

EXTREME TEMPERATURE EVENTS AND HEALTH IMPACT ON OLDER ADULTS LIVING IN BUENOS AIRES. COMPARATIVE ANALYSIS OF 3 STUDIES.

FONTAN, SILVIA¹; RUSTICUCCI, MATILDE²

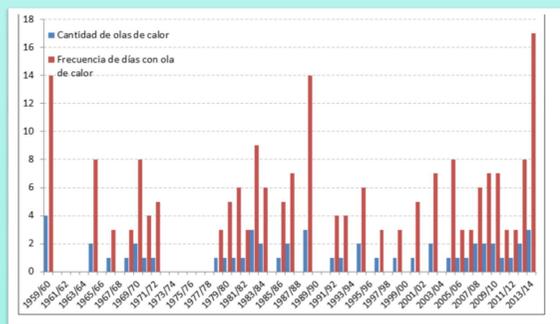
¹ DEPARTAMENTO CIENCIAS DE LA SALUD. UNIVERSIDAD NACIONAL DE LA MATANZA . e-mail: silvifontan@gmail.com

² DEPARTAMENTO DE CIENCIAS DE LA ATMÓSFERA Y LOS OCÉANOS - FACULTAD DE CIENCIAS EXACTAS Y NATURALES UNIVERSIDAD DE BUENOS AIRES / CONICET (DCAO-UBA/CONICET) e-mail: mati@at.fcen.uba.ar

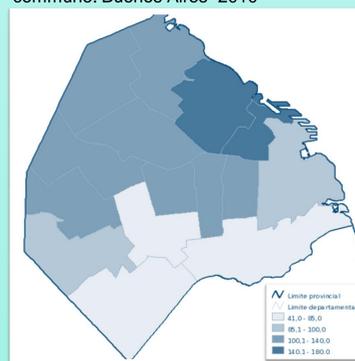
INTRODUCTION

Buenos Aires City shares the pattern of increased extreme temperature events, the frequency of extreme heat waves, thus, increasing temperatures, increasing life expectancy with a progressive increase in the population of older adults and the increasing prevalence of chronic diseases and obesity make it necessary to produce knowledge oriented towards taking timely measures targeted at urban populations.

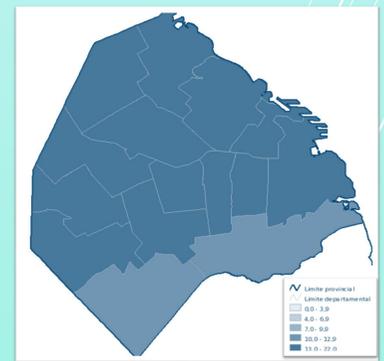
Heat waves and frequency of days with waves in Buenos Aires between 1959 2014.



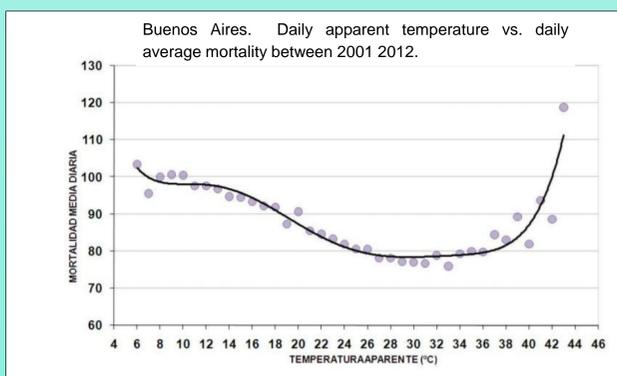
Persons 65 years old and over for every hundred children under 15 years of age, by commune. Buenos Aires 2010



Buenos Aires City by commune. Population 65 years old or more. 2010



Three studies that analyze the relationship of extreme heat wave events with morbidity or mortality of older population.

