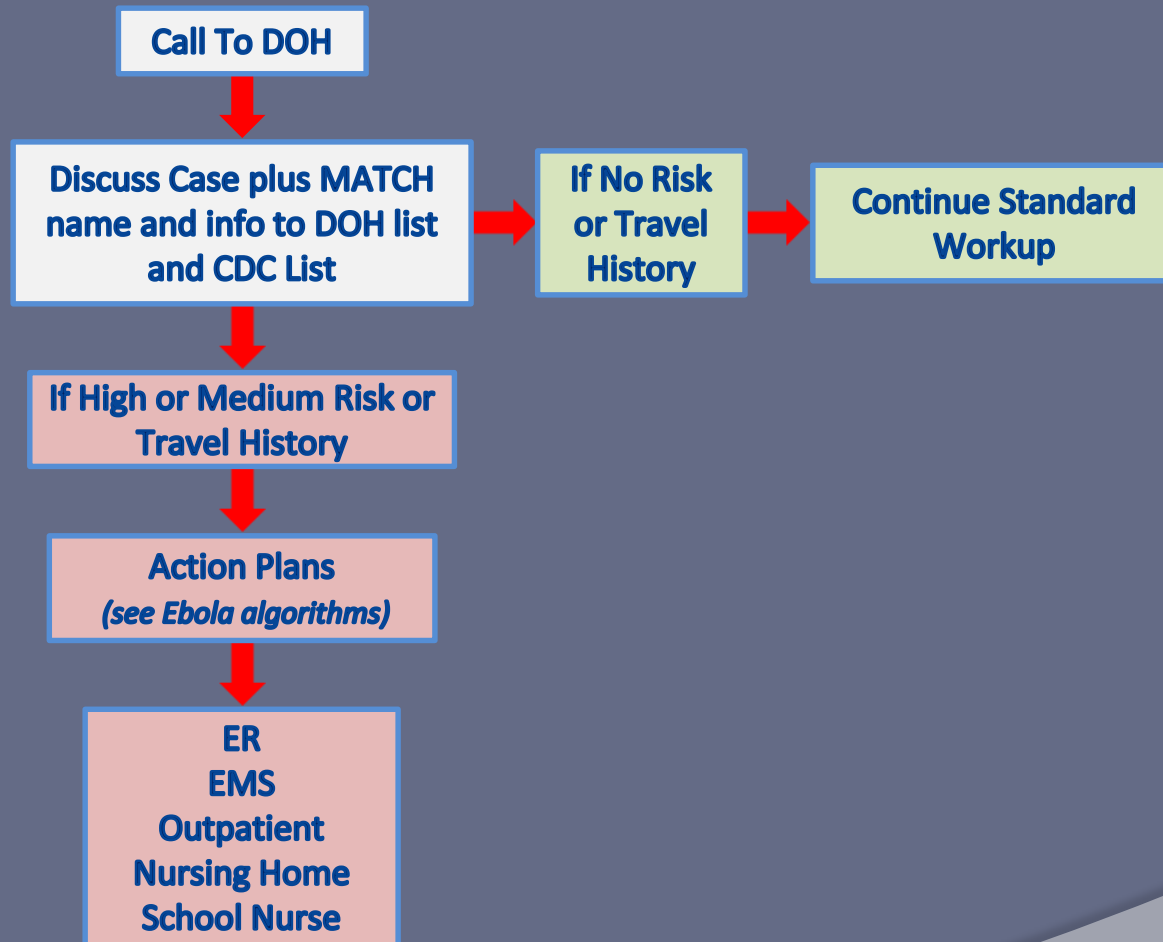


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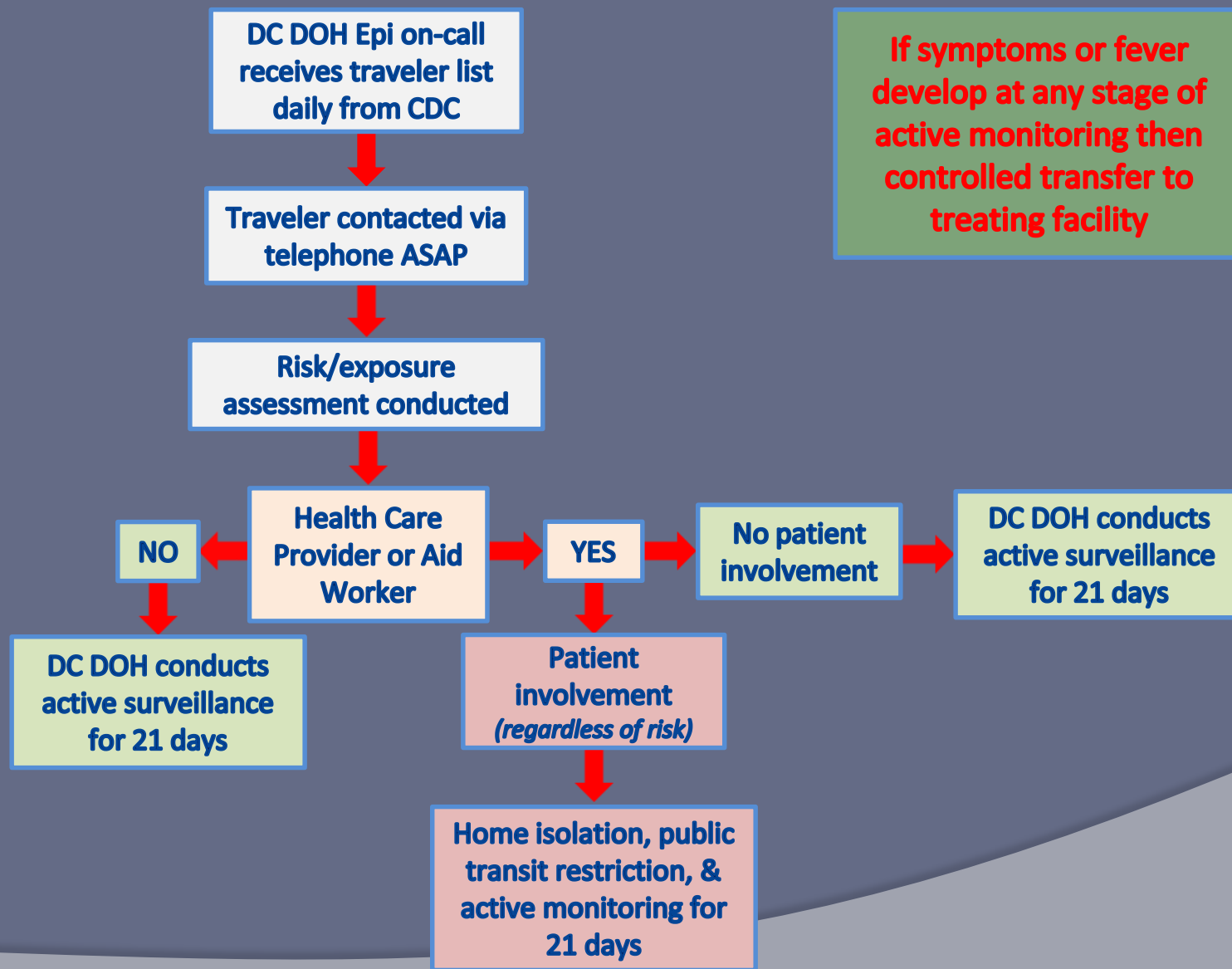


