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Detection of viral respiratory and gastrointestinal pathogens among healthy adults and children of an informal settlement (Kibera) in Nairobi, KenyaD.O. Mogeni^{1,*}, C.L. Otieno², G. Awiti¹, N. Wamola¹, B. Fields², J. Neatherlin², G.M. Bigogo¹, J.M. Montgomery²¹ Kenya Medical Research Institute/Centers for Disease Control and Prevention (KEMRI/CDC), Nairobi, Kenya² Centers for Disease Control and Prevention-Kenya (CDC-K), Nairobi, Kenya**Background:** Asymptomatic individuals (AIs) serve as reservoirs of pathogens associated with disease transmission. The objective of this study was to identify the presence and diversity of selected viral respiratory and gastrointestinal (GI) pathogens in AIs among residents of an informal settlement in Nairobi, Kenya.**Methods & Materials:** In 2006, KEMRI/CDC established a population-based infectious disease surveillance site within Kibera in Nairobi, Kenya. AIs (healthy controls) were enrolled as part of the system among persons who presented to the study's referral facility (Tabitha Medical Clinic). Persons presenting without current or previous 2 weeks history of fever, respiratory or diarrheal symptoms were eligible for enrollment as healthy controls. Following consent, participants provided stool and nasopharyngeal/oropharyngeal (NP/OP) specimens. Stool samples were tested by culture for bacterial pathogens and rotavirus by enzyme-linked immunoassay. Respiratory viruses were detected in NP/OP swabs by real time PCR.**Results:** Between 01st November 2008 and 31st December 2011, 384 stool samples and 779 NP/OP swabs were obtained from AIs. Pathogens were found in 23 (6.0%) of the 384 stool samples. *Shigella*, 10 (43.5%), was the predominant bacterial pathogen isolated; *S. dysenteriae* (10%), *S. flexneri* (70%), and 2 unsubtypeable *Shigella* species. Other bacterial species identified included *Campylobacter coli* (4.3%) and *C. jejuni* (17.3%). Rotavirus was the only viral pathogen targeted for isolation; however, it was only detected in <2% of the participants (n=384; 1.8%). Of the 779 NP/OP swabs, adenovirus (11%), respiratory syncytial virus (RSV) (2.8%), human metapneumovirus (hMPV) (2.7%), influenza virus type A and B (2.3 and 0.5%, respectively), parainfluenza (PIV) type 1, 2 and 3 (0.9, 1.0 and 1.9%, respectively) were detected. Adenovirus, hMPV, RSV, and influenza B were found more frequently in ages 5-17 years (28.1%, 33.3%, 45.5%, and 75% respectively). Adenovirus (78.9%) and all cases of RSV and PIV 1-3 in 18-34 years were identified more among females. Within the same age group Influenza A (85.7%) and hMPV (60%) were more common among males.**Conclusion:** AIs did show evidence of infection and could serve as reservoirs for these pathogens through close contact in this urban settlement especially among immunocompromised individuals.<http://dx.doi.org/10.1016/j.ijid.2014.03.885>**Type: Poster Presentation**

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Emergence of murine typhus in Reunion Island, South West Ocean Indian Island: Epidemiological, clinical, laboratory features of 10 casesE. Balleydier^{1,*}, G. Camuset², C. Socolovschi³, M.P. Moiton⁴, B. Kuli², A. Foucher², P. Poubeau², G. Borgherini², G. Wartel⁴, H. Audin⁵, P. Parola³, D. Raoult³, F. Pagès¹, L. Filleul¹¹ Institut de Veille Sanitaire - Cire, Sainte Denis Cedex/REUNION ISLAND, France² Groupe Hospitalier Sud Réunion (GHSR), Saint Pierre, France³ Faculté de la Méditerranée, Marseilles, France⁴ Centre hospitalier universitaire - Saint Denis, Sainte Denis Cedex/REUNION ISLAND, France⁵ Centre hospitalier Gabriel Martin, Saint Paul Cedex, France**Background:** Murine typhus (MT) is an acute zoonotic infection caused by *Rickettsia typhi*, worldwide distributed but under-diagnosed and largely under-reported. In early 2012, two MT autochthonous cases were identified in Reunion Island. Thereafter new cases were confirmed. The objective was to describe clinical manifestations of the disease and epidemiological data.**Methods & Materials:** Suspect case of MT, presenting prolonged fever, headache and/or arthromyalgia reported by clinicians were confirmed by laboratories. A case was defined as a patient was confirmed by Western Blot study, or real-time quantitative PCR assay, or by seroconversion or increase the level of antibody response against *Rickettsia typhi* using the indirect immunofluorescence test, performed or confirmed by the National Reference Center-WHO collaborative center for Rickettsial Diseases, Marseille. Clinical and epidemiological data using a grid of reading and a specific form were collected by phone.**Results: (preliminary results)**

A total of 10 autochthonous cases have been identified so far: 6 in 2012, 2 in 2013 and 2 cases were retrospectively notified in 2011. Eight cases occurred during the southern summer. The average age of the patients was 45 (range 21- 55 years) and 5 were male. The patient

all lived in private house located in the Western and Southern part of the island in peri-urban areas and none of them had travelled overseas.

All the patients developed a fever (average of 13,6 days). Other main symptoms were arthromyalgia (9/10), headaches (8/10), and skin rash (6/10). One of the clinical specificities was the presence of pharyngitis (5/10) and ophthalmological signs like uveitis, floater (2/10). Biochemical findings were hepatitis (transaminases > 2N) in 8/10 cases, lymphopenia (lymphocytes <1000/mL) in 7/10 cases and thrombocytopenia (platelets < 150 000/mL) in 7/10 cases.

Risk factors such as close contact with pets were observed (6/7), recent derattings of their accommodations and neighborhoods (4/6), and outdoor activities (4/7).