

**FIG** **FIG Working Week 2012**   
Rome, Italy 6–10 May Knowing to: Manage the territory  
Protect the environment  
Evaluate the cultural heritage

**AWARENESS OF BUILDING-RELATED HEALTH CONCERNS IN THE ITALIAN POPULATION**

Results from a questionnaire on general population and surveyors

Paola Allegri, Barbara Mazza, Vita Rossetti, Alida Ferreri, Valentina Ferrotti  
Settimio Pezzotti, Massimo Lanaro, Nicola Fiotti



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**THE NEOLITHIC REVOLUTION**



### USER'S MANUAL DISCREPANCY

3.85 in  
0.94 in  
2 in

■ on the phone  
■ off the phone

■ secluded areas  
■ open spaces

### THE GREATER THE IGNORANCE, THE GREATER THE RISK

How much do we know about the health problems generated by buildings?

## The Washington Post

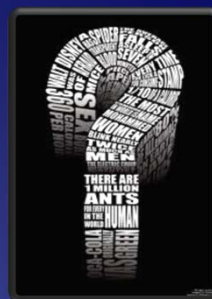
### USE OF POTENTIALLY HARMFUL CHEMICALS KEPT SECRET UNDER LAW

By Lyndsey Layton - Monday, January 4, 2010

Of the 84,000 chemicals in commercial use in the United States -- from flame retardants in furniture to household cleaners -- **nearly 20 percent** are secret, according to the Environmental Protection Agency, their names and physical properties guarded from consumers and virtually all public officials under a little-known federal provision.

Although a number of the roughly 17,000 secret chemicals may be harmless, manufacturers have reported in mandatory notices to the government that many pose a "substantial risk" to public health or the environment. In March, for example, **more than half** of the 65 "substantial risk" reports filed with the Environmental Protection Agency involved secret chemicals.

### AIM OF THE STUDY



Assess the level of awareness on **Building-Related Illnesses (BRI)** and **Sick Building Syndrome (SBS)** within a sample of adult Italian population;

Compare the knowledge in the aspects of **BRI/SBS** between surveyors and general population.

## METHODS

### Questionnaire on **BRI/SBS** submitted to a group of **Italian** adults

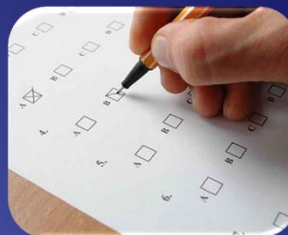
20 questions on technical, general (economical, social) or medical aspects of **BRI/SBS**;

Estimated time to fill-in: <20';

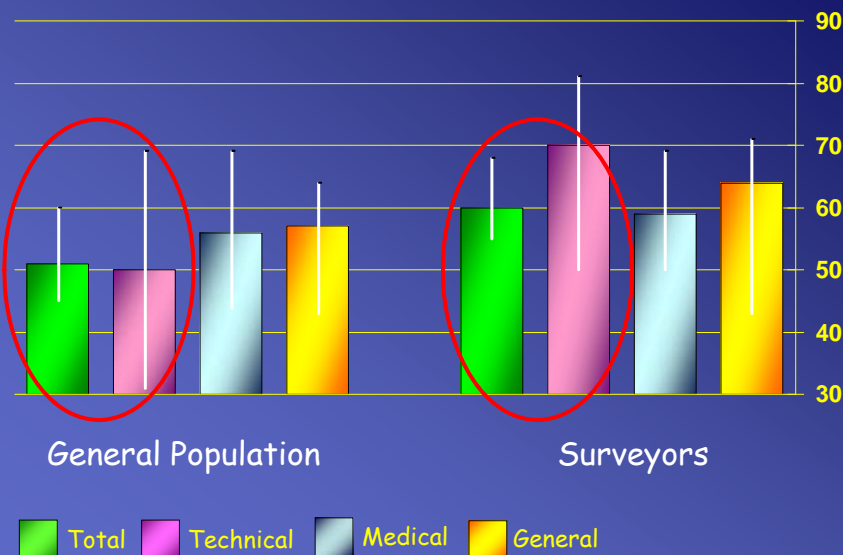
Multiple choice with 1 right answer (score: 1) and another(s) partly correct (score: 0,5). Total, technical, general and medical final scores for each participant have been expressed as percentage of the maximum theoretical score;