Protocol for Monitoring DOH Incoming Calls

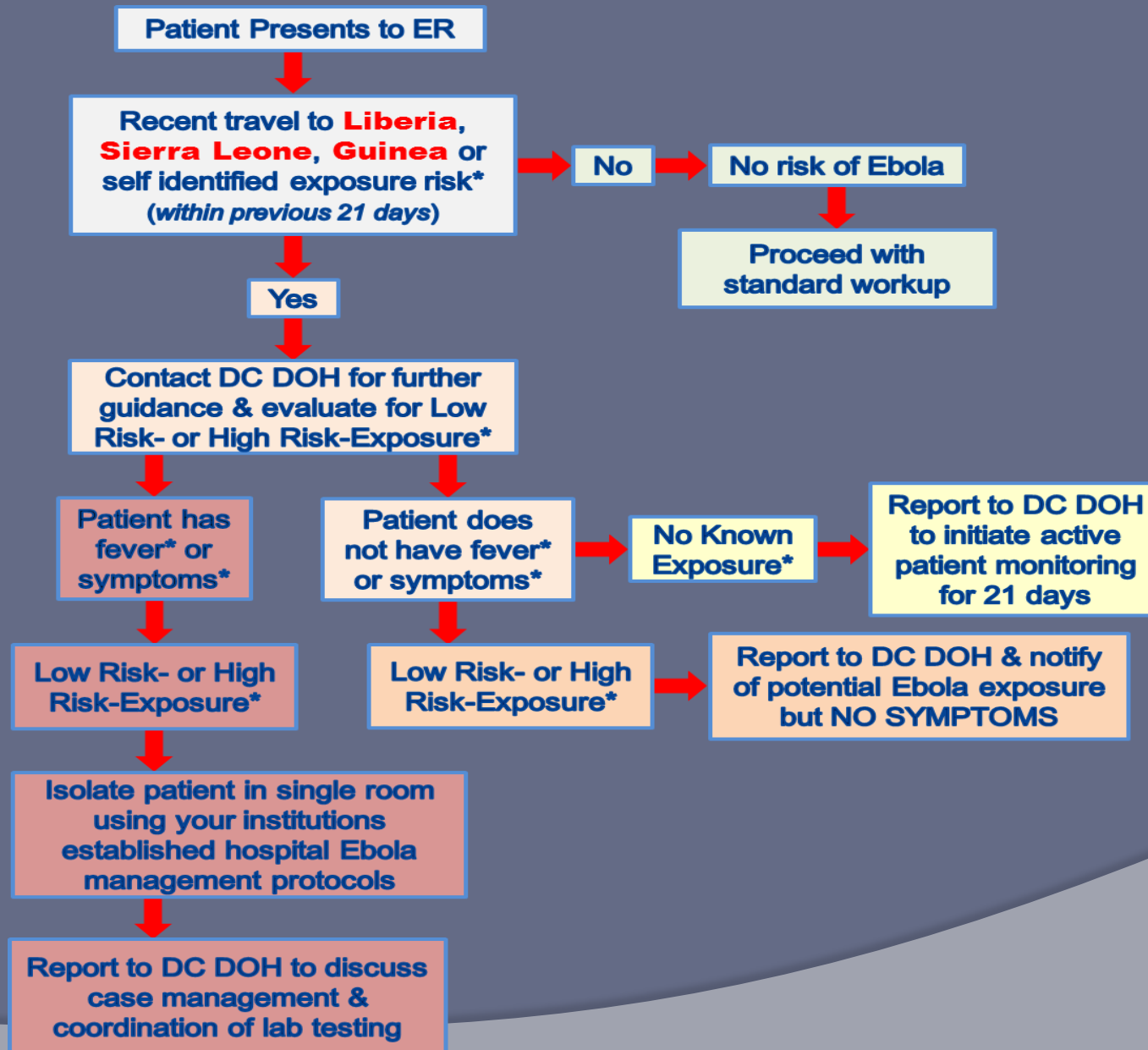
Risk Stratification



