

United States. To ensure the US meets PAHO standards, we estimated the rate of MLI investigations using a large insurance claims database.

Methods. We used the 2009–2016 Truven Health MarketScan[®] Databases to identify MLI and MLI investigations. MLI were defined using International Classification of Diseases (ICD)-9/10 diagnostic codes in two ways: *a priori*, using the Council of State and Territorial Epidemiologists (CSTE) measles case definition or empirically, using ICD codes on insurance claims with a measles diagnostic code. MLI investigations were defined as MLI occurring up to 5 days prior to a measles diagnostic code or billing code for measles serology testing. We computed annual rates of MLI investigations per 100,000 population.

Results. We identified ~35.5 million MLI using the *a priori* definition. Of these, 24,010 had a measles serology code within 5 days; median age was 30 and 51% were aged 18–34 years. Using the empirical definition we identified ~46 million MLI. Of these, 29,940 were coupled with a measles serology code; median age was 31 and 50% were aged 18–34 years. The median annual rates for MLI investigations were 3.2 (*a priori*) and 4.3 (empirical) per 100,000 population.

Conclusion. Maintaining measles elimination requires continued vigilance by clinicians and high-quality case-based surveillance. The estimated rates of MLI investigations in this US population exceeded the PAHO standard, suggesting that the quality of US measles surveillance is robust.

Disclosures. All authors: No reported disclosures.

661. Surveillance of Rabies Prophylactic Treatments After Exposure to Animals: 5 Years Experience

Georgios Dougas, DVM¹; Vasileia Konte, MD, MSc¹; Konstantinos Mitrou, RN, MSc¹; Emmanouel Christodoulou, MD²; Michail Stavrakakis, DVM²; Agoritsa Baka, MD¹; Theano Georgakopoulou, MD, MSc, MPH, PhD¹; Symeon Metallidis, MD, PhD³; Ioannis Istikoglou, RN, MSc⁴; Chrysa Pargiana, MD⁵; Aikaterini Liona, Adm.¹; Foteini Tsalikoglou, MD, MSc⁶; Myrsini Tzani, DVM, MSc⁷; Marilina Korou, DVM, MSc, PhD⁷; Konstantia Tasioudi, DVM, MSc, PhD⁸; Maria Mavrouli, Biologist, MSc, PhD⁹; Georgia Vrioni, MD, PhD⁹ and Sotirios Tsiodras, MD, MSc, PhD, FIDSA¹⁰.
¹Hellenic Center for Disease Control and Prevention, Athens, Greece, ²Department of Internal Medicine, Papanikolaou General Hospital of Thessaloniki, Thessaloniki, Greece, ³Internal Medicine Department, Infectious Diseases Division, Medical School, Aristotle University of Thessaloniki, Thessaloniki, Greece, ⁴Infection Control Committee, "AHEPA" University Hospital, Thessaloniki, Greece, ⁵Infectious Diseases Hospital of Thessaloniki, Thessaloniki, Greece, ⁶Ministry of Health, ATHENS, Greece, ⁷Department of Zoonoses, Animal Health Directorate, Directorate General of Veterinary Services, Ministry of Rural Development and Food, Athens, Greece, ⁸Virology Laboratory – National Reference Laboratory for Rabies in animals, Department of Molecular Diagnostics, FMD, Virological, Rickettsial & Exotic Diseases, Athens Veterinary Center, Ministry of Rural Development and Food, Athens, Greece, ⁹Department of Microbiology, Medical School, University of Athens, Athens, Greece, ¹⁰National and Kapodistrian University of Athens Medical School, Athens, Greece

Session: 66. Public Health: Epidemiology and Outbreaks

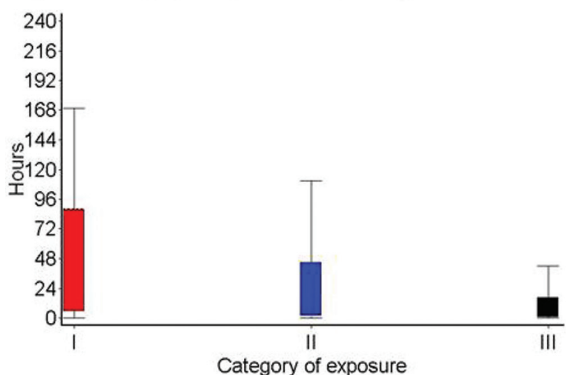
Thursday, October 4, 2018: 12:30 PM

Background. Rabies re-emerged in Greek fauna in October 2012, 25 years after the last report in animals. Hellenic Center for Disease Control & Prevention developed a semi-active surveillance system to monitor the medical management of potentially exposed persons to rabies. This study aims to providing insight on the biologicals administered and the epidemiological characteristics of the cases where post-exposure prophylaxis was initiated after contact with animals.

Methods. Data received from November 2012 to December 2017 on demographics, exposure event, animal species involved, category of exposure (COE) according to WHO, vaccination history, the veterinary evaluation of the animal and the type of treatment administered, were analyzed with Epidata Analysis V.2.2.2.180.