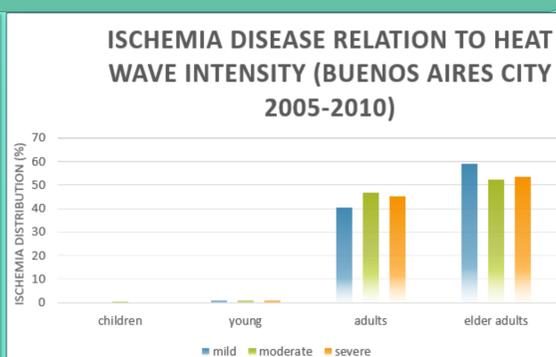
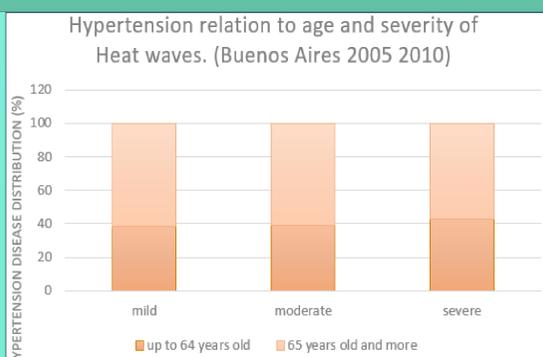


Almeira, G; Rusticucci, M; Suaya, M. 2016. Relationship between mortality and extreme temperatures in Buenos Aires and Rosario. Meteorologica Vol 41, 2 Page 65-79. Open Access

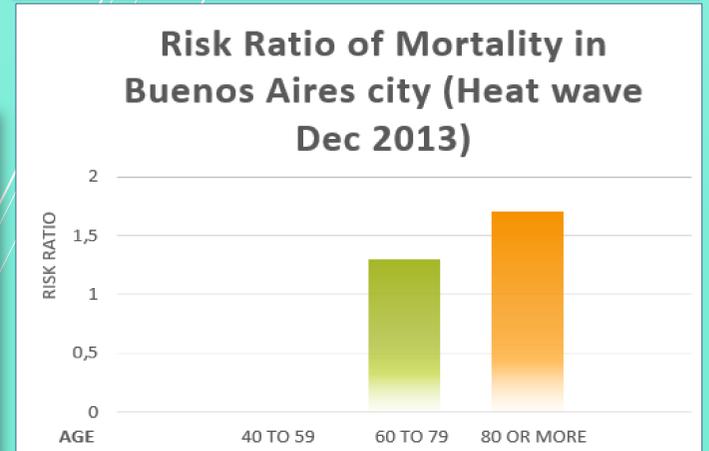
Mortality and HW 2001-2012: In the city of Buenos Aires there is a u-type relationship between mortality and the maximum, minimum and apparent daily temperatures between 2001/2012. Rusticucci, Suaya and Almeira (2015) observe that the affections vary between 20-80% of excess mortality during heat waves, 70-80% of the deceased people are over 65 years of age. Men and women are equally affected, but people over 65 represent 70-80% of deaths under heat waves.

Mortality and HW in the warm semester 2013-2014: In this research, the effects of heat waves were analyzed and characterized, showing a significant increase in mortality and risk ratio in older people on the 9 days of heat wave in Buenos Aires

Morbidity and HW 2005- 2010: In this study authors show the relation between the occurrence of heat waves and the number of cases of hypertensive diseases and ischemia.



Chesini, F; Fontan, S; [et al.] 2015. Climatic variability and its impacts on health in cities of Latin America: Buenos Aires, Santiago, Montevideo, Salto and Manaus. Ministry of Health of Argentina



Chesini, F; Fontan, S and Savoy, F. 2017. Heat waves mortality in the warm semester 2013-2014 in the central and northern regions of Argentina. Ministry of Public Health.

Conclusions

Studies compared here, reports the association between the extreme event, heat wave and the impact on health of the elderly in the City of Buenos Aires. Considering that the City has a demographic profile of aging and that extreme events have experienced an increase in decadal values, it is necessary to deepen interdisciplinary research. New perspectives of analysis and methodology to characterize living condition of this population and their distribution in the different communes of the City would allow better policies of prevention and care strategies in a climate change scene.