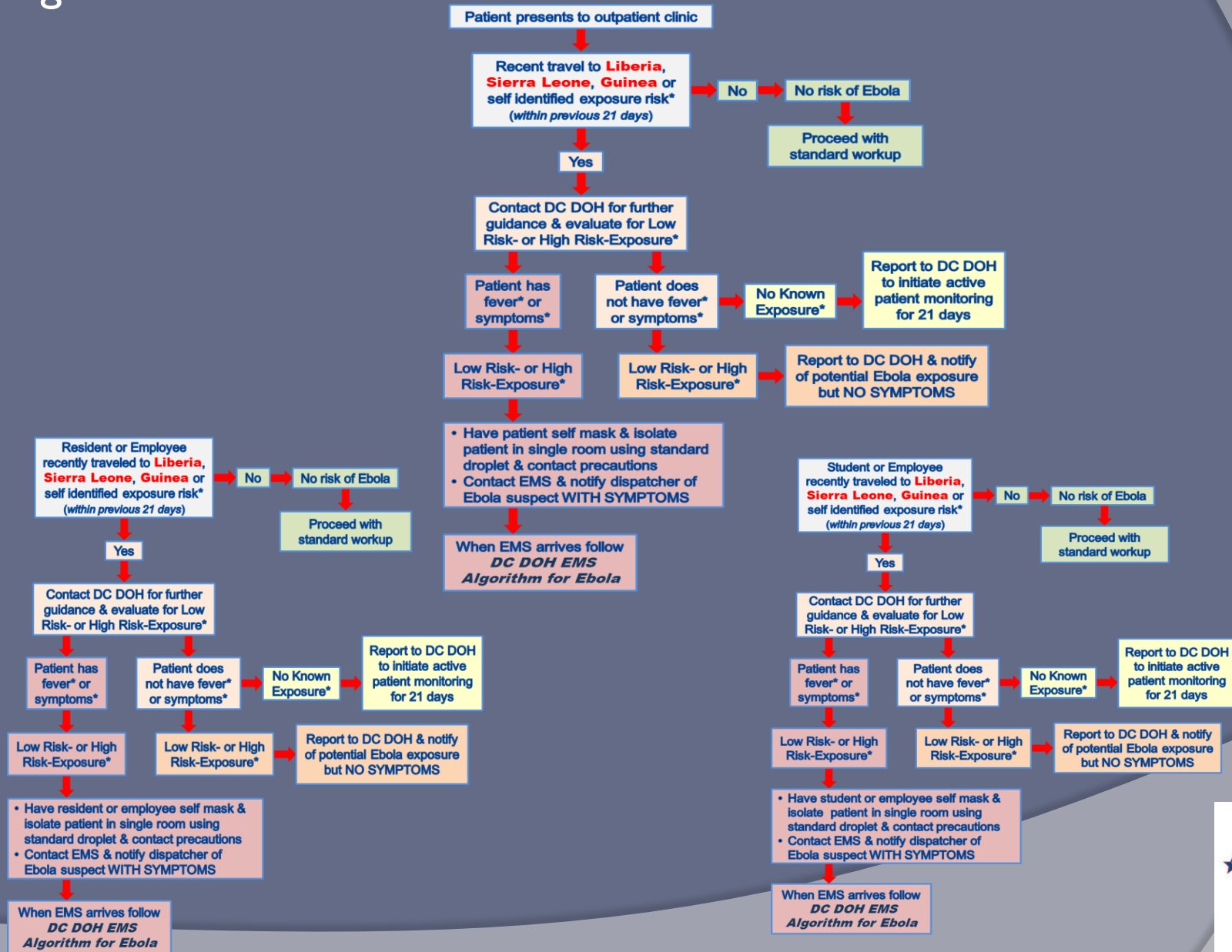
Protocols for Monitoring Recent Travelers