Results. A total of 1,616 cases (63.2% males) received rabies post-exposure prophylaxis. In 94.7% of cases cleansing of the wound before visiting a medical practitioner took place during the first 3 hours after the exposure whereas 75.1% of victims presented at a healthcare setting during the first 24 hours; COE III cases had shorter time interval ($P < 0.01$), before arrival at a hospital (mdn = 1.3 hours) compared with COE II (mdn = 3.6 hours) or COE I (mdn = 88.2 hours) (Figure 1);

Figure 1. Time elapsed from exposure until presentation to a hospital by WHO category of exposure, boxplot diagram, Greece 2012–2017



55.1% were initiated on a vaccine series, 43.1% received both vaccine and immunoglobulin and 1.7% immunoglobulin alone. Exposure to stray dogs represented 67.3% of all incidents (Table 1).

Table 1: Post-Exposure Prophylaxis (PEP) by Animal Involved, Greece, 2012–2017

Species	Status	PEP	%
Dog	Ownerless	1,087	67.3
	With owner	252	15.6
	Unknown	20	1.2
Cat	Ownerless	120	7.4
	Companion	17	1.1
	Unknown	1	0.1
Fox		48	3.0
Bat		33	2.0
Other domestic species		6	0.4
Other wildlife species		18	1.1
Unidentified		14	0.9
Total		1,616	100

No human case was recorded.

Conclusion. The vast majority of the reported treatments involved stray dogs as Greek legislation permits free roaming of ownerless companion animals in urban settings. Bat was the fourth most frequently reported species in our treatment series. Surveillance of post-exposure prophylaxis represents a valuable tool for outlining the epidemiological profile of treated cases and for planning of effective policies for the management of rabies.

Disclosures. All authors: No reported disclosures.

662. Tick Borne-Associated Thrombocytopenia Among United States Veterans in Long Island New York

Olga Kaplun, MD¹; Beth Lemaitre, MT²; Zeena Lobo, MD³ and George Pseudos Jr., MD⁴; ¹Infectious Diseases, Stony Brook University Hospital, Stony Brook, New York, ²Microbiology/Pathology, Northport Veterans Affairs Medical Center, Northport, New York, ³Infectious Disease, Veterans Affairs Medical Center, Northport, New York, ⁴Infectious Diseases, Northport Veterans Affairs Medical Center, Northport, New York

Session: 66. Public Health: Epidemiology and Outbreaks

Thursday, October 4, 2018: 12:30 PM

Background. Long Island, New York, is highly endemic for tick borne illnesses (TBI) with rising numbers of cases in the past years. Thrombocytopenia is a known complication of babesiosis caused by *Babesia microti*, anaplasmosis caused by *Anaplasma phagocytophilum*, and ehrlichiosis caused by *Ehrlichia chaffeensis*. We identified cases of thrombocytopenia attributed to TBI in our institution.

Methods. Retrospective chart review of patients diagnosed with babesiosis, anaplasmosis, and ehrlichiosis from 2000 to 2017 at Northport Veterans Affairs Medical Center. Demographics, method of diagnosis (PCR/serologies), CBC/chemistries, treatment choices, and outcomes were analyzed.

Results. Thirty-two veterans (VETS) were identified with the following TBI: Babesiosis 22, Ehrlichiosis 6, Anaplasmosis 4. The majority of cases (19) were from Suffolk County, Long Island. The median (MED) age of this group was 62 years (range 31–89). Ninety-one percent were Caucasian, 9% Black. 37.5% had history of tick bite. The MED temperature on presentation was 101.9°F (range 97.6–105.2°F). 56% had HTN, 6% DM, 37% HLD, 9% hepatitis C, 3% HIV. Laboratory studies: MED platelet count 88,000/μL (36,000–161,000); MED hemoglobin 12 gm/dL (5.6–15.6); MED ALT 41 IU/L (6–330); MED LDH 335 IU/L (193–1,322). Twelve VETS had positive C6 peptide. The peak MED *B. microti* parasitemia was 1.4% (0.1–3%). PCR tests were available in the later years of the study period: three were positive for *E. chaffeensis*, two for *A. phagocytophilum*, and 14 for *B. microti*. The majority of the cases (19) were observed after year 2010. Morulae were seen in only one case. Haptoglobin in eight VETS was undetectable. One veteran with history of splenectomy and babesiosis with 3% parasitemia required exchange transfusion with 12 units of PRBCs. Two other babesiosis cases required regular transfusion of PRBCs. 20 babesiosis cases were treated with azithromycin-atovaquone and two with clindamycin-primaquine. Doxycycline was used in the other cases. One patient developed NSTEMI and required coronary stent placement. Platelet counts returned to baseline levels with treatment. No deaths occurred.

Conclusion. The incidence of TBI in Long Island, New York is rising. PCR testing for TBI can be utilized in our VETS presenting with febrile illness and thrombocytopenia to help identify the possible tick borne pathogen during the months of high tick activity.

Disclosures. All authors: No reported disclosures.

663. Characteristics, Treatment Patterns, and Outcomes of Outpatients With Rickettsial Diseases in a Large, Commercially Insured Population: United States, 2005–2016

Alison Binder, MS; Amy E. Peterson, DVM, PhD and Paige Armstrong, MD MHS; Rickettsial Zoonoses Branch, Centers for Disease Control and Prevention, Atlanta, Georgia

Session: 66. Public Health: Epidemiology and Outbreaks

Thursday, October 4, 2018: 12:30 PM