(LOS) among hospitalised influenza confirmed cases in King Abdulaziz Medical City – western Saudi Arabia.

Methods A retrospective review of laboratory-confirmed influenza cases admitted to King Abdulaziz Medical City during the period from January to December 2016 was conducted. Identified variables included age, gender, influenza strains and associated comorbidities.

Results Among the 556 laboratory-confirmed influenza cases during the study period, 157 patients were admitted (28.2%). More than half (52.2%) of the admitted patients were females, 20.4% were ≤5 years old, 51.6% were >5–65 years old and 28.0% were >65 years old. Healthcare workers represented 3.2% of the admitted patients. Influenza A-non H1N1 represented 65.6% followed by influenza B (36.3%) and influenza A-H1N1 (10.8%). Some patients have more than one episode of influenza. Most patients (65.0%) were admitted for more than 2 days (41.4% for 2–5 days and 23.6% for more than 5 days). Length of stay was significantly longer among elderly patients (>65 years old) and patients with DM, cardiac, chronic respiratory, immune deficiency diseases and with increased number of co-morbidities, however, no statistical significant association was reported according to influenza strains.

Conclusion Significant number of patients were admitted because of influenza for duration more than 2 days. Length of stay was associated with chronic morbidities and old age. Enhancement of immunisation programs especially for high risk patients is essential for reducing burden of influenza on patients and healthcare system.

1365 THE INCIDENCE OF COMMUNITY ACQUIRED PNEUMONIA BY OCCUPATION

[1]Anil Adisesh*, [1]Anne Theriault, [2]Donna MacKinnon-Cameron [2]Ardith Ambrose, [3]Duncan Webster, [3]Stefanie Materniak, [4]Sylvie Trottier, [4]Guy Boivin, [4]Isabelle Chabot, [5]Anne McCarthy, [5]Stephanie Carson, [5]Wanda Allen Shelly McNeil[2]. [1]*Dalhousie Medicine New Brunswick, Dalhousie University, Saint John, New Brunswick, Canada*; [2]*Canadian Centre for Vaccinology, IWK Health Centre and Nova Scotia Health Authority, Dalhousie University, Halifax, Nova Scotia, Canada*; [3]*Horizon Health, Saint John, New Brunswick, Canada*; [4]*Centre Hospitalier Universitaire de Québec, Québec, Québec, Canada*; [5]*The Ottawa Hospital, Ottawa, Ontario, Canada*

10.1136/oemed-2018-ICOHabstracts.596

Introduction Reversible, modifiable risk factors are associated with a greater risk of developing community acquired pneumonia (CAP). Welders of working age are 3.5 times more likely to die from pneumococcal pneumonia than workers in other jobs. A higher risk of CAP is seen in workers exposed to any type of metal fume and this excess risk is limited to below the age of 65 years, indicating a reversible susceptibility. Other causes of CAP may also be related to occupation or recent working conditions.

Methods At 12 sites across Canada patients admitted to hospital with CAP have been recruited to participate in a wider study. As a pilot we added questions regarding occupation. The information was coded using the Canadian National Occupational Classification (NOC) 2011. Data were used to calculate percentages and compare occurrences of pneumonia across occupations.

Results We obtained occupation data on 171 cases (now 671). The NOC codes were aggregated to the ten single digit NOC codes. Those in 'trades, and related fields' comprised 26% (n=44) of cases when including retired workers. There was a significantly greater proportion of cases 32% (n=29, p=0.05, Chi=3.834) amongst current workers in 'trades and related occupations' compared to workers in all other jobs 68% (n=62). There were five single digit NOC codes including 'trades and related occupations' where the proportion of cases amongst current workers was higher than in those retired.

Conclusion Our data suggests workers in 'trades and related fields' are more at risk of CAP with the proportion affected exceeding that of those employed in this group, 25.5% (StatCan, 2011). Few studies have analysed occupations and exposure as risk factors for developing CAP. The reduction of cases in those retired 'trades and related occupations' compared to current workers may represent an occupational effect.

