Table 2. Rate of positive bacterial infections in 46 *A. agrarius* rodents as indicated by serological assays.

Name of positive sera	Seropositive	
	IFA titer for *O. tsutsugamushi*[a] (% positive rate)	PHA for *Leptospira* species[b] (% positive rate)
6-6	1:128	–[c]
6-7	1:64	–
7-4	1:16	–
7-13	1:16	–
7-17	1:16	1:160
7-18	1:32	–
8-7	1:256	–
8-9	1:64	–
No. of positive sera	**8 (17.4)**	**1 (2.2)**

[a]Cutoff titer of immunofluorescence assay, immunoglobulin G ≥ 1:16,
[b]Cutoff for passive hemagglutination assay ≥ 1:80,
[c]–: negative.

Table 3. Number of positive cases of *Orientia tsutsugamushi, Anaplasma phogocytophilum,* and *Leptospira interrogans* among the 47 *Apodemus agrarius* rodents obtained by PCR targeting different genes.

Specimen	No. of samples	*O. tsutsugamushi*			*A. phagocytophilum*		*L. interrogans*		
		rrs[a]	TSUTSU Kit[b]	56 kDa[c]	groEL[d]	ankA[e]	rpoB[f]	LipL32[g]	gyrB[h]
Blood	46	0	0	0	4	4	0	0	NA[i]
Spleen	45	0	0	0	0	6	0	0	NA
Kidney	47	0	0	0	0	1	3	2	2
No. of positive rodents		0			9 (19.1)[j]		3 (6.4)		

[a]16S ribosomal RNA,
[b]INNOPLEX TSUTSU detection kit for *O. tsutsugamushi,*
[c]56 kDa gene,
[d]Heat shock protein chaperone,
[e]Ankyrin-related protein gene,
[f]RNase polymerase subunit beta,
[g]Outer membrane lipoprotein,
[h]DNA gyrase subunit B,
[i]NA: not available,
[j]% Positive rate.

Disclosures. All authors: No reported disclosures.

1649. That's Not Cricket! Outbreak of *Legionella pneumophila* (*L. pneumophila*) in a Community Cricket Club in the UK, 2018: Challenges in *Legionella* Control in This Setting

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Background. Cricket clubs in the UK are frequently collocated with community venues which host a range of activities, often for vulnerable members of society, such as children and elderly people. In July 2018, two cases of local laboratory-confirmed Legionnaires' disease were notified to Public Health England (PHE). The cases were found to be players in the same cricket team (via the enhanced Legionnaires' disease surveillance system) and had multiple shared potential exposures during their incubation periods.
Methods. A three-pronged outbreak investigation was conducted, with epidemiological, microbiological, and environmental components. Case-finding and potential shared exposures were identified through completion and analysis of *Legionella* enhanced surveillance questionnaires. Following risk assessment, environmental samples were obtained from aerosolizing outlets at identified sites. Additionally, sputum and urine samples were obtained from cases. All samples were sent to the PHE reference laboratory for confirmation of species and sequence typing.
Results. All cases were confirmed as *L. pneumophila* serogroup 1. Only one case provided a sputum sample suitable for sequence typing, which yielded a partial result. This result was consistent with a strain of *L. pneumophila* found in abundance at numerous water outlets at a local cricket club epidemiologically linked to all cases. On the emergence of these findings, control measures were put in place to prevent further exposure to the pathogen including shot-dosing of the water systems and closure of aerosolizing outlets. However, eradication of the organism proved challenging.
Conclusion. This is the first known outbreak of *L. pneumophila* epidemiologically and microbiologically linked to a cricket club in the UK. Control of the outbreak was challenging for two reasons. Firstly, the nature of the setting as a community venue meant that there was a large number of people potentially exposed, many with characteristics putting them at increased risk of Legionnaires' disease. Secondly, the cricket club was run by a committee of volunteers with limited expertise and financial resource. There was a resultant lack of clarity about who was ultimately responsible for *Legionella* risk management and the implementation of control measures.

