to childhood vaccination recommendations and targeted vaccination ofrecommended at-risk groups can prevent future hepatitis A outbreaks of any transmission pattern.

**Disclosures. All authors:** No reported disclosures.

**LB11. Rapid Rise in Decreased Susceptibility to Azithromycin among Shigella Isolates in the United States: A Look at National Surveillance Data, 2011–2017**

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**Session:** 167. Late Breaker Oral Abstracts: Emerging Infections

**Friday, October 5, 2018: 2:00 PM**

**Background.** *Shigella* spp. cause ~500,000 illnesses in the United States annually. Antibiotics are recommended for immunocompromised patients and shorten the duration of illness, thus limiting spread. First-line treatments include ciprofloxacin (CIP) and azithromycin (AZM). CIP resistance is a growing problem in the United States; decreased susceptibility to AZM (DSA) has been reported globally, particularly among men who have sex with men (MSM). We reviewed National Antimicrobial Resistance Monitoring System (NARMS) data to determine DSA trends among *Shigella* isolates in the United States.

**Methods.** Health departments nationwide forward every 20th *Shigella* isolate to CDC NARMS for antimicrobial susceptibility testing using broth microdilution. We defined CIP resistance using CLSI clinical breakpoints and DSA using epidemiological cutoff values where available. We performed whole genome sequencing on isolates from 2016 and screened the sequences for resistance determinants using ResFinder 3.0.

**Results.** To date, we have tested 3,044 *Shigella* isolates collected during 2011–2017. Overall, 264 isolates (9%) had DSA, increasing from 3% in 2011 to 23% in 2017; 41 (16%) were also CIP resistant. The odds of DSA increased by 1.5 (95% confidence interval [CI] 1.4–1.6) annually. DSA was more common among adult males (OR 21.2, CI 14.9–30.3), in isolates from the West census region (OR 2.4, CI 1.8–3.2), and in *S. flexneri* (OR 8.2, CI 6.3–10.7). Of 543 sequenced isolates, 52 (10%) had DSA; of these, 31 (60%) contained both mph(A) and tet(A) genes, 17 (33%) contained mph(A) only, and 4 (8%) had no identified macrolide-resistance mechanism.

**Conclusions.** In 2017, nearly 1 in 4 *Shigella* isolates tested had DSA, a 7-fold increase since 2011. This rapid rise in DSA parallels that seen in other countries, where resistance to other clinically relevant drugs is high and macrolides are no longer useful as empiric treatment. The increased risk of DSA in adult males is consistent with the small sample size precluded conclusions on most outcome differences.

**LB12. Safety and Efficacy of Fidaxomicin and Vancomycin in Pediatric Patients with *Clostridium difficile* Infection: Phase III, Multicenter, Investigator-blind, Randomized, Parallel Group (SUNSHINE) Study**

Joshua Wolf, MBBS FRACP; Kristina Kalocai, MD; Claudia Fortuny, MD, PhD; Stefan Lazar, MD, PhD; Samantha Bosis, MD; Bartosz Korczowski, MD, PhD; Arnaud Petit, MD, PhD2;3; Daniel Bradford, MA, MBBS, DCPSA, PGDPM2; Elodie Incera, MSc; Joost Melis, MSc2 and Rob Van Maanen, MD, FFPM1; St. Jude Children’s Research Hospital, Memphis, TN; Del pediç Centrumskórias Orsagos Haematológia és Infekcióintezet, Budapest, Hungary; Hospital Sant Joan de Deu, Barcelona, Spain; Clinical and Infectious Diseases Dr. Victor Babés Hospital, Bucharest, Romania; Fondazione IRCCS Ca’ Granda - Ospedale Maggiore Policlinico, Milan, Italy; Medical College, University of Rzeszow, Rzeszow, Poland;

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**Disclosures. All authors:** No reported disclosures.

