We defined a confirmed case as a probable case that was laboratory confirmed by throat culture. We collected line list of probable and confirmed diphtheria cases, population details in Bijapur district and antibiotic sensitivity of culture reports. We calculated attack rates and case fatality rate by taluks of Bijapur district. We calculated proportion of antibiotic resistance among lab confirmed cases.

Results. There were 229 probable cases and 26 confirmed cases of diphtheria. Attack rate was 110/million and case fatality rate was 2% (5/255). Median age of males was 5 years (range: 3 months to 18 years) and females was 6 years (range: 1 year to 18 years). Highest attack rate (290/million) was in Bagewadi taluk, followed by Sindagi taluk (130/ million). Attack rate in Bijapur, Indi and Muddebihal were 80, 80and 70 per million respectively. Incidence of diphtheria cases was 3/million in 2012, 15/million in 2013, 80/million in 2014 and 14/million in 2015. Penicillin resistance was found among 92% (24/26) of cases, cotrimaxozole resistance among 27% cases (7/26) and ampicillin resistance among 15% cases (4/26)}. Multidrug resistance for penicillin and cotrimoxazole was found among 23% (6/26) of cases. Multidrug resistance to penicillin and ampicillin was found among 15% (4/26) of cases). All cases were sensitive to azithromycin, erythromycin, doxycycline, clindamycin, ciprofloxacin, cefotaxime, gentamycin and tetracycline.

Conclusion. Diphtheria incidence increased between 2012 and 2014. Incidence reduced in 2015. Penicillin resistance was common. We recommend sensitising health workers about penicillin resistance and educating them not to use penicillin. We recommend estimating vaccine coverage and vaccine effectiveness among children.

Disclosures. All authors: No reported disclosures.

675. Current Physician Knowledge, Attitudes, and Clinical Practice Regarding Legionnaires' Disease in the Aftermath of the Flint Water Crisis in Genesee County, Michigan

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Background. Legionnaires' disease (LD) is a respiratory illness caused by the inhalation of aerosolized water contaminated with Legionella bacteria. For reasons not yet understood, the incidence of LD has steadily increased across the United States during the past 10 years. In 2014 and 2015, the City of Flint in Genesee County (GC), Michigan underwent a change in the city's water source, which resulted in the third largest recorded LD outbreak in American history and over 100,000 residents being exposed to contaminated water. In order to reduce the incidence of LD in at-risk populations it is imperative that we evaluate and improve LD knowledge and clinical practice among healthcare personnel.

Methods. This investigation surveyed clinicians practicing in Genesee County who are also members of the Genesee County Medical Society (GCMS). A survey was designed to assess current clinical knowledge, attitudes, and practices related to LD, in addition to measuring the uptake and utility of the LD clinical guidelines. The survey and the LD clinical guidelines were distributed to all GCMS members over a 6-month period. Prompts to complete the survey using Qualtrics programming were emailed to GCMS members and posted in the GCMS monthly bulletin. In addition, surveys were distributed to members at GCMS meetings. Completed responses were entered into Qualtrics software and exported into MS Excel and SPSS statistical software for analysis.

Results. In total, 95 healthcare personnel responded. Of those surveyed, 79.5% have been in practice for more than 10 years and 55% identified as practicing in family, internal or emergency medicine. Despite, the well-publicized LD outbreak in GC, 45% of respondents did not believe or were unsure if LD was a current public health issue, and 65% have either not received, have received but are not interested, or have received but not read the LD clinical guidelines. Despite this, 47% and 61% of respondents were able to correctly identify the symptoms and risk factors for LD, respectively. In addition, 34% of participants believe that drinking tap water is a risk factor for contracting LD.

Conclusion. This survey underscores the continuing need for comprehensive physician education to improve the clinical recognition and evaluation of patients with LD.

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This abstract has been withdrawn at the author's request.

677. Using a Multisectoral One Health Approach to Prioritize Zoonotic Diseases in the United States

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Background. Emerging and endemic zoonoses continue to have adverse global impacts. One Health approaches promoting multisectoral, transdisciplinary collaboration are important methods to address zoonoses threats through disease surveillance, prevention, control, and response. We conducted a One Health Zoonotic Disease Prioritization (OHZDP) workshop in the United States (US) to identify zoonotic diseases of greatest national concern that should be jointly addressed by the Centers for Disease Control (CDC), US Department of Agriculture (USDA), Department of the Interior, and partners.

Methods. We used CDC's OHZDP tool to prioritize zoonoses. Workshop participants selected criteria for prioritization, and developed questions and weights for each criterion. Questions were answered using available literature and expert opinion with subsequent scoring resulting in a ranked zoonotic disease list. After agreeing on a final prioritized disease list, participants used components of the One Health Systems Mapping and Analysis Resource Toolkit, developed by USDA and University of Minnesota, to review multidisciplinary coordination processes for the prioritized zoonotic diseases.

Results. Participants selected epidemic or pandemic potential, disease severity, economic impact, introduction or increased transmission potential, and national security as criteria to prioritize 56 zoonoses. The eight prioritized zoonotic diseases for the US were zoonotic influenzas, salmonellosis, West Nile virus, plague, emerging coronaviruses (e.g., SARS, MERS), rabies, brucellosis, and Lyme disease. Agencies then discussed recommendations to enhance One Health approaches to surveillance, response, prevention, and control of the prioritized zoonoses. Key themes and next steps for further implementation of One Health approaches were identified.

Conclusion. This OHZDP workshop represents the first use of a One Health approach to zoonotic disease prioritization in the United States. It is a critical step forward in US government agency collaboration using One Health approaches. Further, the workshop created a foundation for future US government One Health systems strengthening for the prioritized zoonoses.

Disclosures. All authors: No reported disclosures.

678. Outbreak of Shiga Toxin-Producing *Escherichia coli* Infections at Marine Corps Recruit Depot (MCRD), San Diego and Camp Pendleton, California: October–November, 2017

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