

Prevention and Control of CVD Risk Factors at the Policy Level, Health Systems and Community: Main Issues and Perspectives

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GOBIERNO DE CHILE
MINISTERIO DE SALUD

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Public policy in the context of a Health Reform Process

- **National Health objectives 2010:**
 - Cardiovascular diseases and Cancer are declared a priority
- **Burden of disease**
 - Burden of disease study (DALYs), 1993
 - Quality of Life Survey 2000
 - National Health Survey 2003
- **Priority in primary health care**

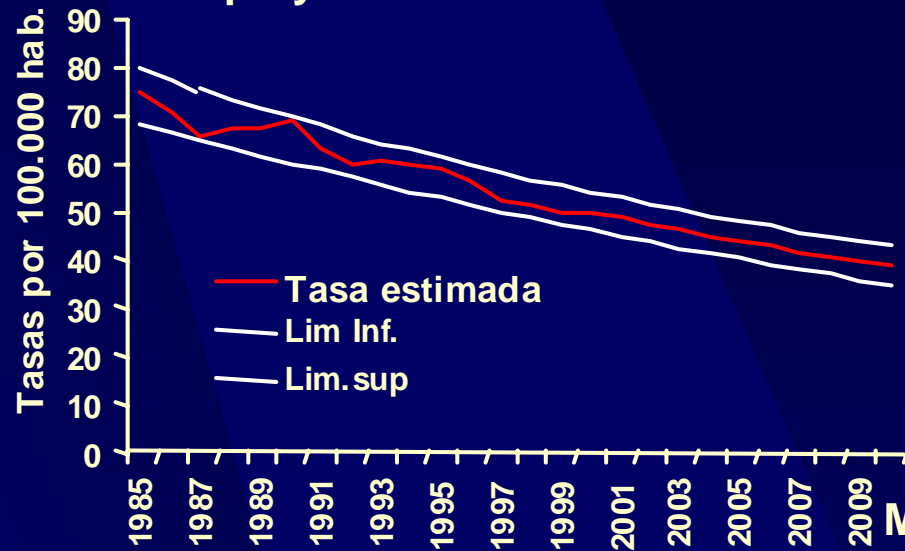
Prevalence (%) of selected risk factors National Health Survey, Chile 2003

(17 years and above)

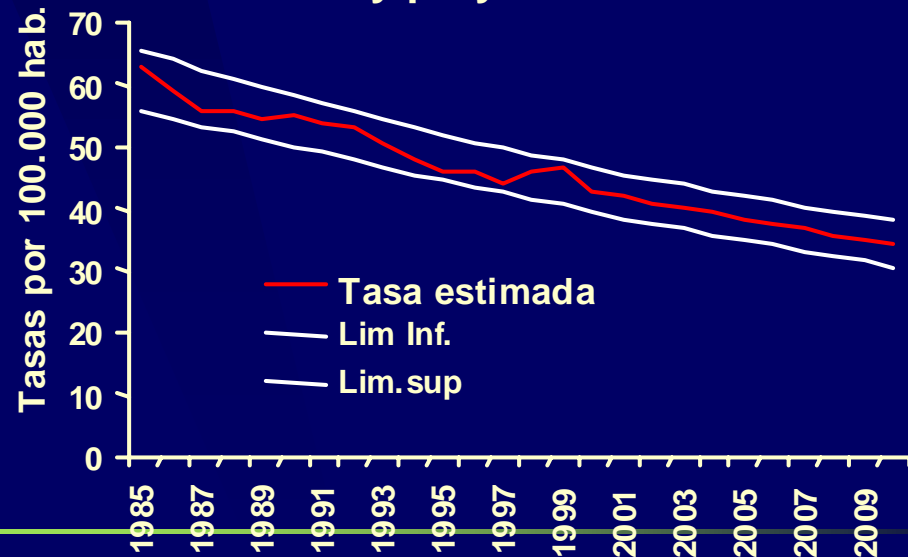
| | Men | Women | Total |
|-----------------------------------|------------|-------|-------|
| • Tobacco (1 cigarette) | 48.0 | 37.0 | 42.0 |
| • Hypertension ($\geq 140/90$) | 36.7 | 30.8 | 33.7 |
| • Diabetes (≥ 126 mg/dl) | ≥ 4.8 | 3.8 | 4.2 |
| • Total Col \uparrow (200mg/dl) | 35.1 | 35.6 | 35.4 |
| • HDL Col \downarrow (<40mg/dl) | 48.4 | 30.6 | 39.3 |
| • Overweight (25-29) | 43.2 | 32.7 | 37.8 |
| • Obesity (≥ 30) | 19.4 | 27.0 | 23.2 |
| • Physical inactivity (3x) | 89.4 | 87.8 | 90.8 |



