

included difficulty of associating outcomes, limited post-index time period, and potential misclassification when establishing a standardized algorithm for PWID identification.

	All Drug Injectors		P-value	Opioid Injectors		P-value
	Pre-Index n=328 (#, %)	Post-Index n=398 (#, %)		Pre-Index n=146 (#, %)	Post-Index n=156 (#, %)	
Biological Sex			0.52			0.46
Male	230 (70.12)	270 (67.84)		103 (70.55)	103 (66.03)	
Female	98 (29.88)	128 (32.16)		43 (29.45)	53 (33.97)	
Race			0.09			0.64
White	223 (67.99)	245 (61.56)		118 (80.82)	124 (79.49)	
Black	104 (31.71)	148 (37.19)		27 (18.49)	29 (18.59)	
Others	1 (0.30)	5 (1.26)		1 (0.30)	3 (1.92)	
Hispanic †	123 (37.50)	134 (33.75)	0.31	65 (44.52)	57 (36.54)	0.16
Age in Years			0.11			0.17
18-29	39 (11.89)	60 (15.08)		22 (15.07)	30 (19.23)	
30-39	88 (26.83)	90 (22.61)		47 (32.19)	47 (30.13)	
40-49	67 (20.43)	108 (27.14)		36 (24.66)	48 (30.77)	
50-59	83 (25.30)	97 (24.37)		30 (20.55)	20 (12.82)	
60-65	37 (11.28)	28 (7.04)		9 (6.16)	5 (3.21)	
65+	14 (4.27)	15 (3.77)		2 (1.37)	6 (3.85)	
Insurance Status			0.88			0.90
Uninsured	166 (50.61)	196 (49.25)		85 (58.22)	95 (60.90)	
Medicaid	95 (28.96)	122 (30.65)		31 (21.23)	34 (21.79)	
Medicare + Federal	51 (15.55)	66 (16.58)		24 (16.44)	21 (13.46)	
Private	13 (3.96)	11 (2.76)		5 (3.42)	4 (2.56)	
Other	3 (0.91)	3 (0.75)		1 (0.68)	2 (1.28)	
Median Length of Stay			0.39			0.14
Expired During Study Period	15 (4.57)	17 (4.27)	0.85	5 (3.42)	4 (2.56)	0.74

† "Hispanic" is recorded as a yes/no function similar to US Census Data. Hispanics of any race and are included in the applicable race categories.

Infectious Sequela Admissions in Persons who Inject Drugs††	All Drug Injectors		P-value	Opioid Injectors		P-value
	Pre-Index n=328 (N, %)	Post-Index n=398 (N, %)		Pre-Index n=146 (N, %)	Post-Index n=156 (N, %)	
Endocarditis	13 (3.96)	29 (7.29)	0.08	6 (4.11)	12 (7.69)	0.23
Bacteremia, Sepsis	147 (44.82)	165 (41.46)	0.37	70 (47.95)	55 (35.26)	.026
Osteomyelitis of bone/spine	49 (14.94)	78 (19.60)	0.12	20 (13.70)	25 (16.03)	0.63
Skin and Soft Tissue	172 (52.44)	212 (53.27)	0.88	82 (56.16)	98 (62.82)	0.24
HIV	52	56	0.53	18	21	0.86
HCV	107	140	0.48	64	94	0.0056
Overdose Sequela	32 (9.76)	34 (8.52)	0.0006	20 (13.7)	6 (3.85)	0.0034

†† Some admissions had multiple infectious sequelae coded

Disclosures. All authors: No reported disclosures.

1644. Performance of Symptom-Based Case Definitions to Identify Influenza Virus Infection among Pregnant Women in Middle-Income Countries: Findings from the Pregnancy and Influenza Multinational Epidemiologic (PRIME) Study

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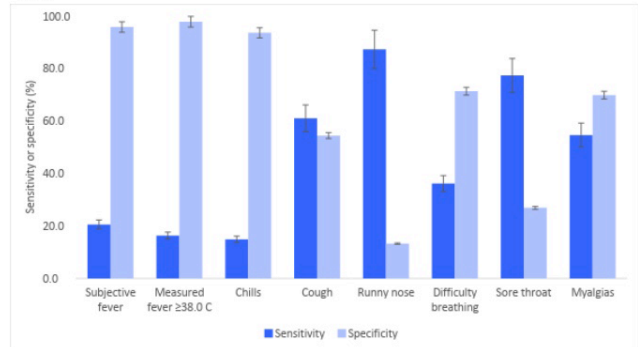
Background. The World Health Organization (WHO) recommends case definitions for influenza surveillance that are also used in public health research, though their performance has not been assessed in many risk groups, including pregnant women in whom influenza may manifest differently. We evaluated the performance of symptom-based case definitions to detect influenza in a cohort of pregnant women in India, Peru, and Thailand.

