potent *in vitro* and *in vivo* activity against *B. anthracis*. This project evaluated the *in vitro* activity of omadacycline against a larger set of *B. anthracis* strains across two laboratories.

Methods. Methods: Antibiotic susceptibility testing followed Clinical Laboratory Standard Institute methods against a collection of 53 *B. anthracis* strains at the University of Florida (UF) and 50 *B. anthracis* strains at MRIGlobal, representing human and animal isolates from North America, Africa, Europe, Asia, and Australia. Minimum inhibitory concentrations (MICs) for omadacycline and comparators at both sites (doxycycline, ciprofloxacin, levofloxacin, moxifloxacin) were determined by broth microdilution.

Results. Results: In the UF study, omadacycline demonstrated an MIC50 of 0.015 mg/L and an MIC90 of 0.03 mg/L against *B. anthracis*. Omadacycline MIC values were equal to or lower than doxycycline. In the MRIGlobal study, omadacycline demonstrated an MIC50 of 0.06 mg/L and an MIC90 of 0.06 mg/L (Table 1). All comparator MIC values were within ranges previously observed against these strains. Against a ciprofloxacin-resistant strain (MIC = 2 mg/L), omadacycline had an MIC value of 0.015 mg/L; against a doxycycline-resistant strain (MIC = 4 mg/L), omadacycline had an MIC value of 0.06 mg/L. Reproducibility was observed between the 2 laboratories for omadacycline *in vitro* activity against *B. anthracis* (Table 2).

Table 1. MIC Concentration Summary for Omadacycline and Comparators Against B. anthracis Strains

MRIGLOBAL (n = 50)					
MIC values, mg/L	Omadacycline	Doxycycline	Ciprofloxacin	Levofloxacin	Moxifloxacin
MIC_{50}	0.06	0.015	0.06	0.125	0.06
MIC_{90}	0.06	0.03	0.125	0.125	0.125
Range	0.015-0.125	0.008-4	0.125-0.25	0.015-0.25	0.03-0.25
UNIVERSITY OF FLORIDA (n = 53)					
MIC_{50}	0.015	0.03	0.12	0.25	0.25
MIC_{90}	0.03	0.06	0.25	0.5	0.5
Range	≤0.008-0.25	≤0.008-0.25	0.015-2	0.06-2	0.06-2

Table 2. Reproducibility of Omadacycline in Vitro Activity Against B. anthracis Strains

MIC value, mg/L	***B. anthracis* strain**		
	Ames	**Sterne**	**Vollum**
University of Florida	≤0.015	≤0.008	0.015
MRIGlobal	0.06	0.03	0.03

Conclusion. Based on the *in vitro* activity in both studies, omadacycline has the potential to be effective in treating anthrax infection. Reproducibility of omadacycline *in vitro* activity against *B. anthracis* was observed at 2 independent study sites.

Disclosures. **Alisa W. Serio, PhD**, **Paratek Pharmaceuticals, Inc.** (Employee, Shareholder) **Diane M. Anastasiou, BA**, **Paratek Pharmaceuticals, Inc.** (Consultant)

1209. The Evolving Nature of Syndromic Surveillance During the COVID-19 Pandemic in Massachusetts

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Session: P-71. Public Health

Background. We developed a syndromic algorithm for COVID-19 like illness (CLI) to provide supplementary surveillance data on COVID-19 activity.

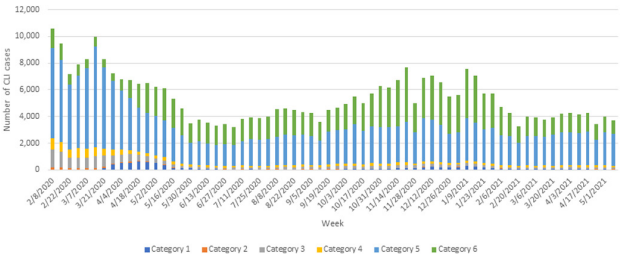
Methods. The CLI algorithm was developed using the Electronic Medical Record Support for Public Health platform (esphealth.org) and data from five clinical practice groups in Massachusetts that collectively care for 25% of the state's population. Signs and symptoms of CLI were identified using ICD-10 diagnosis codes and measured temperature.