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**Session:** 167. Late Breaker Oral Abstracts: Emerging Infections

**Friday, October 5, 2018: 2:00 PM**

**Background.** *Clostridium difficile* infection (CDI), a common cause of antibiotic-associated diarrhea, leads to substantial healthcare burden. In children and young adults, the incidence of CDI is increasing. Fidaxomicin (FDX) is a narrow-spectrum macrocyclic antibiotic treatment for CDI in adults, but pediatric data are limited. The primary objective of our study was to investigate safety and efficacy of FDX and vancomycin (VAN) in children.

**Methods.** Patients aged <18 years with new laboratory-confirmed CDI and diarrhea (watery diarrhea for patients aged <2 years, and ≥3 formed bowel movements in 24 hours for patients aged ≥2 years) were enrolled in a randomized, investigator-blinded study. Participants were randomized (2:1) to 10 days of treatment with either FDX (oral suspension 32 mg/kg/day or tablets 200 mg BD) or VAN (oral liquid 40 mg/kg/day or capsules 125 mg QID). Concurrent use of other antibiotic treatment for CDI was not permitted. Randomization was stratified by age group. The primary efficacy endpoint was confirmed clinical response (CCR) at Day 12 (absence of diarrhea for 2 consecutive days on treatment and remaining well until treatment discontinuation). Other efficacy endpoints were also evaluated.

**Results.** Of 142 patients in the full analysis set (FDX n = 56; VAN n = 44), 30 were aged <2 years, 48 were aged 2 to <6 years, 36 were aged 6 to <12 years and 28 were aged 12 to <18 years. At baseline, 28.6% of the FDX arm and 22.7% of the VAN arm had prior confirmed CDI. Overall, 73.5% of the FDX arm and 75.0% of the VAN arm had ≥1 treatment-emergent adverse event. There were three deaths in the FDX arm during the study and two deaths in the VAN arm after end of study (post-Day 40); both were related to treatments. There was a trend to improved CCR and other efficacy outcomes for FDX (figure) and this was statistically significant for global cure (adjusted difference 18.8%; 95% CI 1.5%, 35.3%).

**Conclusions.** There was a consistent trend for improved efficacy outcomes with FDX compared with VAN, as shown by the adjusted treatment differences, although the small sample size precluded conclusions on most outcome differences.

**Figure.**

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LB13. *Candida auris* in NYC: A Health System’s Experience Treating the Emerging Drug-Resistant Yeast

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1. Medicine, Division of Infectious Diseases, Icahn School of Medicine at Mount Sinai, New York, NY, 2.Infection Prevention, Mount Sinai Brooklyn, Brooklyn, New York, 3.Infection Prevention, Mount Sinai Downtown, New York, New York, 4. Mount Sinai Brooklyn, Brooklyn, New York

**Session:** 167. Late Breaker Oral Abstracts: Emerging Infections

**Friday, October 5, 2018:** 2:00 PM

**Background.** *Candida auris* is emerging multisegregate-resistant yeast that can cause serious infections with published mortality rates as high as 60%. It was first recognized in 2009 and has been reported in over a dozen countries. The current United States outbreak was identified in 2016 with New York City (NYC) as the epicenter. The aim of this presentation was to document the clinical infections and outcomes with *C. auris* in a large health system in NYC.

**Methods.** Cases were identified from clinical specimens collected December 2015–June 2018 from the Mount Sinai Hospital Clinical Microbiology Laboratory, the central laboratory for the Mount Sinai Health System, which encompasses seven hospitals across NYC. All *C. auris* isolates were confirmed by the New York State Department of Health Wadsworth Center. Medical charts were reviewed. A case was included if *C. auris* grew from a sterile body site, an antifungal treatment was initiated or the patient died before the yeast was identified on Gram stain.