EMERGENCY ROOM EVALUATION PROTOCOLS



Outpatient Clinic, Nursing Home, & School Nurse Evaluation Algorithms



Ebola Cases in Institutions

If positive in screening hospital:

- ✓ Isolate and contain
- ✓ Start transfer (controlled transfer to treating institution)
- ✓ Epidemiological investigation
- ✓ All health care providers and ancillary personnel monitored for 21 days



Additional Ebola Protocols

- Death of Patient
- Unexpected Death of Patient
- Ebola Epidemiological Investigations
- Media Communications for Positive Cases
- Outpatient Clinic, Nursing Home, & School Nurse

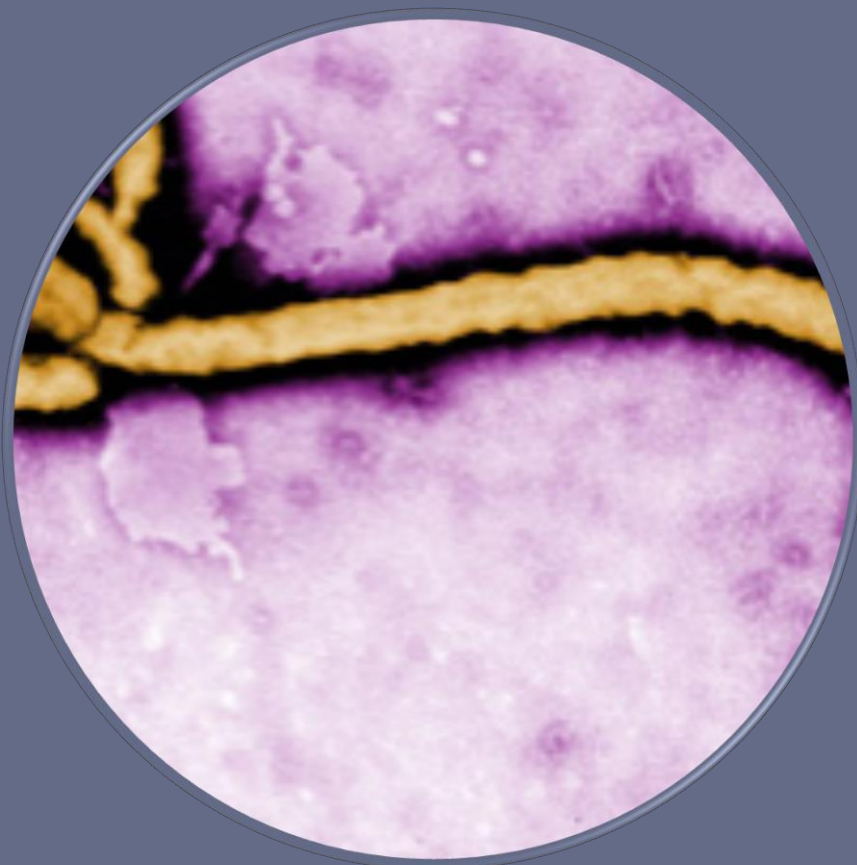


Most likely scenario

- ⊙ Patient on list calls the public health officer on call at DOH
- ⊙ Based on history
 - Transfer to Hospital
 - Screening and isolation
 - Clinical evaluation & testing if needed
 - Treatment as indicate
 - Epidemiological investigation

Working Together

- ① Educate
- ① Communicate
- ① Protect
- ① NO Stigmatization



**Please visit
ebola.dc.gov**

**Toll-Free
1-(844) 49-EBOLA (32652)**