Mortalidad por Enfermedad isquémica, Chile 1984- 1999 y proyecciones 2000-2010



Mortalidad por Enfermedad cerebrovascular, Chile 1984-1999 y proyecciones 2000-2010



CARDIOVASCULAR

PROGRAMA SALUD



REORIENTACION DE LOS PROGRAMAS
DE HIPERTENSION Y DIABETES



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2000

**“Cardiovascular
Health Program”**

Integrates the
detection and
management of
mayor CV risk
factors.

**Random sample of 1376 patients
with at least 1 year of follow-up in
Hypertension and Diabetes Programs,
by number of major CV risk factors*,
CARMEN-CV Project, V & VIII Regions, 2001**

| | | N° of major risk factors | | |
|--------------|----------|---------------------------------|--------------|--------------|
| | | N° | % | |
| • | 1 | 251 | 18.2 | |
| • | 2 | 688 | 50.0 | 81.8% |
| • | 3 | 389 | 28.3 | |
| • | 4 | 48 | 3.5 | |
| Total | | 1376 | 100.0 | |

(tobacco, hypertension, diabetes, hypercholesterolemia)

From a: Cardiovascular Health Project to a National Cardiovascular Health Program

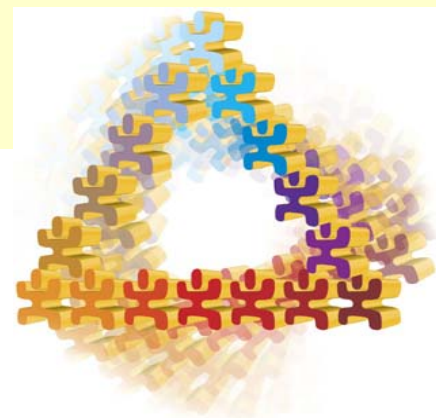




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CARMEN INICIATIVE*

**Public health strategy
Supports interventions for
the prevention and control of
NCDs.**



****Conjunto de Acciones para la Reducción Multifactorial
de Enfermedades No transmisibles***



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CARMEN-Chile Demonstration Areas 1997-2004

- **1996: V Region, Valparaíso**
- **2000: VIII Región, Arauco, Bío-Bío, Concepción, Talcahuano & Ñuble**
- **2003: VII Región: Maule**
- **2004: Metropolitan Region, Sur-Oriente**



Cardiovascular Health Project

CARMEN-MOH-PAHO



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- **2000-2002**

- **Planning phase**

- Task forces: MOH convenes experts from Universities and Scientific Societies.
 - Writing Guidelines
 - Demonstration areas in CARMEN Health Services



- **2003**

- **Implementation phase**

- Budget increase for those CARMEN demonstration areas with CV Health Projects
 - Training workshops at a national level



Organización Panamericana de la Salud
Oficina Regional de la
Organización Mundial de la Salud

From CV Health Project to a National CV Health Program (2)



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- **2004**

Ministry of Finance approves an increase in the budget for Cardiovascular Health throughout the country.

