GUÍAS EUROPEAS DE PREVENCIÓN CARDIOVASCULAR 2012

CEIPC

Comité Español Interdisciplinario para la Prevención Cardiovascular

V Jornadas Científicas del Comité Español Interdisciplinario de Prevención Cardiovascular

La prevención cardiovascular en España. Oportunidades y barreras.

Ministerio de Sanidad. Madrid, 29 de septiembre de 2013

Miguel Ángel Royo Bordonada. Coordinador del CEIPC

Comité Español Interdisciplinario para la Prevención Cardiovascular



La misión fundamental del Comité Español Interdisciplinario para la Prevención Cardiovascular (CEIPC) es revisar y difundir las recomendaciones sobre prevención cardiovascular (PCV), trasmitir un mensaje homogéneo, en una única guía, evitando la multiplicidad de criterios, y promover la implementación de las guías en la práctica clínica

Comité Español Interdisciplinario para la Prevención Cardiovascular (CEIPC)

Miembros del CEIPC

Sociedad Española de Arteriosclerosis
Sociedad Española de Cardiología
Sociedad Española de Diabetes
Sociedad Española de Epidemiología
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Comité Español Interdisciplinario para la Prevención Cardiovascular (CEIPC)

AÑO	COMPOSICIÓN	ACTIVIDAD
2000	5 SC	Constitución
2002	7 SC	Tríptico II Task Force
2004	11 SC + DGSP	Adaptación Española III Task Force
2006	12 SC + DGSP	I Jornadas
2007	13 SC + DGSP	II Jornadas
2008	14 SC + DGSP	Adaptación Española IV Task Force
2009	14 SC + DGSP + ISCIII	III Jornadas
2010	14 SC + DGSP + ISCIII	Documento de Consenso Dislipemias
2011	15 SC + DGSP + ISCIII	IV Jornadas
2012	15 SC + DGSP + ISCIII	Estudio Barreras Estudio PCV en CCAA

Guías basadas en los 5 principios de la enseñanza

- **Qué** es la PCV
- **Por qué** es necesaria la PCV
- **Quién** necesita la PCV
- **Cómo** se aplica la PCV
- **Dónde** debe ofrecerse la PCV