The algorithm originally included three categories: Category 1 required codes for coronavirus infection and lower respiratory tract infections (LRTI); Category 2 required an LRTI-related diagnosis and fever; Category 3 required an upper or lower RTI and fever.

The three categories mirrored statewide laboratory-confirmed case trends during spring and summer 2020 but did not detect the increase in late fall. We hypothesized this was due to the requirements for fever and LRTI. Therefore, we added three new categories defined by milder symptoms without fever: Category 4 requires LRTI-related diagnoses only; Category 5 requires upper or lower RTI or olfactory/taste disorders; and Category 6 requires at least one sign of CLI not identified by another category.

Results. The six-category algorithm detected the initial surge in April 2020, the summer lull, and the second surge in late fall (see figure). Category 1 cases were not identified until mid-March, which coincides with the first laboratory-confirmed cases in Massachusetts. Categories 2 and 3, which required fever, were prominent during the initial surge but declined over time. Category 5, the broadest category, declined during February and March 2020, likely capturing the end of the influenza season, and successfully detected the spring surge and fall resurgence.

Weekly number of COVID-19 like illnesses by category, February 2, 2020 through May 8, 2021



Conclusion. A syndromic definition that included mild upper RTI and olfactory/taste disorders, with or without fever or LRTI, mirrored changes in laboratory-confirmed COVID-19 cases better than definitions that required fever and LRTI. This suggests a shift in medically attended care and/or coding practices during initial vs subsequent surges of COVID-19, and the importance of using a broad definition of CLI for ongoing surveillance.

Disclosures. **Michael Klompas, MD, MPH**, **UpToDate** (Other Financial or Material Support, Chapter Author)

1210. Recommendations for Screening and Diagnosis of Chagas Disease in the United States

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Session: P-71. Public Health

Background. Over 300,000 people in the United States are infected with *Trypanosoma cruzi*, the protozoan parasite that causes Chagas disease (CD). Only about 1% of estimated U.S. cases have been identified, usually through blood donor screening, and most people are unaware they have the infection. Screening is critical for increasing case detection and ensuring patients receive appropriate and timely care, but awareness of CD management strategies among healthcare providers is low. Diagnostic guidelines for CD in the United States are needed to increase provider-directed screening and diagnosis.

Methods. Screening recommendations were prepared by the U.S. Chagas Diagnostic Working Group, which consists of clinicians, researchers, and public health experts involved in CD programs. The group agreed on six main questions based on the PICO method (Population, Intervention, Comparison, and Outcome). Subgroups discussed each and proposed initial recommendations, which were then shared and validated within the larger group. The recommendations used the GRADE methodology, assigning two sets of ratings: 1) strength of the recommendation, and 2) quality of the evidence.

Results. The group recommended screening anyone who was born or lived for >6 months in South America, Central America and Mexico (Figure 1). Recent community-based studies found a prevalence of 1-3.8% in this population. Within this population, having a family member with CD, or having clinical conditions suggestive of CD, including electrocardiographic abnormalities, suggest an elevated risk. Screening women of childbearing age and infants born to seropositive women is important for preventing congenital transmission. Test performance may vary depending on several factors, including whether patients are from South America, Central America or Mexico. Confirmation therefore requires positive results on at least two serological tests based on different antigens or formats, in line with Pan American Health Organization (PAHO) recommendations. Once CD is confirmed, patients should receive an electrocardiogram and echocardiogram to monitor for development of cardiac complications.

Conclusion. These CD screening recommendations are meant to be a resource for U.S. healthcare providers to simplify testing of at-risk patients.