- **2005**

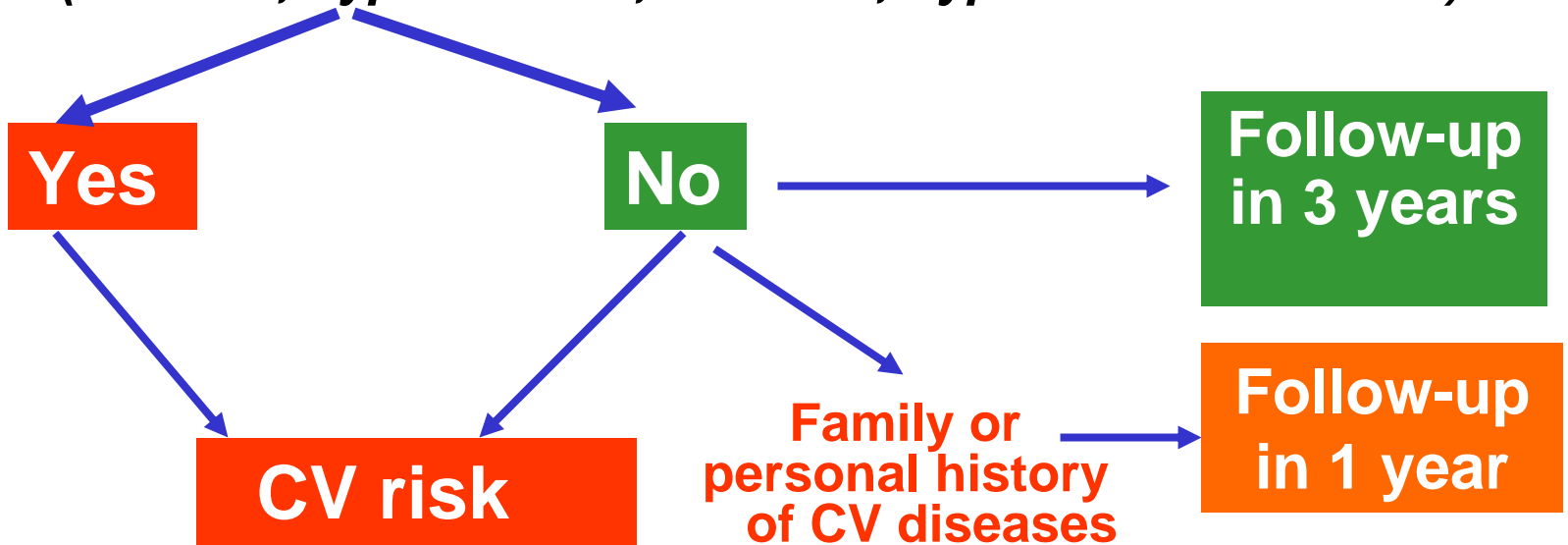
Cardiovascular Health in AUGE Plan

(universal access, opportunity and quality of care according to Protocol)

Preventive Health Examination for Adults

¿1 or more major risk factors?

(tobacco, hypertension, diabetes, hypercholesterolemia)



* *except smokers with no other risk factors: **counseling***

**Diagnosis confirmation
Global CV Risk classification**



EXAMEN DE SALUD PREVENTIVO DEL ADULTO - ESPA BASICO

1. IDENTIFICACION

Nombre: Fecha: Sexo: F M

N° RUT: - Fono:

2. SALUD CARDIOVASCULAR

2.1 FACTORES DE RIESGO NO MODIFICABLES

- | | Riesgo CV | Indicación |
|--|---|--|
| a) Hombre > 45 años o mujer postmenopáusica | No <input type="checkbox"/> Sí <input type="checkbox"/> | Promoción hábitos vida saludable |
| b) Evento o muerte cardiovascular prematura (antes 55 años en hombres o 65 años en mujeres) en familiares directos (padre, madre, hermanos, hijos) | No <input type="checkbox"/> Sí <input type="checkbox"/> | Promoción hábitos vida saludable y control anual |
| c) Antecedentes personales enfermedad cardiovascular (angina, infarto, crisis isquémica transitoria, AVE, otros) | No <input type="checkbox"/> Sí <input type="checkbox"/> | Control en Nivel Secundario |