Platón

QUÉ ES LA PCV

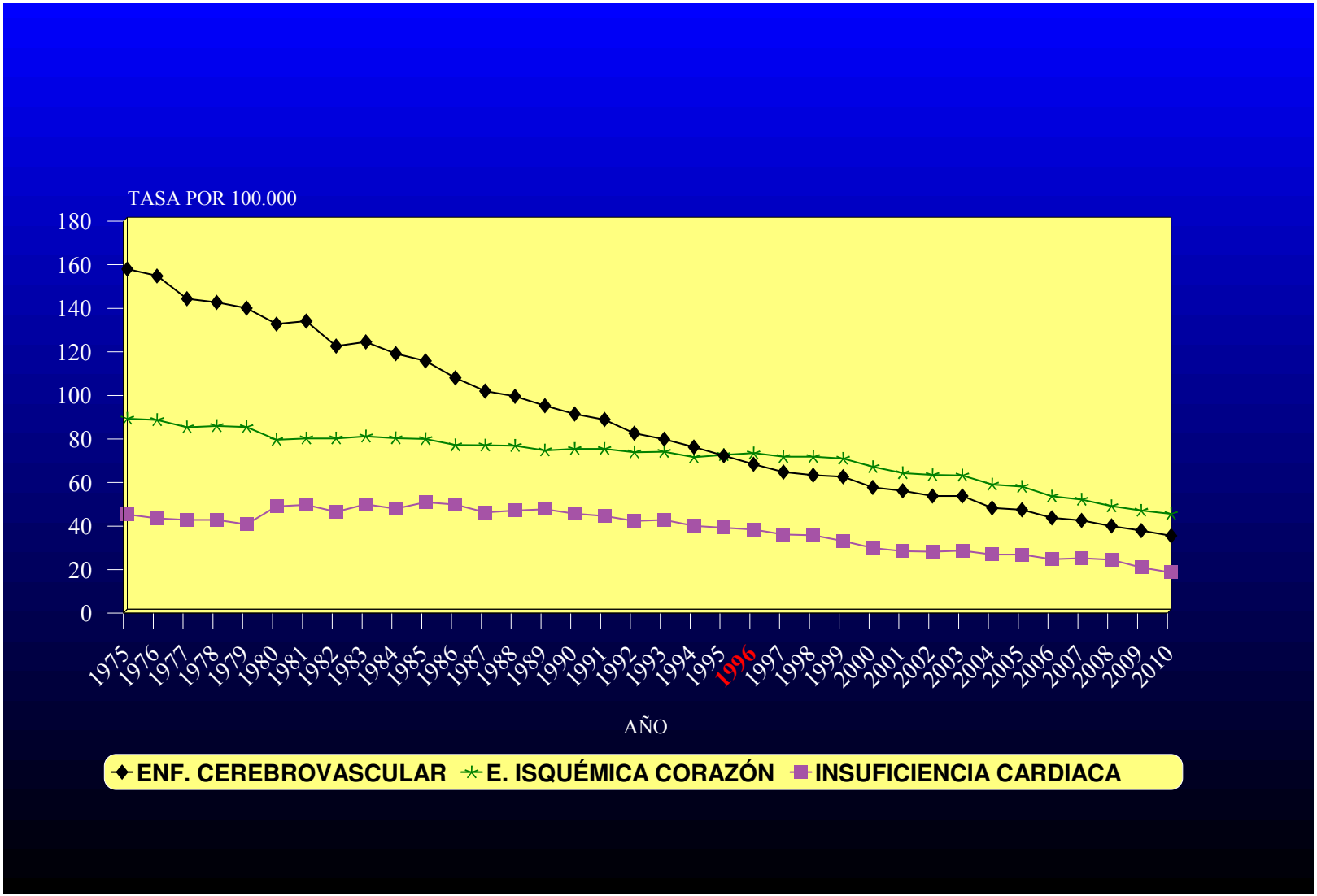
Un conjunto coordinado de acciones, a nivel público e individual, dirigido a erradicar, eliminar o minimizar el impacto de las ECV y la discapacidad asociada a las mismas.

Los beneficios de la estrategia poblacional incluyen la reducción de desigualdades en salud, prevención de otras enfermedades, ahorro costes por enfermedad y pérdidas productividad, y mejora de la calidad y esperanza de vida