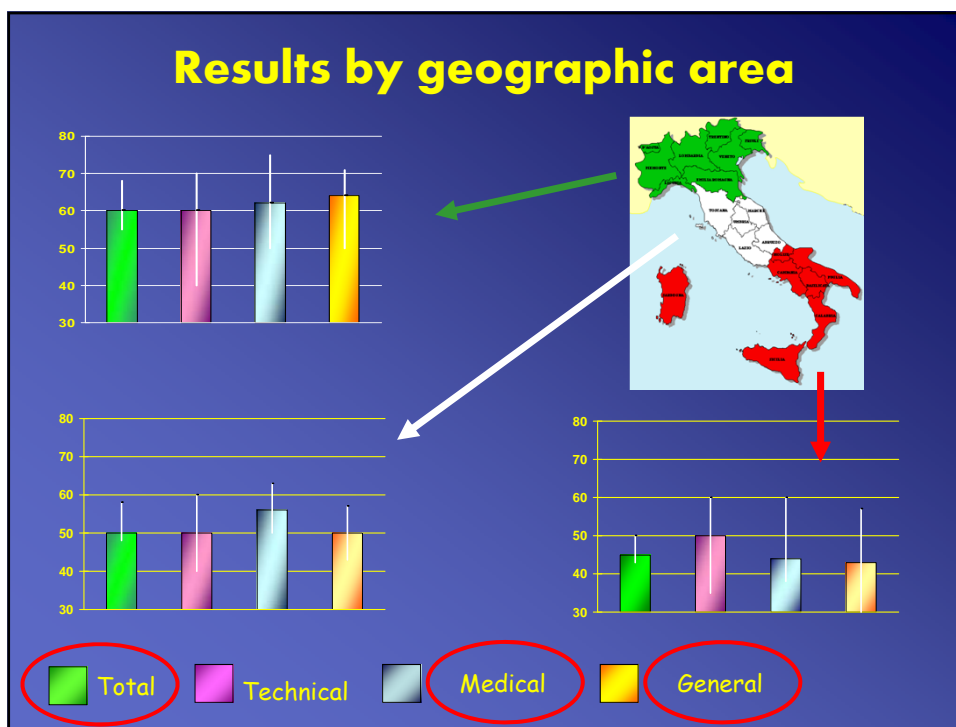
Population: n= 109, 61% male, age range: 19-72, living in **North, Center** or **South** of **Italy**, tuition: 90% high school or degree;

Non parametric statistics after standardization for possible confounders, and multinomial analysis.



## RESULTS





### Multinomial analysis

Independent variables: age, schooling, gender, geographical area, being a surveyor.

Dependent	Independent var.	Independent var.	R	R <sup>2</sup>
Total	Geographical area	Being a surveyor	0,470	0,221
Technical	Being a surveyor	Geographical area	0,403	0,163
Medical	Geographical area	//	0,308	0,095
General	Geographical area	//	0,30	0,09

## DISCUSSION



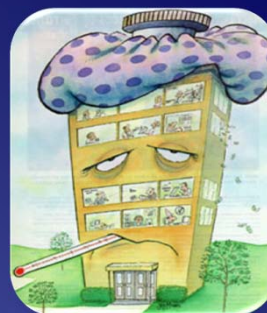
Knowledge about building-related health problems is independent of age and gender among Italian citizens;

**Italians** are more informed about medical issues than about technical or building maintenance aspects;

Geographical area is the main determinant of awareness on **BRI-SBS**;

**Surveyors** show a good knowledge on how to handle technical aspects of building-related health issues.

## CONCLUSIONS AND FUTURE PROSPECTIVES



Many actions could be taken to improve the knowledge on **BRI-SBS**. Although information, assessed with this questionnaire, is fair, it should be further implemented among surveyors and general population by **courses** focusing on healthy designing and renovation, as well as on choice of the building materials. An informed and scrupulous surveyor is **as effective as a doctor** in preventing the building-related conditions leading to many serious, sometimes deadly, conditions.

