

2009 National Risk Factors Surveillance: evolution of the epidemic of chronic non communicable diseases in Argentina

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BACKGROUND: In Argentina, non-communicable diseases (NCD) account for about 80% of mortality. The most cost-effective way for their surveillance is through risk factor surveys. In 2009 we conducted the second National Risk Factor Survey (NRFS). Its aims were to monitor the evolution of the main risk factors of chronic diseases and describe the distribution of major risk factors in subgroups.

MATERIAL AND METHODS: A probabilistic sample was performed, including general urban population (cities with more than 5000 habitants) aged 18 and over across the country. The main risk factors for chronic diseases were included in the survey.

RESULTS: We included 34,372 respondents, with a response rate of 75%. The risk factors at the national level that showed improvement compared with 2005 NRFS were smoking (27.1%), exposure to second hand smoke (40.4%), blood pressure measurement (81.4%), cholesterol measurement (76.6%), glucose measurement (75.7%), mammography (54.2%) and PAP (60.5%). However, obesity (18.0%), physical inactivity (54.9%) and unhealthy diets increased. (Table 1). Disadvantaged populations (with lower incomes and less education) had worse indicators.

CONCLUSIONS: Policies for prevention and control of NCDs should continue to intensify to reverse this epidemic. Further actions will be needed both at environmental and individual levels. The NCDs, given their impact on

development and social and health costs, should be highly prioritized into the political and health agendas in our country and globally.

Table 1. Comparison of principal indicators in NRFS 2005 and 2009

Principal indicators	NRFS 2005		NRFS 2009	
	Total	95% Confidence Interval	Total	95% Confidence Interval
Bad or regular general health	19.9%	(19.1%-20.8%)	19.2%	(18.5%-20.0%)
Physical inactivity	46.2%	(45.1%-47.3%)	54.9%	(53.9%-55.9%)
Tobacco Smoking	29.7%	(28.7%-30.8%)	27.1%	(26.3%-27.9%)
Exposure to second hand smoke	52.0%	(50.8%-53.1%)	40.4%	(39.3%-41.4%)
% that eat fruits daily	39.8%	(39%-40.7%)	35.7%	(34.8%-36.7%)
% that eat vegetables daily	41.6%	(40.8%-42.5%)	37.6%	(36.7%-38.6%)
Consumes salt always	23.1%	(22.1%-24.2%)	25.3%	(24.5%-26.2%)
Overweight (BMI >25 and <30)	34.4%	(33.3%-35.5%)	35.4%	(34.6%-36.3%)
Obesity (BMI ≥30)	13.4%	(12.7%-14.2%)	18.0%	(17.4%-18.7%)
Blood pressure measurement in the last 2 years	78.7%	(77.6%-79.7%)	81.4%	(80.6%-82.1%)
Prevalence of high blood pressure	34.5%	(33.4%-35.6%)	34.8%	(34.0%-35.7%)
Cholesterol measurement (sometime)	72.9%	(71.5%-74.3%)	76.6%	(75.5%-77.6%)
Prevalence of high cholesterol (among those who were measured)	27.9%	(26.7%-29.2%)	29.1%	(28.2%-30.1%)
Glucose measurement (sometime)	69.3%	(68%-70.6%)	75.7%	(74.8%-76.6%)
Diabetes (general population)	8.4%	(7.8%-9.1%)	9.6%	(9.1%-10.1%)
PAP in the last 2 years (women)	51.6%	(50%-53.2%)	60.5%	(59.3%-61.6%)
Mammography in the last 2 years (women older than 40 years)	42.5%	(40.3%-44.7%)	54.2%	(52.7%-55.8%)