POR QUÉ ES NECESARIA LA PCV

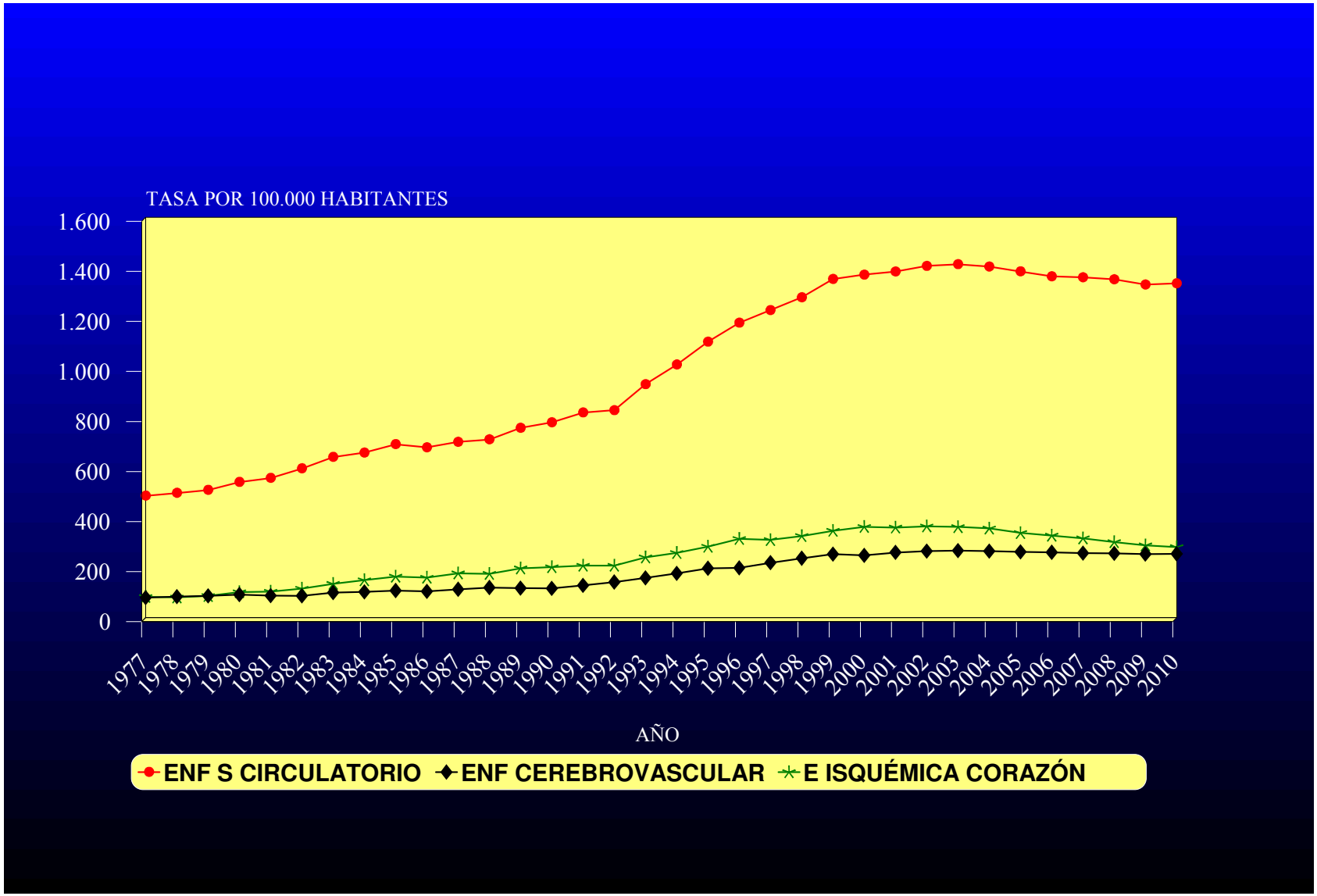
1. La ECV es la 1ª causa de muerte prematura.
2. La ECV causa 1/3 mortalidad en España.
3. La prevención funciona: >50% reducción de la mortalidad debida a cambios en factores de riesgo.
4. La arteriosclerosis subyacente se desarrolla desde edad temprana y de forma gradual e insidiosa durante años.
5. Pocos pacientes alcanzan objetivos de estilos de vida, adherencia terapéutica y control de factores de riesgo.
6. Existe evidencia amplia para justificar la aplicación de estrategias preventivas poblacionales e individuales (de alto riesgo).

Figura 1. Tendencia de la tasa de mortalidad ajustada por edad de la enfermedad isquémica del corazón, enfermedad cerebrovascular e insuficiencia cardiaca en ambos sexos. España, 1975-2010.