**Results.** Twenty-nine possible cases were identified with 23 meeting the case definition. These included 19 bloodstream infections (BSI), two intra-abdominal abscesses, one skin soft tissue infection, and one otitis externa. Using the MIC breakpoint recommended by the Centers for Disease Control and Prevention, 100% of isolates tested were susceptible to caspofungin, 29% were susceptible to amphotericin B, and 17% were susceptible to fluconazole. Nineteen patients received antifungal treatment, 13 with caspofungin monotherapy and four with sequential therapy of caspofungin followed by an azole (three with fluconazole, one with posaconazole). Fifteen (65%) patients expired within 90 days of the positive culture. Fourteen of the deaths were in candidemic patients, despite that eight (57%) of these patients had documented microbiologic clearance after appropriate therapy. The 90-day mortality rate was 74% for all patients.

**Conclusions.** This case series is the largest reported in the United States. Candidemia was the most common site of infection and had a very high 90-day mortality rate, despite sterilization of the blood. These findings highlight the significant morbidity and mortality associated with *C. auris* and the need to focus efforts on rapid diagnostics and infection prevention.

**Disclosures.** No reported disclosures.

LB14. Safety and Immunogenicity of High-Dose Quadrivalent Influenza Vaccine Administered by Intramuscular Route in Subjects Aged 65 Years and Older

Lee Chang, MD; Ya Meng, PhD3; Helene Janosczyk, MA3; Victoria Landolfi, MSc, MBA; H. Keipp, MD, MPH; and the QH000013 Study Team.1
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**Session:** 213. Late Breaker Oral Abstracts: Influenza and Vaccines

**Saturday, October 6, 2018:** 10:30 AM

**Background.** Older adults (>65 years of age) remain at increased risk of influenza because they do not respond to standard dose influenza vaccines as well as younger adults. A high dose, inactivated trivalent influenza vaccine, IIV3-HD, containing four times the antigen content (60 μg hemagglutinin per influenza strain) of standard-dose influenza vaccines has been available in the United States since 2010. Two distinct B influenza lineages (Victoria and Yamagata) have co-circulated for over 30 years, and it is difficult to predict which one will predominate in any given season. IIV4-HD has been developed to address the frequent influenza B strain mismatches by incorporating a strain from each B lineage. This pivotal Phase III trial demonstrated that a trivalent high-dose IIV3-HD vaccine is noninferior to two IIV3-HD vaccines with a similar safety profile. The addition of a second B lineage strain does not adversely affect the safety or immunogenicity profile of IIV4-HD compared with IIV3-HD.

**Methods.** Cases were identified from clinical specimens collected December 2015–June 2018 from the Mount Sinai Hospital Clinical Microbiology Laboratory, the central laboratory for the Mount Sinai Health System, which encompasses seven hospitals across NYC. All *C. auris* isolates were confirmed by the New York State Department of Health Wadsworth Center. Medical charts were reviewed. A case was included if *C. auris* grew from a sterile body site, an antifungal treatment was initiated or the patient died before the yeast was identified on Gram stain.

**Results.** Twenty-nine possible cases were identified with 23 meeting the case definition. These included 19 bloodstream infections (BSI), two intra-abdominal abscesses, one skin soft tissue infection, and one otitis externa. Using the MIC breakpoint recommended by the Centers for Disease Control and Prevention, 100% of isolates tested were susceptible to caspofungin, 29% were susceptible to amphotericin B, and 17% were susceptible to fluconazole. Nineteen patients received antifungal treatment, 13 with caspofungin monotherapy and four with sequential therapy of caspofungin followed by an azole (three with fluconazole, one with posaconazole). Fifteen (65%) patients expired within 90 days of the positive culture. Fourteen of the deaths were in candidemic patients, despite that eight (57%) of these patients had documented microbiologic clearance after appropriate therapy. The 90-day mortality rate was 74% for all patients.

**Conclusions.** This case series is the largest reported in the United States. Candidemia was the most common site of infection and had a very high 90-day mortality rate, despite sterilization of the blood. These findings highlight the significant morbidity and mortality associated with *C. auris* and the need to focus efforts on rapid diagnostics and infection prevention.

**Disclosures.** No reported disclosures.