ELSEVIER

Contents lists available at ScienceDirect

## American Journal of Infection Control

journal homepage: www.ajicjournal.org



#### **Brief Report**

# Preparedness planning and care of patients under investigation for or with Ebola virus disease: A survey of physicians in North America



Jessica D. Lewis MD <sup>a</sup>, Kyle B. Enfield MD, MS <sup>b,c</sup>, Trish M. Perl MD, MSc <sup>d,e</sup>, Costi D. Sifri MD <sup>a,c,\*</sup>

- a Division of Infectious Diseases and International Health, Department of Medicine, University of Virginia Health System, Charlottesville, VA
- <sup>b</sup> Division of Pulmonary and Critical Care Medicine, Department of Medicine, University of Virginia Health System, Charlottesville, VA
- <sup>c</sup> Office of Hospital Epidemiology/Infection Prevention and Control, University of Virginia Health System, Charlottesville, VA
- <sup>d</sup> Division of Infectious Diseases, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD
- <sup>e</sup> Epidemiology and Infection Prevention, The Johns Hopkins HealthSystem, Baltimore, MD

Key Words: Physician Outbreak Epidemic The West African Ebola virus disease (EVD) epidemic of 2014-2015 required North American hospitals to undertake comprehensive planning and training for the potential need to care for patients with EVD. Here we describe physician contributions to EVD preparedness planning and the care of persons under investigation for or patients with EVD.

© 2017 Association for Professionals in Infection Control and Epidemiology, Inc. Published by Elsevier Inc. All rights reserved.

#### INTRODUCTION

The largest outbreak of Ebola virus disease (EVD) in known history began in West Africa in December 2013 and has just recently come to an end. The outbreak resulted in 28,616 confirmed, probable, and suspected cases of the disease and left 11,310 people dead.<sup>1</sup> Although cases were primarily limited to Guinea, Sierra Leone, and Liberia, isolated travel- and health care-associated cases were reported in Mali, Nigeria, Senegal, Spain, Italy, the United Kingdom, and the United States.<sup>2</sup> At the peak of the outbreak, the Centers for Disease Control and Prevention, the Public Health Agency of Canada, and the World Health Organization released guidelines for the management of patients with known or suspected EVD for health care workers in the United States, Canada, and those working in affected areas in Africa,<sup>3-5</sup> requiring North American hospitals to undertake comprehensive efforts to plan and train for this potential need. It is not known how North American health care facilities selected and trained their physician staff to care for persons under investigation (PUIs) for and patients with EVD and to whom EVD

E-mail address: csifri@virginia.edu (C.D. Sifri).

Conflicts of interest: None to report.

TMP is currently affiliated with Division of Infectious Diseases, Department of Medicine, University of Texas Southwestern Medical Center, Dallas, TX.

preparedness planning responsibilities were delegated. Developing an understanding of physicians' roles in EVD preparedness planning and the care of PUIs and patients with EVD will allow more specific recommendations and workforce estimates to be generated for future use in preparedness planning for novel pathogens. Here we describe selected physician contributions to EVD preparedness planning and the care of PUIs or patients with EVD, as determined by voluntary survey.

#### **METHODS**

An electronic survey invitation was sent to a convenience sample of health care epidemiologists (primarily infectious disease specialists) in the United States and Canada. The convenience sample of hospital epidemiologists and infectious disease physicians was obtained from a circulating listserve that includes a preponderance of academic institutions, including a majority of those institutions designated as Ebola Treatment Centers (ETCs). This sample was expanded to known colleagues who were not included on the listserve. QuestionPro (Seattle, WA) was used to generate and distribute the survey and store response data. The survey was developed specifically for purposes of this study and included 24 questions, which are delineated in Table 1. Data were deidentified before analysis. Descriptive statistics were used to analyze survey responses. The University of Virginia Institutional Review Board for Human Subjects Research reviewed the methods and guestionnaire and deemed this study exempt from institutional review board approval.