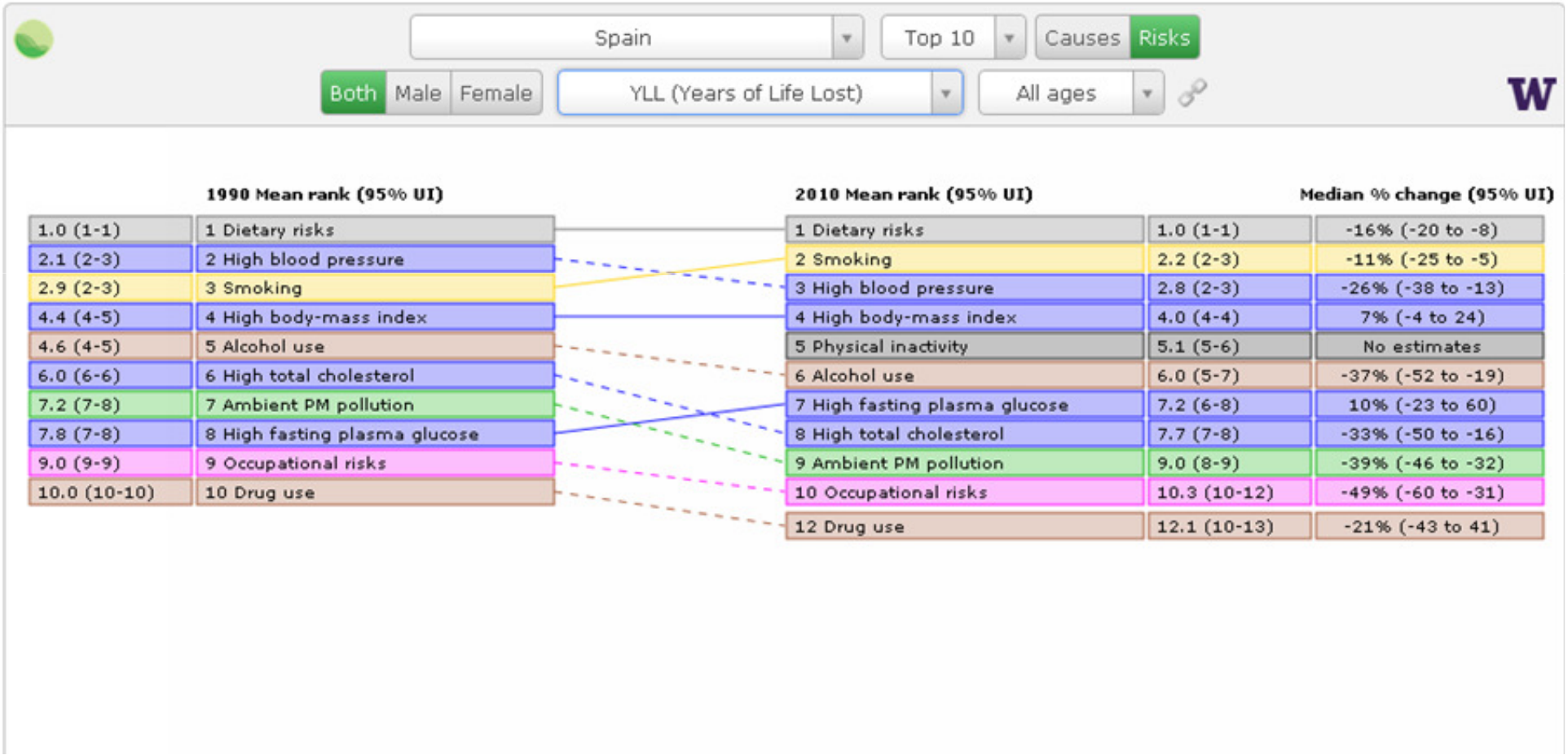
Fuente: Actualización del Informe SEA 2007

Figura 2.- Tendencia de la tasa de morbilidad hospitalaria de las enfermedades del sistema circulatorio, enfermedad isquémica del corazón y enfermedad cerebrovascular en ambos sexos. España, 1977-2010.

