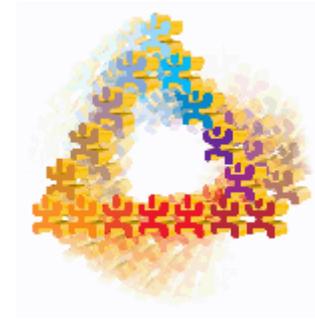




CARMEN Country Profiles: Chile



In 2002, based on the 2002 WHO Global Burden of Disease data¹, noncommunicable diseases (NCDs) accounted for 79.4% of the total 83,683 deaths in Chile. The leading cause of death among the noncommunicable disease was cardiovascular disease, with an Age Standardized Mortality Rate (ASMR) of 165 per 100,000 (36.4%). Malignant neoplasms followed, with an ASMR of 136 per 100,000 (30.1%). Respiratory diseases were responsible for an ASMR of 32 per 100,000 cases (7.2%); and diabetes, for an ASMR of 18 per 100,000 (4.1%). The remainder was due to other non-specified conditions.

Date	CARMEN Demonstration Site
1996	Valparaíso; Región V: First risk factor survey was conducted here
2000	Arauco, Bío-Bío, Concepción, Talcahuano, Ñuble; Región VIII
2002	South East; Metropolitan Region
	Maule; Región VII

Date	Evolution of the CARMEN Initiative
2000	Reorientation of Hypertension and Diabetes Programs & Quality of Life Survey
2000; 2004	Global Youth Tobacco Survey

¹ World Health Organization. *WHO Global InfoBase Online. Country Profiles*. 2006.

2000–2003	Introduction of National Cardiovascular Health Program
2003–2004	National Health Survey
	“Look at Me” CARMEN Program for Children
2003–2004	Center of Surveillance of NCDs in the Bio-Bio Region
2004	CARMEN School

CARMEN/Chile²

The CARMEN Program in Chile is the eldest in Latin America and the Caribbean, apart from it being one of the initiatives in the National Plan for Health Promotion. CARMEN was adopted as a strategy to achieve greater health equity in Chile by the year 2010. The program is applying various methods for NCD prevention and control within the population:

- ➔ Screening according to the Adult Preventive Medical Examination (ESPA)³
- ➔ Counseling to give up smoking
- ➔ Healthy diet and sufficient physical activity
- ➔ For individuals with cardiovascular risk, intervention is conducted according to the Healthy Heart Project

The first CARMEN demonstration project was set up in Valparaiso, V Region, in 1996, where a survey revealed high prevalence of NCD risk factors. 73% of the 25-64 year old population had at least one major risk factor – i.e. smoking, hypertension, high total LDL, and/or diabetes.

Since 2000, the CARMEN program has been gradually expanding its basis to the Region of Arauco, Bío-Bío, Concepción, Talcahuano and Ñuble (Region VIII) in 2000; to the South East (Metropolitan Region) in 2002; and to Maule (Region VII).

² Escobar, Maria Cristina. *CARMEN Initiative Meeting*. Brazil, November 2003.

³ ESPA serves as a screen and follow-up program: individuals with high risk of developing a noncommunicable disease are directed to medical counseling and periodic assessment.

The following projects were implemented by CARMEN/Chile: (up to 2004):

- “Look at Me” CARMEN Program for Children
- Cardiovascular Health Project
- Continuous training in primary care service
- Training on nutrition for health professionals
- CARMEN School, set up in 2004, established the Evidence-Based School of Public Health, with the University of St. Louis, the CDC, and the Universidad Catholic of Chile
- 2003-2004 Center of Surveillance of Noncommunicable Diseases, established in the Bío-Bío Region

Introduction of National Cardiovascular Health Program

The Chilean cardiovascular health program is based on primary health care.⁴ It covers 70% of the hypertensive population and 77% of the diabetic population and is growing. In 2000, the Ministry of Health created several guides to help the health sector in this transition and to conserve the technical basis of the program. The Ministry also conducted an in-depth evaluation of the effectiveness of the CARMEN cardiovascular health program in 13 health centers. Along with several limitations, the study demonstrated that the effectiveness of the program was highest among people with high and maximum cardiovascular risk.

National Diabetes Program

A pilot diabetes prevention program, with focus on non-pharmacological treatment is being endorsed by the Ministry of Health, with the goals of attaining lifestyle changes in people who have pre-diabetes. In addition, a research project is being undertaken with PAHO and the International Life Sciences Institute that will investigate the effects of training the primary health care team on the following variables: sedentary lifestyles, consumption of fruits and vegetables, and overweight and obesity. The target population is people with cardiovascular risk. The study is a random cluster design and is currently in progress.

⁴ Escobar, Maria Cristina. *Biannual Meeting of the CARMEN Network*. Chile, October 2005.

National Health Survey and the Global Youth Tobacco Survey

Several population surveys were undertaken in Chile, such as the *National Health Survey 2003* and the *Global Youth Tobacco Survey* in 2000 and 2004. In addition, monitoring of the indicators for the health objectives for the decade 2000–2010 and population registries form part of the system of NCD surveillance in Chile. Additionally, as a pilot experiment, a Regional Center for Surveillance of NCDs has been established in the VIII Region.

The 2003 *National Health Survey* had the following objectives:

- ➔ To determine the prevalence of priority diseases in Chile in a representative sample of the population
- ➔ To describe the prevalence of these diseases according to population groups of interest: sex, age, socioeconomic level, and education
- ➔ To construct a blood sample depository *seroteca* for the future use of the Ministry of Health

The Ministry of Health participated in the *Global Youth Tobacco Survey*, a WHO initiative that was first implemented in Chile in 2000 and later in 2003. The Ministry of Health also participated in the Global school-based *Student Health Survey*, another WHO initiative.