2.2 FACTORES DE RIESGO MODIFICABLES

a) Condicionantes

- | | | | | |
|---|---|-------------------------------------|---|--|
| Peso <input type="text"/> <input type="text"/> <input type="text"/> Kg. | Talla <input type="text"/> <input type="text"/> <input type="text"/> m. | IMC ≥ 30 cms. (ver reverso) | No <input type="checkbox"/> Sí <input type="checkbox"/> | <input type="checkbox"/> Consejería en alimentación saludable y aumento de actividad física. |
| Circunferencia cintura | mujer ≥ 88 cms. hombre ≥ 102 cms. | | No <input type="checkbox"/> Sí <input type="checkbox"/> | |

b) Mayores

- | | | |
|--|---|---|
| b.1) ¿Ha fumado al menos 1 cigarrillo el último mes? | No <input type="checkbox"/> Sí <input type="checkbox"/> | <input type="checkbox"/> Consejería para dejar de fumar. |
| b.2) Presión arterial PAS ≥ 140 mm Hg y/o PAD ≥ 90 mm Hg | No <input type="checkbox"/> Sí <input type="checkbox"/> | <input type="checkbox"/> Referir a Programa de Salud Cardiovascular |
| b.3) Colesterol total ≥ 200 mg/dL | No <input type="checkbox"/> Sí <input type="checkbox"/> | |
| b.4) Glicemia ≥ 126 mg/dL | No <input type="checkbox"/> Sí <input type="checkbox"/> | |

Global Cardiovascular Risk Qualitative Classification

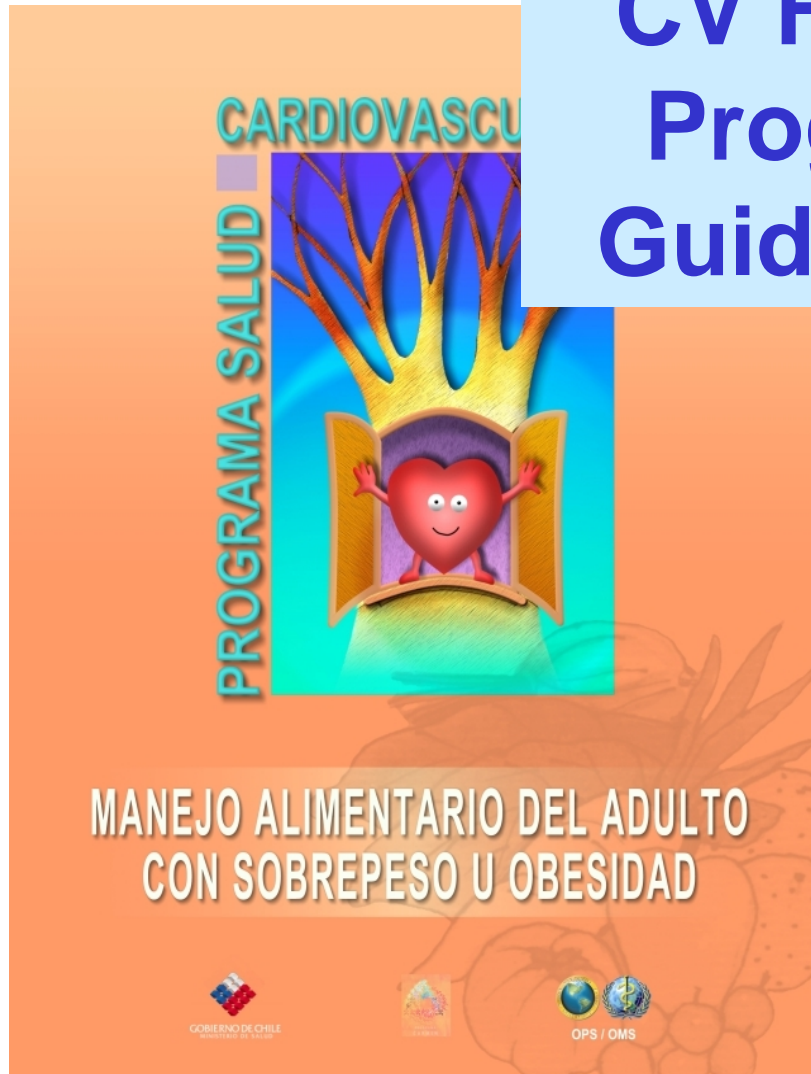
| Risk level | N° & type of risk factor (RF) |
|------------------|--|
| Low | Without major RF* |
| Moderate | 1 major RF, except DM |
| High | 2 or more major FR, except DM |
| Very high | DM, CV disease, genetic hypercholesterolemia, ¿chronic renal disease? |

