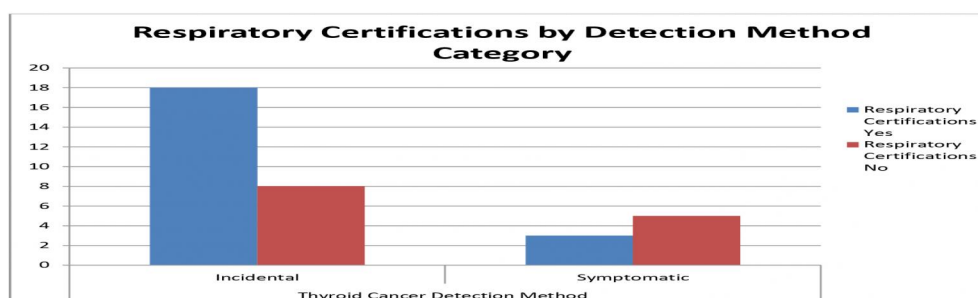


**MECHANISM OF DETECTION OF THYROID CANCER AMONG WORLD TRADE CENTER-EXPOSED RESCUE AND RECOVERY WORKERS** Rachel Zeig-Owens\* Hilary Colbeth, Nadia Jaber, Charles Hall, Molly Skerker, Natalia Genere, Juan Brito, David Prezant, Rachel Zeig-Owens, (Fire Department of the City of New York (FDNY); Montefiore Medical Center)

Background: Positive associations of World trade Center (WTC)-exposure with thyroid cancer (TC) have been documented; but to date, none of the compounds found at the WTC disaster site have proven to be associated with TC. Although exposure to radiation may cause TC; only baseline levels were reported at the WTC site after the disaster. Instead, the elevated risk might be attributed to incidental detection as a result of increased medical surveillance. Aims/objectives: To classify the detection method (i.e., incidental vs. symptomatic) of TC cases via chart review, and to describe how incidental and symptomatic cases compare in terms of demographic make up and medical history. Methods/Approach: The study population consisted of 77 FDNY firefighters and Emergency Medical Service (EMS) workers diagnosed with TC post- September 11, 2001 (9/11) and arrived at the disaster site anytime between 9/11 and July 25, 2002. The detection method for TC was defined as symptomatic or incidental based on criteria used by Brito et al. Results: Of the total population, the mean age at diagnosis was 50.2 ( $\pm 10$ ) years and mean time to diagnosis after 9/11 was 10.2 ( $\pm 4.7$ ) years. Information relating to detection method was not found for 43 cases; however, they were demographically similar to the remaining 34 including in age at diagnosis, time to diagnosis, and WTC arrival time. Among the 34 cases for which a detection method was identified, 26 (76%) were incidentally detected and 8 (24%) were symptomatic. Lower respiratory conditions were verified among 69% of incidental cases and 38% of symptomatic cases. Conclusions: The majority of TC cases in which mechanism of detection could be determined were incidentally identified; however, continued exploration of the remaining 43 is warranted and ongoing. Most incidental cases had a WTC-related lower respiratory condition, indicating a history of frequent and detailed surveillance of their disease whereby an asymptomatic TC could be unveiled.





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**Minneapolis, Minnesota – June 18-21, 2019**