have described the association between air pollution and acute illness, however few studies have been conducted in Ireland to date. This study estimates the association between changes in mean daily air pollutant levels and daily acute hospital admissions in Dublin.

Methods Mean 24-hour levels of fine particulate matter (PM_{2.5}), coarse particulate matter (PM₁₀), and pollutant gases were calculated for the central Dublin area as a whole, using data from EPA monitors between 2007 and 2016. Daily total acute hospital admissions for respiratory and cardiovascular/cerebrovascular conditions were obtained from Healthcare Pricing Office records, for hospitals within the Dublin area, over the same period. Univariate analyses were performed, to investigate the association between individual pollutants and admissions, followed by analyses that mutually adjusted for several pollutants, with a lag of up to 2 days, to further describe the associations observed. Meteorological variables were controlled for in the model.

Results Univariate analysis revealed carbon monoxide as the strongest predictor of respiratory admissions. Multivariate analysis also identified sulphur dioxide as a strong predictor of respiratory admissions and PM_{2.5} and nitrogen dioxide as the strongest predictors of cardiovascular admissions.

Conclusion This study describes the extent of the impact of air pollution on hospital admissions and presents models for predicting future admissions with varying levels of pollution. The findings may inform policies to reduce urban air pollution, to develop early warning systems for the public and to improve the preparedness of hospital emergency departments on days of poor air quality.

P82

CRITICAL DISCOURSE ANALYSIS OF THE JOINT COMMITTEE MEETINGS ON THE EIGHTH AMENDMENT OF THE CONSTITUTION OF IRELAND

¹S Shiplo, ^{1,2}K O'Donoghue, ^{1,3}S Meaney*. ¹University College Cork, Pregnancy Loss Research Group, Cork, Ireland; ²University College Cork, The Irish Centre for Fetal and Neonatal Translational Research (INFANT), Cork, Ireland; ³University College Cork, National Perinatal Epidemiology Centre, Cork, Ireland

10.1136/jech-2019-SSMabstracts.233

Background The 1983 Eighth Amendment to the Irish Constitution stated that the right to life of a pregnant mother and her unborn were equal, which meant that pregnancy terminations were illegal in Ireland. Ongoing debate surrounding strict pregnancy termination laws compelled the Irish government to form a committee tasked with deliberating the arguments for and against repealing the Eighth Amendment as well as forming recommendations. The objective of this study is to evaluate the issues raised and how information was presented during the joint committee meetings on the Eighth Amendment.

Methods Published transcripts from the Joint Committee on the Eighth Amendment of the Constitution meetings were accessed online for analysis. The committee's deliberations commenced on September 20, 2017 and concluded on December 14, 2017. This qualitative study applied a critical discourse analysis, which evaluates language in its social and cultural context. Critical discourse analysis allows for the deconstruction of language to gain an insight and understanding of socially produced meanings, recognising the ability for language to perpetuate inequalities and power dynamics.

Results Seven themes were identified from the meetings' contents related to pregnancy termination: including fatal fetal anomalies, rape and incest, decriminalisation, mental health, human rights, risk and practical issues. Throughout proceedings research evidence was often misrepresented and distorted in order to spin findings in support of members' arguments. Anecdotal evidence, including emotionally-laden narratives, was used to persuade members with divergent views to change their political and ideological opinions about what is socially desirable and acceptable. When discussing the risk and practical issues of introducing termination of pregnancy, the matter of conscientious objection and maternity hospitals whose governance are influenced by religious ethics were debated, clearly illustrating the influence of cultural and religious ideologies over the health of the population.

Conclusion The framing of the discourse throughout the meetings likely influenced the committee members' knowledge, perception, and understanding of key issues, consequently impacting the development of the pregnancy termination legislation introduced in 2019. This study demonstrates that healthcare is influenced by the political context and prevailing religious ideologies in Ireland. This study reveals the potential for underlying bias in political structures to sway healthcare legislation, which can impact health and in particular women's reproductive health.

P84

IS SOCIAL ISOLATION AS BAD FOR HEALTH AS SMOKING 15 CIGARETTES PER DAY? FINDINGS FROM TWO LARGE PROSPECTIVE UK COHORTS

RW Smith, I Barnes*, G Reeves, J Green, V Beral, S Floud. Nuffield Department of Population Health, University of Oxford, Oxford, UK

10.1136/jech-2019-SSMabstracts.234

Background Social isolation has been associated with increased mortality, and a much-cited previous review stated that the risk is comparable to smoking 15 cigarettes per day. However, the available evidence is inconsistent. We examined social isolation in relation to all-cause mortality in two UK prospective cohorts, and assessed whether the excess risk associated with social isolation was comparable to that for smoking 15 cigarettes per day.

Methods After excluding people with vascular disease, cancer or low self-rated health, to minimise reverse causation bias, 326,169 Million Women Study (MWS) participants (mean age=68 years) and 296,913 UK Biobank (UKB) participants (mean age=56 years), were followed for death. Social isolation was measured using an index of self-reported frequency of contact with family or friends, social group contact, and living alone. Adjusted RRs for all-cause mortality were calculated using Cox regression, comparing most isolated participants to the least isolated. Analyses adjusted for smoking and 12 other possible confounding factors.

Results Within each cohort, about 12% of participants were classified as most isolated and 44% as least isolated. Over 5.9 years of follow-up, 9667 MWS participants died; the most isolated had about a 30% excess risk of all-cause mortality compared to the least isolated (RR=1.28, 1.19–1.38). Over 6.8 years follow-up, 4694 UKB participants died; the most isolated had about a 40% excess risk of mortality compared to the least isolated (RR=1.38, 1.27–1.51). Of the constituent measures contributing to isolation, living alone was most