

## NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

**Submission Id:** 5910

### **Title**

*Acute cough in outpatients: what causes it, how long does it last, and how severe is it by pathogen? (EAST-PC)*

### **Priority 1 (Research Category)**

Acute respiratory infections

### **Presenters**

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### **Abstract**

Objective: To describe the symptoms, duration, severity, and microbiologic etiology of lower respiratory tract infection (LRTI) in outpatients. Study Design and Analysis: This was a prospective cohort study of acute respiratory infections. Baseline data included demographics, signs, symptoms and PCR for 46 viruses and bacteria. Severity of symptoms was reported for up to 28 days follow-up via diary and text message. Setting: US primary or urgent care setting. Population Studied: Adults presenting to US primary or urgent care sites with a chief complaint of cough and at least one other systemic or respiratory symptom consistent with LRTI. Outcome Measures: The Bronchitis Severity Score (BSS) assessed severity at baseline; overall severity was defined as the area under the symptom severity curve. Results: Of 718 patients with complete baseline data, 618 had valid PCR results and of those 443 were followed until symptoms resolved. Of those with valid PCR, 34.1% had 1+ viruses detected, 27.2% had 1+ bacteria, and 22.5% had both. Symptoms more likely with viral or mixed infection included feverishness, chills, sweats, being generally unwell, interference with activity, appetite loss, fatigue, coryza, myalgias, and chest congestion, while moderate to severe sputum and colored sputum were associated with bacterial infection. Mean duration of cough was 14.7 days with viruses, 17.3 with bacteria, 16.9 with mixed infection and 18.4 with no detection. Severity did not differ at baseline by BSS; overall severity of cough by area under the symptoms severity curve was slightly lower for viral infections (20.9 points) than for other groups (24.2-26.3). The most common potential pathogens were Haemophilus influenza (28.0%), Moraxella catarrhalis (16.2%), Streptococcus pneumoniae (10.2%), rhinovirus (17.3%), influenza (12.8%), SARS-CoV-2 (11.5%), and seasonal coronaviruses (8.1%), with no important differences in duration or severity by virus or bacteria. Conclusions: Systemic symptoms suggested viral infection. The mean duration of cough was 16.4 days. Consistent with European studies,

the type of infection or potential pathogen was not an important predictor of the duration or severity of LRTI.

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