The clinical data are collected using an internationally accepted standard, the Resident Assessment Instrument Minimum Data Set at each site. We hypothesize that participant compliance is predicted by the satisfaction of their first screening experience in additional to socio-demographic and clinical factors. A multivariable logistic regression model will be conducted to predict non-compliance, which is defined by a return interval >15 months or missing. The model will contain individual level factors including age, sex, aboriginal status, education, income estimates, geographic distance; system level factor includes physician-referral/ self-referral status; clinical factors include the risk prediction by PLCOm2012, which assesses smoking status including intensity and duration; other clinical factors include personal and family history of cancer, history of lung disease, body mass index; psychosocial/behavioral factors include smoking cessation program participation, baseline screening results including the presence of actionable incidental findings and appropriate follow-up of the abnormal results. Data linkage is under way and results will be presented at the conference. **Result:** This study will provide a granular view on the predictors of routine screening compliance among high-risk adults, which will be used to improve the program recruitment and retention especially when designing targeted messages. Findings will have implications for health care professionals when communicating with high-risk individuals about routine screening for lung cancer. **Conclusion:** Section not applicable. **Keywords:** non-compliance, organized screening program, predictors

P2.10-05
Indoor Radon and Lung Cancer Risk. A Pooling Study on the Second Risk Factor for Lung Cancer

A. Ruano-Ravina,[1] M. Lorenzo-González,[1] M. Provencio,[2] M. Torres-Durán,[3] I. Parente-Lamelas,[4] I. Vidal-García,[5] J. Barros-Dios[1] *[1]Preventive Medicine and Public Health, University of Santiago de Compostela, Santiago de Compostela/ES, [2]Hospital Puerta de Hierro Majadahonda, Madrid/ES, [3]Hospital Álvaro Cunqueiro, Vigo/ES, [4]Ourense Hospital Complex, Ourense/ES, [5]Complejo Hospitalario Universitario de A Coruña, A Coruña/ES*

Background: Residential radon is the second risk factor of lung cancer following tobacco consumption, according to WHO (World Health Organization) and United States EPA statements. It is recognized as the first cause of lung cancer in never-smokers by both organizations. Nevertheless, case-control studies performed in radon prone areas are still scarce and with limited sample sizes. We aim to know the relationship between residential radon and lung cancer risk in a study performed in a radon-prone area, and where inhabitants live for a long time in the same dwelling. **Method:** We have pooled results from 5 different case-control studies performed in the same geographical area to assess the relationship between indoor radon and lung cancer. One of these studies was focused specifically in never smokers and other in Small Cell Lung Cancer. All cases and controls were older than 30 and cases had a confirmed diagnosis of lung cancer. Controls were selected for attending hospital for trivial surgery. Controls were selected through a frequency-based sampling based on age and gender distribution of cases. The information and questionnaires collected was the same in all studies, with special focus on tobacco consumption. Radon devices of an alpha track type were placed at the participants' homes for at least three months. Odds Ratios of lung cancer due to radon exposure have been calculated adjusted by age, gender, and tobacco consumption. **Result:** We included 1691 cases and 1698 controls. Median age was 63 and 67, respectively, and females comprised 33% of both cases and controls. Adenocarcinoma was the most frequent histology (43%) and participants lived a median of 30 years in the same dwelling. The table show the risk of lung cancer due to radon exposure.

Table. Residential radon and lung cancer.

Variable	Cases n (%)	Controls n (%)	OR[a] (95% CI)	OR[b] (95% CI)
Residential radon exposure, Bq/m³				
≤50	219 (14.9)	346 (24.1)	1 (---)	1 (---)
51-100	352 (24.0)	350 (24.4)	1.61 (1.28-2.02)	1.66 (1.28-2.15)
101-148	265 (18.1)	235 (16.4)	1.75 (1.37-2.25)	1.89 (1.43-2.50)
149-200	194 (13.2)	162 (11.3)	1.86 (1.41-2.45)	2.00 (1.48-2.72)
>200	435 (29.7)	343 (23.9)	2.00 (1.60-2.52)	2.32 (1.80-3.00)
Tobacco consumption				
Never-smokers	523 (33.4)	900 (54.5)		1 (---)
1-33	205 (13.1)	423 (25.6		1.51 (1.17-1.94)
34-66	425 (27.2)	223 (13.5)		6.19 (4.78-8.02)
>66	412 (24.4)	104 (6.3)		12.1 (8.96-16.4)

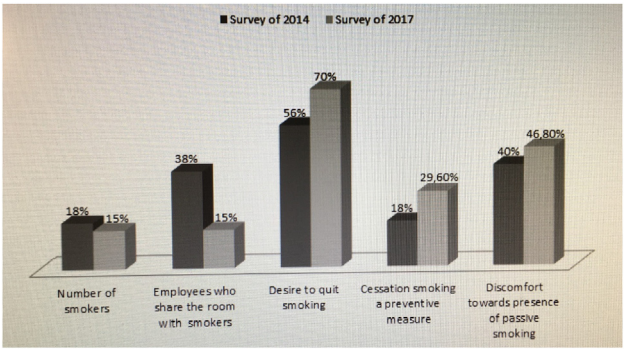
[a]Adjusted by age and sex [b]Adjusted by age, sex and tobacco consumption.

Conclusion: Residential radon is a relevant risk factor for lung cancer, even below concentrations established as safe by USEPA and WHO. **Keywords:** ionizing radiation, Indoor radon, case-control study

P2.10-06
Smoking Prevalence and Perceptions Among Healthcare Professionals: A Survey in an Italian Clinical Cancer Centre

D. Bafunno, A. Catino, V. Lamorgese, D. Galetta, V. Longo, A. Mastrandrea, M. Montrone, F. Pesola, P. Petrillo, P. Pizzutilo, D. Ricci, N. Varesano, A. Zacheo *Thoracic Oncology, Clinical Cancer Centre "Giovanni Paolo Ii", Bari/IT*

Background: A survey has been conducted on employees of our Clinical Cancer Centre about the smoking prevalence and knowledge of the smoking-related harms. The results have been compared to those emerged from a previous survey when the current smoke-free-hospital policies (national and internal) were not yet active. **Method:** In June 2017, during two weeks, 400 subjects received an anonymous questionnaire (36 items) investigating demographics, smoking-habits, secondhand-smoke exposure, knowledge of Italian smoke-free legislation. **Result:**



104 subjects (26%) returned the self-completed form (M=45.34years, SD=10.5; 67.3%women). 17,8%of responders were smokers, 26,2% former smokers, 56% no smokers, while in 23,8% the data were missing. Among the former smokers, the mean age of smoking cessation was 33,3 years (sd=10,2), without drugs in 77,3% of cases, for the