* *Tobacco, Hypertension, Diabetes or Hypercholesterolemia*

**Random sample of 1376 patients
with at least 1 year of follow-up
in Hypertension and Diabetes Programs
classified by nutritional status (BMI),
CV Project, V & VIII Regions, 2001**

| BMI | % | |
|--------------------------------|-------------|----------------|
| • Underweight (-18,5) | 0,1 | |
| • Normal (18,5-24) | 5,6 | |
| • Overweight (25-29) | 30,6 | } 94,3% |
| • Obesity (≥ 30) | 63,7 | |

CV Health Program Guidelines

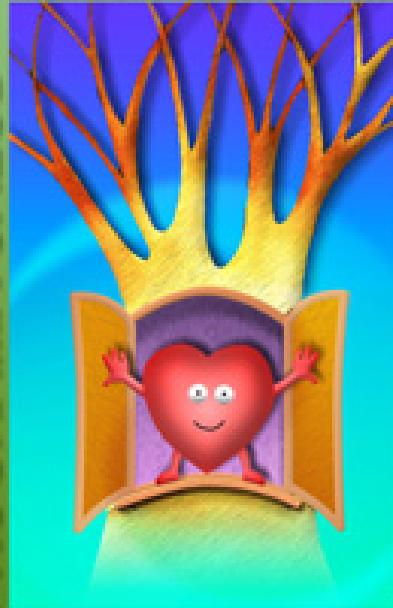


***“Dietary management of
overweight and obese adults”***

***“Physical activity for the
prevention and control of
CV risk factors”***

CARDIOVASCULAR

PROGRAMA SALUD



COMO AYUDAR A DEJAR DE FUMAR

MANUAL PARA EL EQUIPO DE SALUD



“How to help quit smoking”