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1650. Knowledge and Attitudes Toward Influenza Vaccination Among Hispanics: A Survey Conducted in Latin American Consulates in South Florida

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Background. Each year Influenza causes between 12,000 and 56,000 deaths, and over half a million of hospitalizations in the United States. Despite the widespread availability of vaccination, immunization coverage is low. Less than half of American adults receive the influenza vaccine, and there is a disparity between Hispanic and non-Hispanics, with only 35.9% of Hispanic compared with 45.9% of white non-Hispanics receiving the vaccine. In Miami, South Florida, over two-thirds of the population is Hispanic, and rates of influenza vaccination are low. This study aims to identify the knowledge and attitudes toward influenza vaccination among members of the adult Hispanic community in Miami, and to identify barriers to vaccination in this population.
Methods. This is a cross-sectional study conducted during the influenza season in 2017 and 2019 (October to December). A survey was administered in the waiting rooms of participating Latin American Consulates (Argentina, Colombia, Ecuador, Guatemala, Honduras, Mexico, Peru, and Uruguay) in Miami. Participants included were older than 18 years, Hispanic, and with residence in the United States for more than 6 months. The participants accepted the inform consent orally. The survey was voluntary and anonymous.
Results. We enrolled 970 adults. The median age was 43 years, 50% were male, 60% had health insurance, and 67% had completed education of high school or higher. Knowledge regarding influenza and vaccination was low (78% believed asymptomatic individuals could transmit influenza, 14% knew that vaccination is recommended during the winter months, 50% felt not everyone should be vaccinated, 25% believed the vaccine causes influenza, and 7% autism). About one quarter (27%) received the influenza vaccine annually, 35% sometimes, and 38% never. Using multinomial logistic regression, we identified age $\chi^2(2) = 19.38$, $P < 0.001$, consulate $\chi^2(6) = 160.21$, $P < 0.001$, and insurance status $\chi^2(2) = 23.04$, $P < 0.001$ as predictors of receiving vaccination. Neither gender, nor education level found to be associated with vaccination behavior.
Conclusion. Immunization rates in the adult Hispanic population are low. Interventions to improve vaccination among Hispanics who are older and lack of health insurance are urgently needed in the diverse Hispanic community.

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1651. The Impact of the 2017–2018 Influenza Season on Acute Care Hospitals in the United States: A Qualitative Evaluation of Immediate Responses and Future Preparedness

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Background. The 2017–2018 influenza season was characterized by high illness severity, wide geographic spread, and prolonged duration compared with recent years in the United States – resulting in an increased number of emergency department evaluations and hospital admissions. The current study explored how US hospitals perceived the impact of influenza during this time period, including effects on patient volumes, ways in which hospitals responded, and how lessons learned were incorporated into future influenza preparedness.
Methods. We conducted semi-structured phone interviews with capacity management personnel in short-term acute care hospitals across the United States. A random hospital sample was created using Centers for Medicare and Medicaid Services annual reports. Hospitals self-identified key informants who were involved with throughput and capacity. The interview guide was developed and pilot tested by a team of clinicians and qualitative researchers, with interviews conducted between April 2018 and January 2019. We performed thematic content analysis to identify how hospitals experienced the 2017–2018 influenza season.
Results. We achieved thematic saturation after 53 interviews. Responses conformed to three thematic domains: impacts on staff and patient care, immediate staffing and capacity responses, and future preparedness (Table 1). Hospitals almost universally reported increased emergency department and inpatient volumes that frequently resulted in strain across the hospital. Strain was created by both increased patient volume and staff shortages due to influenza illness. As strategies to address strain, respondents reported the use of new protocols, new vaccination policies, additional staffing, suspected-influenza treatment areas, and more frequent hospital administration meetings. Many hospitals reported increased diversion time. Despite experiencing high levels of strain, some hospitals reported no changes to their future influenza preparation plans.
Conclusion. Acute care hospitals experienced significant strain as a result of the 2017–2018 influenza season. Hospitals implemented a range of immediate responses to seasonal influenza, but generally did not report future planning specific to influenza.