Disclosures. **Jen Manne-Goehler, MD, DSc**, Regeneron (Individual(s) Involved: Self): Scientific Research Study Investigator **Caryn Bern, MD, MPH**, **UpToDate (Wolters Kluwer)** (Other Financial or Material Support, Author Royalties)

1211. Incidence of All-Cause Community-Acquired Pneumonia in Ontario and British Columbia, Canada, 2002-2018; a Canadian Immunization Research Network (CIRN) study

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Session: P-71. Public Health

Background. Community-acquired pneumonia (CAP) causes substantial morbidity and mortality. There is a lack of data on the comprehensive burden of CAP across the life span in Canada. We estimated the incidence of all-cause CAP in all age groups in Ontario and British Columbia (BC), Canada.

Methods. We identified hospitalized and outpatient CAP episodes from the Discharge Abstract Database (DAD) and physician billing claims databases (Ontario Health Insurance Plan in Ontario and Medical Services Plan in BC) in both provinces. The National Ambulatory Care Reporting System was used to identify CAP episodes from emergency department visits in Ontario. CAP recorded with a primary or secondary diagnosis was identified using International Classification of Diseases 9 (480–486, 510, 513) and 10 (J10.0, J11.0, J12–J18, J86.9, J85.1) codes. We estimated the age and sex adjusted annual incidence of CAP overall, and by age groups (0–4, 5–17, 18–39, 40–64, 65–74, 75–84 and ≥85 years) according to routine childhood pneumococcal conjugate vaccine (PCV) immunization periods from 2005–2018 in Ontario and from 2002–2018 in BC. Poisson regression models were fitted with population denominators from Statistics Canada to estimate the incidence rates.

Results. Ontario had 3,607,186 CAP episodes from 2005–2015 with a mean annual incidence of 2,801 (95% confidence interval [CI]: 2,748, 2,854) per 100,000 population; incidence declined from 3,077/100,000 in 2005 to 2,604/100,000 in 2010 before increasing to 2,843/100,000 in 2018. BC had 1,146,172 CAP episodes from 2002–2008, with a mean annual incidence of 2,146 (95% CI: 2105, 2189); the incidence increased from 2,005 /100,000 in 2002 to 2,199/100,000 in 2018. A high incidence of CAP was observed in children aged 0–4 years and older adults, particularly in adults aged ≥85 years in both provinces across all PCV program periods (Figure 1).

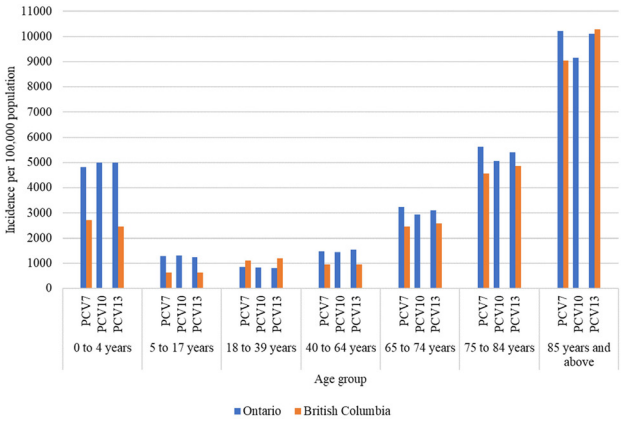

Figure 1: Age group-specific incidence of all-cause community-acquired pneumonia according to childhood pneumococcal conjugate vaccine (PCV) program periods in Ontario (PCV7 [1 Jan 2005–30 Sep 2009]), PCV10 [1 Oct 2009–31 Oct 2010] and PCV13 [1 Nov 2010–31 Dec 2018]) and British Columbia (PCV7 [1 Sep 2003–31 May 2010] and PCV13 [1 Jun 2010–31 Dec 2018]), Canada

Conclusion. CAP continues to be a public health burden in Canada despite publicly funded pneumococcal vaccination programs. Ontario seems to have higher CAP burden than British Columbia that warrants further investigation. The youngest cohort of children and older adults contribute significantly to the CAP burden.

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1212. COVID-19 and the Importance of Institutional Trust to Public Health

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Session: P-71. Public Health

Background. Institutional trust is a key component of the public health system's effectiveness. However, the COVID-19 pandemic highlighted gaps in institutional trust and hesitation. Analysis was conducted to understand correlates of institutional trust to inform communication strategies for the ongoing pandemic and future public health crises.

