Essential Good Laboratory Work Practices for safe and secure handling of diagnostic samples

SAND2015-9096PE

Key Messages

- Robust adherence to practices and procedures are necessary when working with potential highly infectious disease agents
- Barriers to utilizing good laboratory work practices can be overcome to help staff feel safe working with potential highly infectious disease agents
- Good laboratory work practices are crucial to safe and secure handling but some practices are difficult for individuals to control

Biorisk Management: the AMP Model

Biorisk Management =
Assessment, Mitigation, Performance

Slide Recall
Good Laboratory Work Practices

Group Exercise:

Prepare a list of good laboratory work practices

Questions:

Are GLWPs only concerned with safety and security?

In your group, please spend **10 minutes** to create a list of GLWPs. Write each GLWP on a separate **sticky note** and place them on your **flip chart**. Consider the question as you think of your GLWPs.

Good Laboratory Work Practices

Group Exercise, Part 2:

Using answers from previous activity,

- Rank the good laboratory work practices that are most important to safe handling of blood samples suspected to contain highly infectious disease agents

Good Laboratory Work Practices Identifying Barriers

Group Exercise

Using your group's top three good laboratory work practices

- List at least three potential barriers to properly performing the task
  - Think about what can cause this task to fail?

Good Laboratory Work Practices Categorizing Barriers

Group Exercise

Using results from previous slide that identified barriers to safe and secure good laboratory work practices

- Categorize the barriers as
  - Organizational-dependent
  - Individual-dependent

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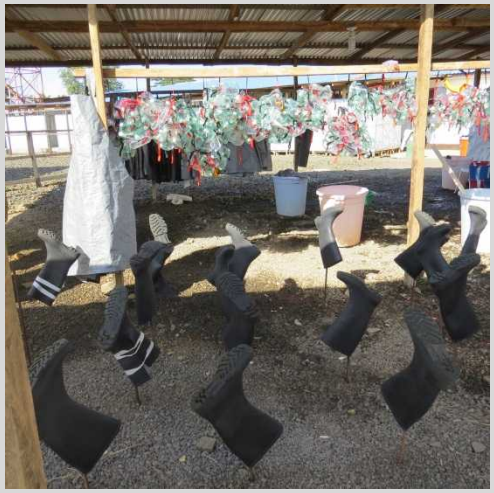
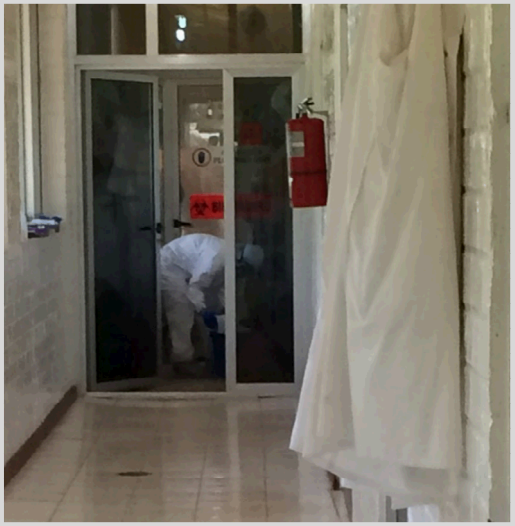
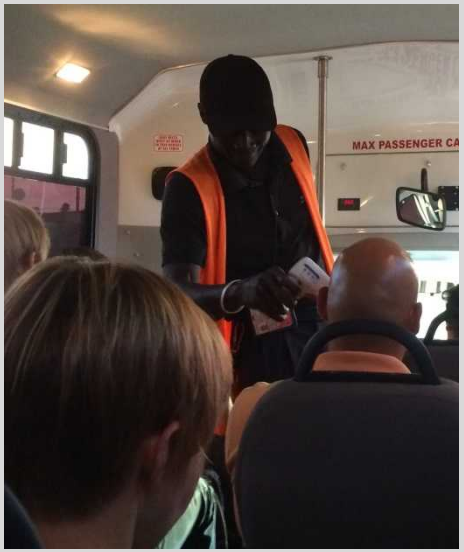
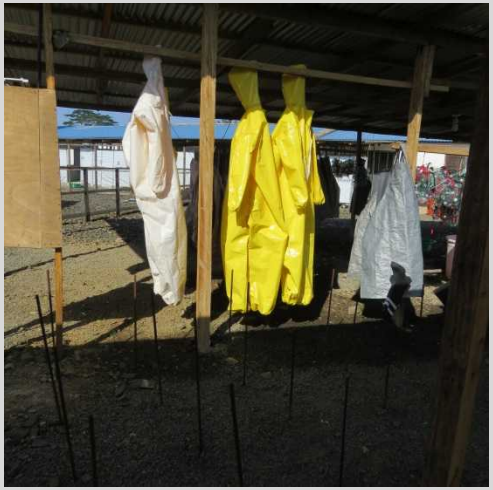
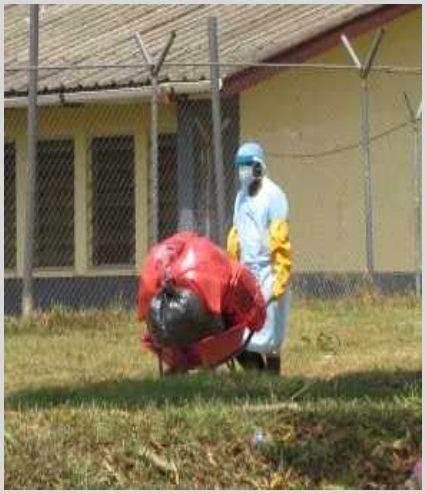
Ebola PPE

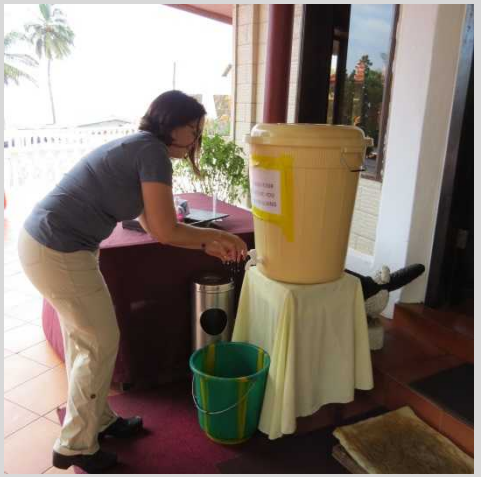












Why did the mitigation measures fail?

Healthcare workers had a higher incidence of Ebola infection than non-healthcare workers

- How did they become infected?
  - Exposure of healthcare workers and laboratorians to infectious blood and body fluids

Identify the root cause of the exposure using 5 Whys

Root Cause Analysis: 5 Whys

- Problem: Healthcare workers exposed to Ebola
  - Why?
  - Why?
  - Why?
  - Why?
  - Why?

People do not fail, processes do

Use the factors to design better mitigation measures