PROMOCION de la SALUD y PREVENCION de las ENFERMEDADES CRONICAS NO TRANSMISIBLES

Material educativo

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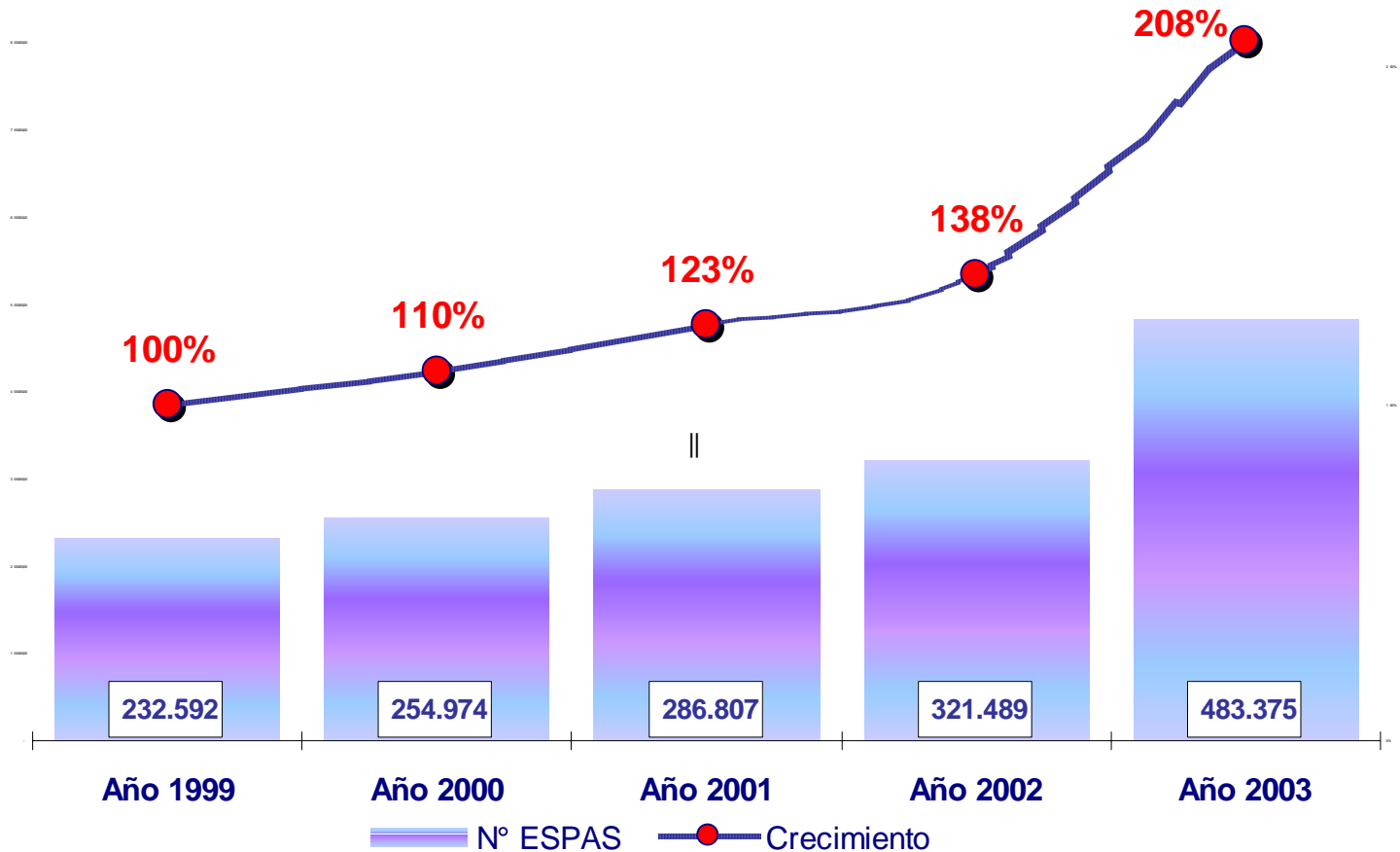
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Programa CARMEN - CHILE