Methods. The Roper Center for Public Opinion/ America's Voice Project Coronavirus Index conducted a US online survey February 22-April 5, 2021 and included questions about COVID-19 experiences, attitudes and behaviors. Respondents also indicated trust in each of four institutions to provide accurate information about COVID-19: federal government, state government, CDC and national public health officials. Scores were summed to create an Institutional Trust (IT) index: the top third was classified as "High IT," the middle third "Moderate IT" and the bottom third "Low IT." Data were analyzed using $\chi 2$ tests, with z-tests for more granular between-group comparisons.

Results. Those with Low IT were significantly more likely than those with Moderate or High IT to be white, male, rural, politically conservative, married, and live with children under age 18. Low IT individuals were less likely to have been tested for COVID-19 themselves and less likely to know someone who had tested positive for COVID-19. However, Low IT respondents were more likely to have tested positive for COVID-19, even when controlling for their lower propensity to be tested. Low IT individuals were significantly more likely to have visited restaurants and stores in the past week and feel these activities posed no health risk; they also wore masks less often. Despite greater risk-taking, Low IT respondents were over five times more likely than High IT respondents to refuse the COVID-19 vaccine.

Conclusion. Low IT was associated with higher COVID-19 vaccine hesitancy as well as behavior that, at the time data was collected, put people at higher risk of contracting COVID-19. Public health officials should prioritize the development of more effective communications towards Low IT populations. Traditional methods of establishing message credibility may require modification in order to encourage Low IT individuals to participate in behaviors that enhance public health.

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

1213. Vaccine Uptake Amongst Participants in the North Carolina COVID-19 Community Research Partnership Who Were Initially Receptive or Hesitant to Receive a COVID-19 Vaccine

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Session: P-71. Public Health

Background. Public health officials are concerned that adults may refuse to be vaccinated with an approved COVID-19 vaccine thereby limiting the community health benefit. Here, we studied the self-reported intent to be vaccinated of persons in North Carolina (NC) and then measured whether they did or did not get vaccinated.

Methods. The Community COVID-19 Research Partnership (CCRP) is a large prospective study exploring COVID-19 epidemiology and sequelae in participants of several mid-Atlantic and Southern States. All participants complete an online daily survey where they are asked questions about COVID-like symptoms, infections, and their vaccination status. In addition to the daily survey, in December 2020, we implemented a short online cross-sectional survey questioning NC participants on whether they intended to be vaccinated. After completing the cross-sectional survey, we used daily survey data through 15 May 2021 to see if participants reported receiving vaccine. Unvaccinated participants who did not complete the daily survey 30 days or more prior to 15 May 2021 were excluded.

Results. 18,874 participants completed the cross-sectional survey and reported vaccination status. Of these participants, 90% were white, 68% were female, 26% were healthcare workers, and 2% self-reported COVID-19 diagnosis The median age was 54 years (IQR: 41 – 65). 79%, 13%, 9%, and 2% answered yes, unsure, no, and prefer not to answer, respectively, about intention to be vaccinated (Table). 99% of the participants who intended to receive the COVID-19 vaccine reporting being vaccinated. Those who were unsure or intended not to get vaccinated had vaccination rates of 80% and 53%, respectively. 78% of the participants who preferred not to answer were vaccinated.

Table. Vaccine intent versus vaccine status – COVID-19 Community Research Partnership, North Carolina, December 2020 – May 2021

	Vaccinated (N=17,461, % row)	Non-vaccinated (N=1,413, % row)	Overall (N=18,874, %)
Vaccine Intent			
Yes	14,582 (98.5%)	228 (1.5%)	14,810 (78.5%)
Unsure	1,929 (80.3%)	474 (19.7%)	2,403 (12.7%)
No	715 (52.7%)	643 (47.3%)	1,358 (7.2%)
Prefer not to answer	235 (77.6%)	68 (22.4%)	303 (1.6%)