999 LATENT TUBERCULOSIS INFECTION AMONG HEALTHCARE WORKERS AT A GENERAL HOSPITAL

D Melo*, T Pinto, E Silva, M Bastos, L Pires, AP Sardo, F Mautempo. *Occupational Health and Work Medicine Service, Centro Hospitalar do Baixo Vouga, Aveiro, Portugal*

10.1136/oemed-2018-ICOHabstracts.597

Introduction Healthcare workers (HCWs) have a higher risks of contracting tuberculosis (TB) than general population. International and national policies recommend routine screening of latent tuberculosis infection (LTBI) as an essential component in the control and prevention of TB in healthcare facilities.

Methods From January 2008 to December 2016, 1759 hospital employees were screened for LTBI. Symptom assessment and chest X-ray were conducted to exclude active TB, and tuberculin skin test (TST) and/or QuantiFERON-TB Gold test (QFT) were performed to diagnose LTBI.

Results At the end of 2016, 1054 active workers were screened one or more times, totalizing 1810 screenings; 81.5% were female and 18.5% were male; mean age was 42 years. None were found to have active TB. LTBI prevalence in the screened population was 17.7% (n=187): 101 individuals had a QTF positive test and 86 didn't perform QTF test but had a TST ≥15 mm. The majority were positive for LTBI at the first screening (n=110; 58.8%). Among the screened HCWs, medical aid assistants had the highest prevalence of LTBI (21.7%), followed by nurses (19.4%), administrative and supportive staff (14.4%), while physicians had the lowest prevalence (12.4%) of LTBI. QFT was negative in 47.3% of the individuals with TST ≥15 mm (n=61, which 41 submitted to repetitive TST testing), and in 76.5% of the cases with TST ≥10 mm but <15 mm (n=65, which 37 submitted to repetitive TST testing).

Discussion Since 2015, Portugal has been a low-incidence country regarding TB. The prevalence of LTBI in HCWs is relatively high as far as 17,7%. As a result, active screening for TB and LTBI is needed for these workers. Screening with TST and QTF is a cost-effective approach as high numbers of discordant TST positive/QTF negative results are probably caused by BCG vaccination or boosting due to repetitive TST testing.

1000 TUBERCULOSIS RISK ASSESSMENT IN HOSPITAL SETTINGS

[1]D Melo*, [1]T Pinto, Â Rodrigues[2], [1]E Silva, [1]M Bastos, [1]L Pires, [1]AP Sardo, [1]F Mautempo. [1]*Occupational Health and Work Medicine Service*; [2]*Risk Management Office, Centro Hospitalar do Baixo Vouga, Aveiro, Portugal*

10.1136/oemed-2018-ICOHabstracts.598

Introduction Tuberculosis (TB) is an occupational hazard for healthcare workers. National and internationals policies establish occupational TB risk assessment through the number of patients with TB per year for the whole facility. However, in an hospital setting with different workplaces, it's important to independently classify TB risk in every work environment in order to implement cost-effective preventive measures.

Methods We establish a TB risk matrix for our 500-beds hospital and we applied it retrospectively to each department from 2014 to 2016. We studied the following variables: frequency (number of inpatients with infectious TB per service per year), exposure (period of time without isolation measures per patient or, in case of outpatient setting, performance of high-risk procedures for transmission) and severity of the occupational disease.

Results The highest risk of occupational TB was found through the studied years in Emergency, Pneumology and Infectiology Departments. However, there was a decrease in the last year due to better isolation measures. Internal Medicine and Otorhinolaryngology wards were considered very high-risk departments due to prolonged exposure to TB patients without any control procedures. Imageology and Primary Care ward were consistently classified as high-risk as result of the high number of TB patients assisted. Exceptionally, in 2015, Intensive Care and Stroke units as well as Psychiatry department were found to have very high-risk TB infection due to a prolonged admission of one patient without isolation procedures. The other departments were classified as moderate or low risk.

Discussion All healthcare institutions should conduct TB risk assessment periodically as risk classification may change. These results allow to identify which departments have high-risk of occupational TB infection, in order to undertake specific preventive strategies and TB screening accordingl.