Achievements

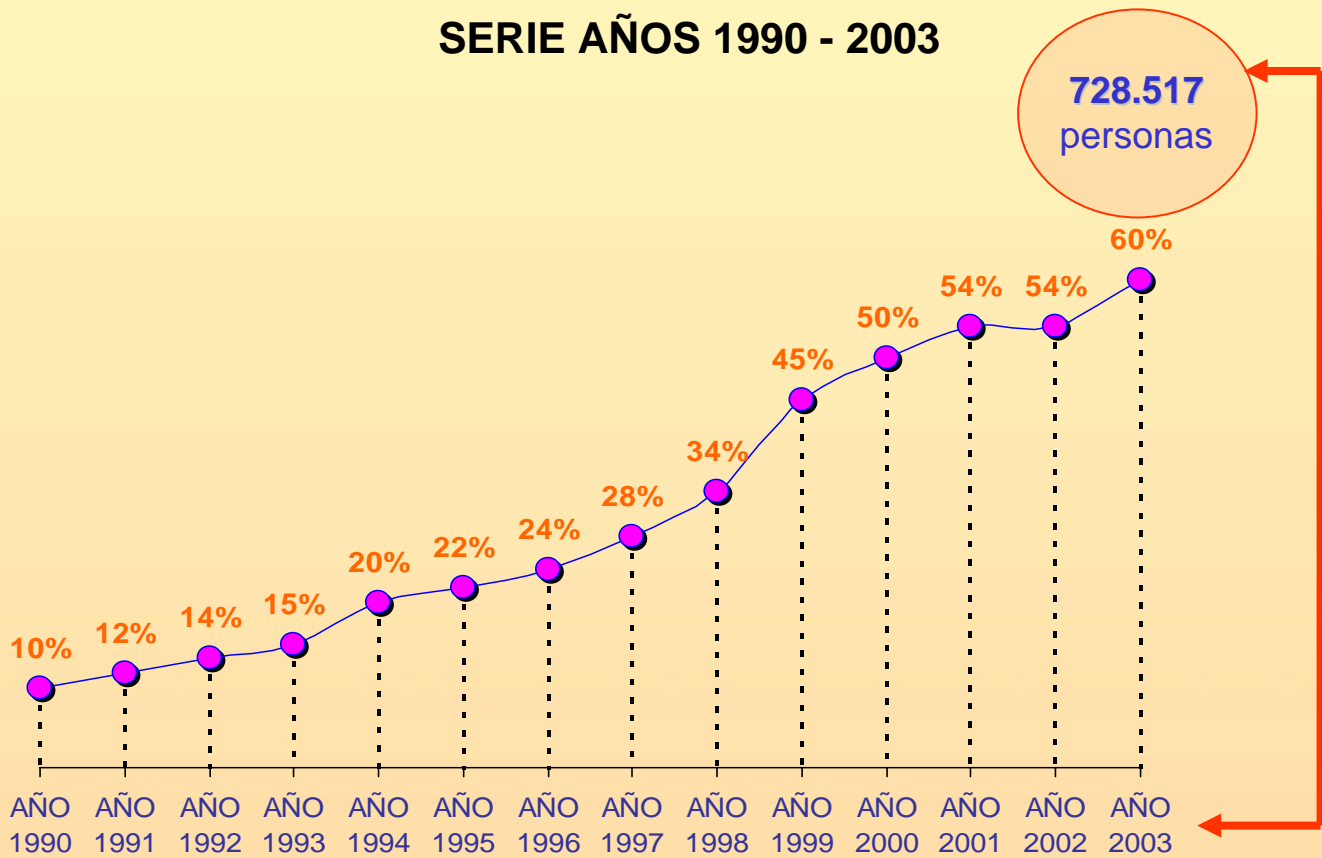
- Increased coverage of the population at risk
- Incentives (\$) have promoted detection at younger age groups (35-45 years)
- Increase in the number of patients with a complete assessment of target organ damage (eyes, kidneys, heart, etc.)
- Resources used more efficiently: focus in those at higher risk categories, avoid duplication of activities.

EVOLUTION OF THE PREVENTIVE HEALTH EXAMINATION FOR ADULTS IN MUNICIPAL PRIMARY HEALTH CENTERS 1999-2003



Resolutividad Cardiovascular

COBERTURA NACIONAL HIPERTENSIÓN ARTERIAL (1) PROGRAMA SALUD CARDIOVASCULAR SERIE AÑOS 1990 - 2003



(1) Prevalencia estimada 18 %

Fuente: DEIS/ MINSAL, 2003.