Methods. In 2017, we contacted 4774 pregnant women twice a week during the influenza season to identify illnesses with new or worsened cough, runny nose, sore throat, difficulty breathing or myalgia, and collected data on other symptoms and nasal swabs for influenza rRT-PCR testing. To identify symptom predictors of influenza, we used multivariable logistic regression with forward selection of symptoms significant in univariate analysis after controlling for country, chronic conditions, influenza vaccination, and time from symptom onset to swab collection. We calculated sensitivity and specificity of each symptom, WHO respiratory illness case definitions and a case definition based on significant predictors from the multivariable model.

Results. Of 2431 eligible illness episodes among 1,716 participants, 142 (5.8%) were positive for influenza. Among individual symptoms, runny nose was most sensitive and measured fever $\geq 38^\circ$ Celsius was most specific (Figure 1). In a multivariable model, measured fever $\geq 38^\circ$ Celsius [adjusted odds ratio = 3.8, 95% confidence interval [CI] = 2.0–7.2], cough [2.7, CI 1.6–4.7], chills [2.2, CI 1.2–3.8], and myalgia [1.2, CI 2.2, 5.3] were independently associated with influenza illness. A case definition based on these four (measured fever, cough, chills or myalgia), was 91% sensitive and 37% specific. Sensitivity and specificity of case definitions varied (Figure 2).

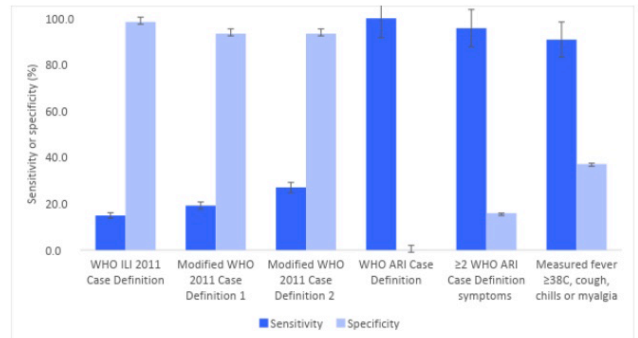
Conclusion. While a case definition based on one or more of fever, chills, cough or myalgia is highly sensitive and moderately specific among pregnant women, case definitions requiring measured or subjective fever may miss many influenza cases making them sub-optimal for studies of burden or vaccine efficacy. The intended use of case definitions should be considered when evaluating the tradeoff between sensitivity and specificity.

Figure 1. Sensitivity and specificity of individual symptom-based case definitions to identify influenza virus infection among a cohort of pregnant women in middle-income countries, India, Peru and Thailand, PRIME 2017.



Error Bars Indicate 95% confidence intervals. RT-PCR for influenza is used as the gold standard for these calculations.

Figure 2. Sensitivity and specificity of combination symptom-based case definitions to identify influenza virus infection among a cohort of pregnant women in middle-income countries, India, Peru and Thailand, PRIME 2017.



WHO Influenza-like illness (ILI) 2011 Case Definition includes measured fever $\geq 38.0^\circ$ Celsius and cough. Modified WHO 2011 Case Definition 1 includes measured fever $\geq 38.0^\circ$ Celsius or subjective fever and cough. Modified WHO 2011 Case Definition 2 includes measured fever $\geq 38.0^\circ$ Celsius or subjective fever or chills and cough. WHO ARI Case Definition includes at least one of the following: cough, sore throat, runny nose or difficulty breathing. Final model includes measured fever $\geq 38.0^\circ$ Celsius, cough, chills or myalgia. Error bars indicate 95% confidence intervals. RT-PCR for influenza is used as the gold standard for these calculations.

Disclosures. All authors: No reported disclosures.

1645. High Seroprevalence and Seroconversion Rate of *Borrelia burgdorferi* Infection Among Hispanic/Latino Immigrant Workers in Eastern Suffolk County, New York: A Longitudinal-Based Study

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Background. Lyme disease, caused by *Borrelia burgdorferi*, continues to be the most commonly reported vector-borne disease in the United States (US) affecting the