<sup>\*</sup> Address correspondence to Costi D. Sifri, MD, Division of Infectious Diseases & International Health, University of Virginia Health System, PO Box 800473, Charlottesville, VA 22908-0473.

This work was presented in part at the Society of Healthcare Epidemiologists of America Spring Conference, Atlanta, GA, May 18-21, 2016.

**Table 1**Questions included in distributed survey

Please choose from the dropdown list the state in which your institution is located.	Response options
	Academic/university
What is your institution's affiliation?	, ,
	Government
	Community
	Other (please specify)
How many beds does your institution have?	< 200
	200-299
	300-399
	400-599
	600-799
	> 800
Is your institution a frontline health care facility, a designated EVD assessment center, a designated EVD Treatment	Frontline health care facility
Center, or other?	EVD assessment center
	EVD Treatment Center
	Other (please specify)
If a designated EVD Treatment Center, how many beds are designated for the care of patients with EVD?	1
if a designated LVD freatment center, now many beds are designated for the care of patients with LVD:	2
	3
	4
	5 or more
Are these beds in a stand-alone unit or part of a larger unit; that is, a section of an intensive care unit?	Stand-alone unit
	Part of a larger unit
What size is the pool of physicians who are trained and prepared to care for a patient with known or suspected EVD	0-5
at your institution?  Physicians from which of these specialties are trained to be involved in the care of a patient with known or suspected	6-10
	11-20
	21-50
	> 50
EVD at your institution? (Choose all that apply)	Adult critical care
EVD at your institution? (Choose an that apply)	
	Pediatric infectious disease
	Pediatric critical care
	Anesthesiology
	Anesthesiology critical care
	Nephrology
	General internal medicine
	General pediatrics
	Family medicine
	Hospitalist
	Emergency medicine
	Interventional radiology
	Obstetrics
	Neonatology
	General surgery
How many physicians comprise the primary team caring for an individual PUI or patient with confirmed EVD?	Other (please specify)
	1-2
	3-4
	5-9
	≥ 10
Physicians from which of these specialties are part of the primary team for the care of a patient with known or	≥ 10 Adult infectious disease
Physicians from which of these specialties are part of the primary team for the care of a patient with known or suspected EVD at your institution? (Choose all that apply)	
Physicians from which of these specialties are part of the primary team for the care of a patient with known or suspected EVD at your institution? (Choose all that apply)	Adult infectious disease
	Adult infectious disease Adult critical care Pediatric infectious disease
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology
	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery
suspected EVD at your institution? (Choose all that apply)	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify)
suspected EVD at your institution? (Choose all that apply)  Which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choose	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) Attending physicians
suspected EVD at your institution? (Choose all that apply)	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) Attending physicians Fellow physicians
suspected EVD at your institution? (Choose all that apply)  Which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choose	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) e Attending physicians Fellow physicians Resident physicians
which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choosall that apply)	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) et Attending physicians Fellow physicians Resident physicians Other
which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choosall that apply)	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) e Attending physicians Fellow physicians Resident physicians Other In-person training
which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choosall that apply)	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) et Attending physicians Fellow physicians Resident physicians Other
suspected EVD at your institution? (Choose all that apply)  Which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choose	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) Attending physicians Fellow physicians Resident physicians Other In-person training Simulations Online or computer modules
which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choosall that apply)	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) Attending physicians Fellow physicians Resident physicians Other In-person training Simulations Online or computer modules
which of these groups (level of training) are part of the physician staff trained to care for a patient with EVD? (Choosall that apply)	Adult infectious disease Adult critical care Pediatric infectious disease Pediatric critical care Anesthesiology Anesthesiology critical care Nephrology General internal medicine General pediatrics Family medicine Hospitalist Emergency medicine Interventional radiology Obstetrics Neonatology General surgery Other (please specify) Attending physicians Fellow physicians Resident physicians Other In-person training Simulations

### Download English Version:

# https://daneshyari.com/en/article/5566445

Download Persian Version:

https://daneshyari.com/article/5566445

<u>Daneshyari.com</u>