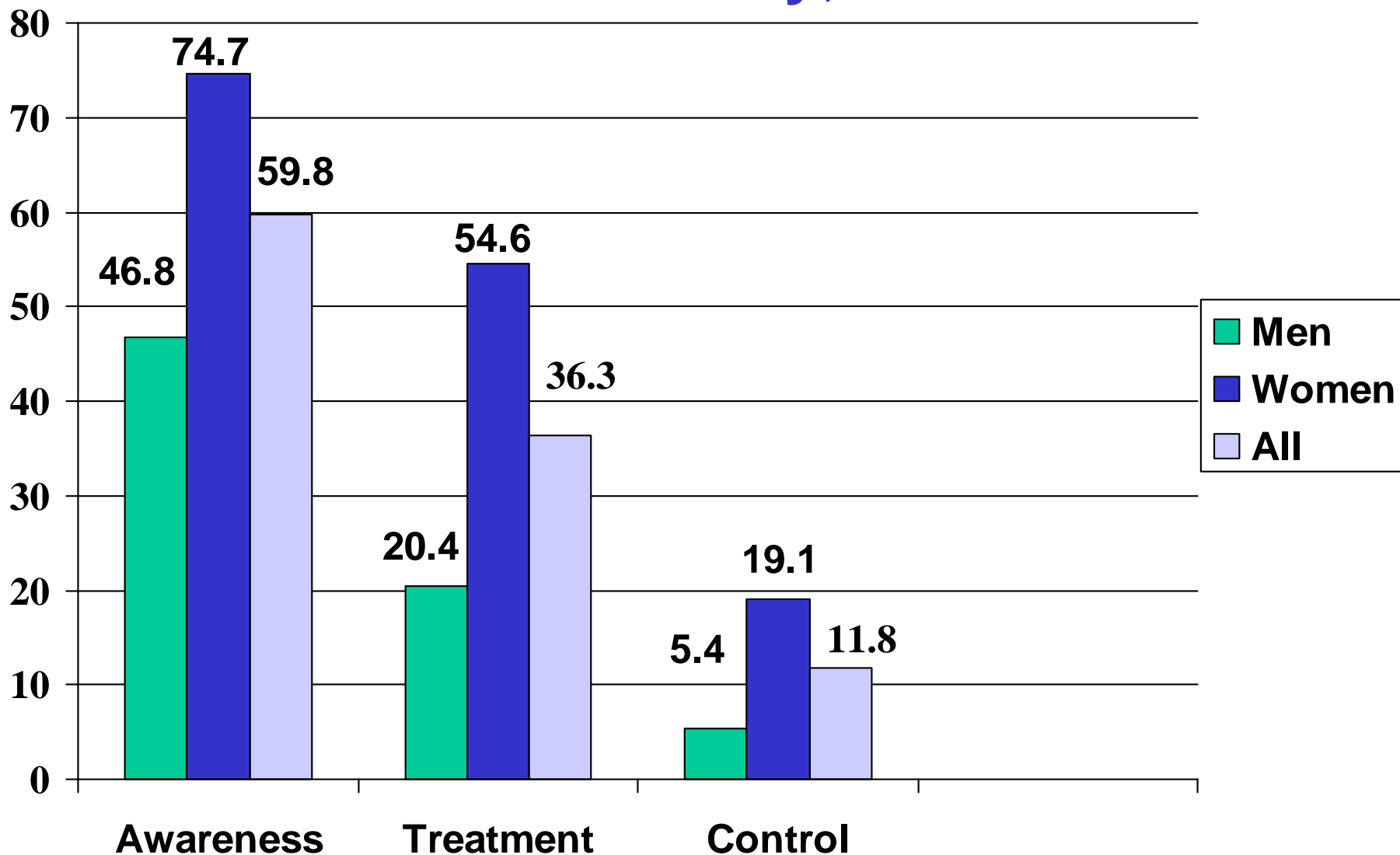


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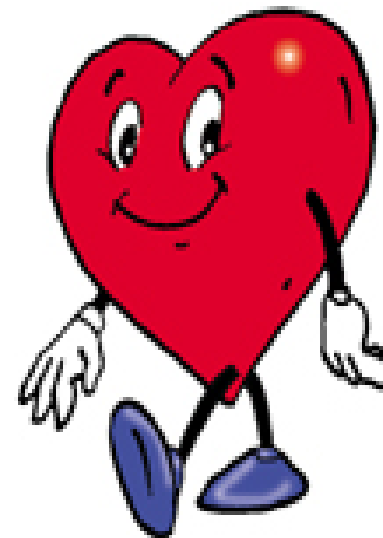
Challenges

- Meet goals
 - weight, physical activity, blood pressure, diabetes (HbA1c), LDL cholesterol
- Increase funding for statins
 - available for secondary prevention
- Quality control & standardization lab:
 - lipid profile, HbA1c
- Incentives in the right direction
- Capacity building (training e-learning)
- Integration with health promotion strategies
- Gradual incorporation of more preventive actions
 - pre-diabetes, pre-hypertension, obesity

High blood pressure prevalence rates: awareness, treatment & control National Health Survey, Chile 2003



!!!Thank-you!!!



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www.minsal.cl