394 FUNGAL KERATITIS IN AUXILIARY GARBAGE COLLECTOR AS AN OCCUPATIONAL DISEASE. CASE REPORT

BS Sanchez*, Y Contreras, S Avelar, P Hurtado. *UIDAC, Research Unit, Teaching and Clinical Support in Occupational Health, IMSS, Guadalajara, Mexico*

10.1136/oemed-2018-ICOHabstracts.599

Introduction Infectious keratitis is a serious ocular pathology with potentially catastrophic visual results, being this one of the most prevalent causes of irreversible blindness worldwide, according to the WHO, with a prevalence ranging from 6% to 60%, predominantly in developing countries.

Methods 45 years old man worker, with history of myopia with contact lens wear for 3 year, urban waste collector since 3 years and 9 months ago, without personal protection equipment, while, working had a right eye exposure from a garbage bag that was being compressed in a collecting truck, rubbing his eye immediately and removing contact lenses 5 hours later. One day later, he presented decreased visual acuity, hyperemic conjunctiva and leukoma, appearing to the ophthalmologist who indicated moxifloxacin ophthalmic, presenting partial recovery of visual acuity. 15 days later he continued with leukoma, which yielded to treatment with fluconazole, but the evolution continued with sudden decrease in vision 20/400, establishing diagnosis of 5 × 4 mm corneal ulcer, receiving treatment with a patch of cyanoacrylate and a bandage lens on 3 occasions without improvement, requiring corneal transplantation performed 8 months later.

Results Direct fundoscopy, Goldmann lens: papilla with excavation of 0.4 × 0.4 mm, central emergency vessels, slimmed vascular pattern, cornea with central opacity at stromal oedema expenses and corneal centre ulcer of 5 × 4 mm.

Discussion During garbage collection workers are exposed to biological agents such as Aspergillus, Fusarium and Candida from organic materials; That without the use of appropriate personal protective equipment and combined with the use of contact lenses increases the risk of developing ocular pathologies such as fungal keratitis. Through symptomatology, physical exploration, and evolution of the pathology, the causal relationship was corroborated, cause-effect, work-injury, being determined as if occupational disease.

182 THERE'S A RAT IN THE LAB – RAT BITE AND RAT BITE FEVER IN THE OCCUPATIONAL HEALTHCARE SETTING

WLC Van Hooste*. *MD, Mediwet Occupational Health Services, External Service for Prevention and Protection at Work, Ghent, Belgium*

10.1136/oemed-2018-ICOHabstracts.600

Introduction Ratborne diseases are a.o. leptospirosis, hantavirosis, tulaeremia, plague, rickettsiosis, pasteurellosis, rat bite fever and parasitical infections. Up to 10 percent of all ratbites results in 'rat bite fever' (RBF). RBF is a designation for 2 diseases caused by different gram negative bacteria: streptobacillary RBF, by *Streptobacillus moniliformis*, a rod-shaped bacteria and less common spirillary RBF or '*sodoku*', by *Spirillum minor*, a spiral-shaped bacteria which occurs more in Asia (Japan). Streptobacillary RBF presents as a local skin lesion, followed abruptly by flu-like illness with fever, chills, headache, vomiting, pain of joints or muscles about 3–10 days after the initial injury. Within 2–4 days a diffuse maculopapular or petechial rash involving the extremities, especially palms and soles, appears. Transmission occurs by a bite or scratch of a rodent or predator of rats, as well as by ingestion of food or water contaminated by a rat. Ingestion leads to the gastrointestinal form of disease known as '*Haverhill fever*', characterised by pharyngitis and vomiting. Relapsing fever and polyarthritis develop in 30 and 50 percent respectively.

Methods We studied the literature from the past 100 years to search for the occupational risk factors of rat bites and rat bite fever.

Result Numerous laboratories use rats as experimental animals, so we retrieved numerous cases from the lab. Other occupations at risk were pest control workers, cleaning workers, manual labourers in a warehouse, pet stores employees, veterinarians and vet personnel, farmers and rat breeders. As pet rats are becoming more popular, RBF rates are rising.

Discussion Ratbites are probably underreported. The diagnosis of RBF can be challenging and easily be overlooked. Unspite