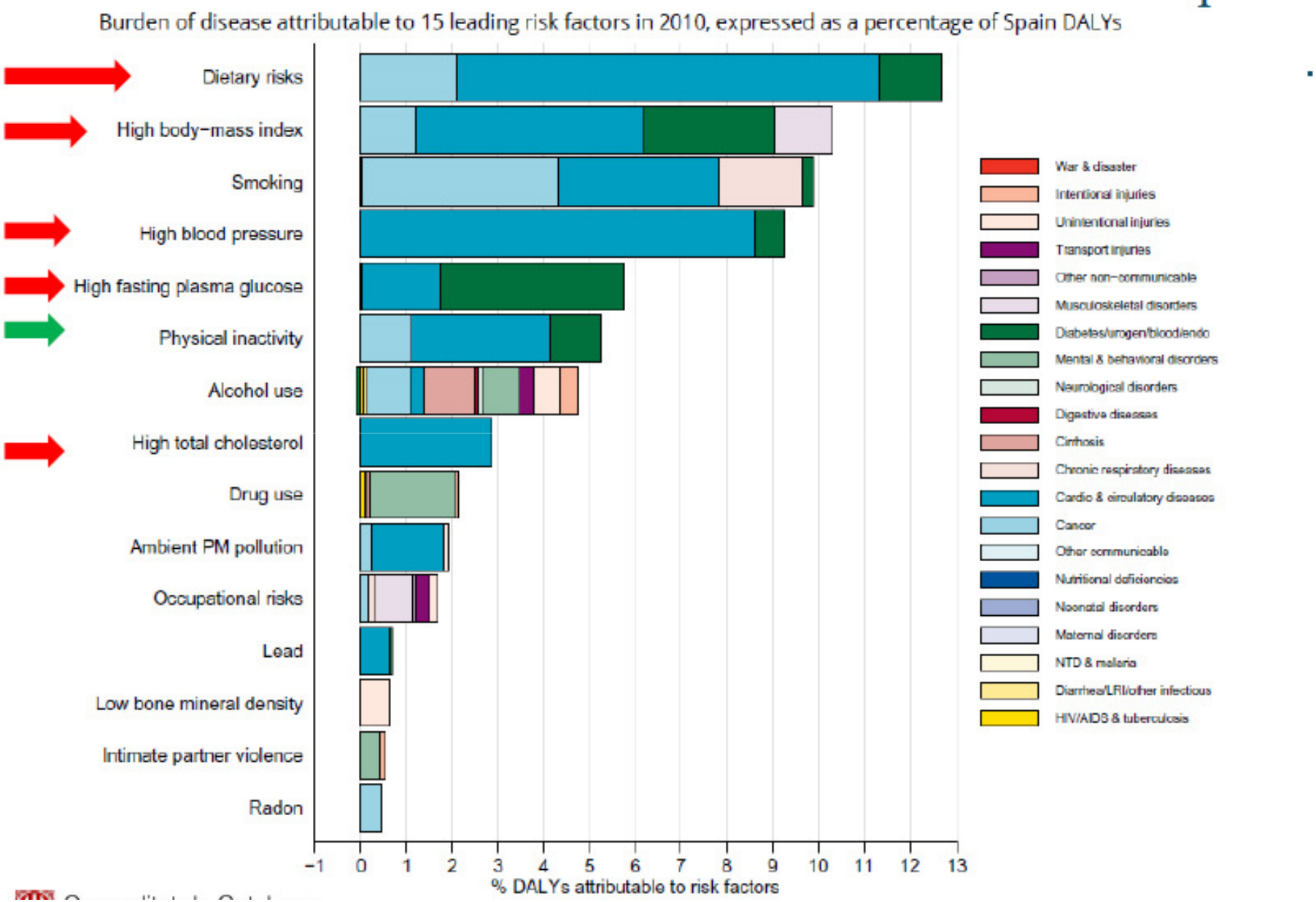


GLOBAL BURDEN OF DISEASE

GBD 2010, released 3/2013



The Global Burden of Disease: Spain



Métodos de evaluación de la calidad de la Evidencia

Sociedad Europea de Cardiología

Table I Classes of recommendations

Classes of recommendations	Definition	Suggested wording to use
Class I	Evidence and/or general agreement that a given treatment or procedure is beneficial, useful, effective.	Is recommended/is indicated
Class II	Conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of the given treatment or procedure.	
Class IIa	*Weight of evidence/opinion is in favour of usefulness/efficacy.*	Should be considered
Class IIb	*Usefulness/efficacy is less well established by evidence/opinion.*	May be considered
Class III	Evidence or general agreement that the given treatment or procedure is not useful/effective, and in some cases may be harmful.	Is not recommended

Table 2 Levels of evidence

Level of evidence A	Data derived from multiple randomized clinical trials or meta-analyses.
Level of evidence B	Data derived from a single randomized clinical trial or large non-randomized studies.
Level of evidence C	Consensus of opinion of the experts and/or small studies, retrospective studies, registries.

Grading of Recommendations Assesmentt, Development and Evaluation

Table 3 Quality of evidence used in GRADE[9]

Study limitations	Non-concealment of allocation; non-blinding of outcome assessment; high losses to follow-up; no intention-to-treat analysis.
Inconsistent findings	Variability due to differences in patients studied, intervention, outcomes assessed.
Indirectness of evidence	Head-to-head comparisons are direct; intervention A vs. control and B vs. control is indirect in assessing A vs. B.
Imprecision	Small patient numbers resulting in wide confidence intervals.
Publication bias	Typically trials showing no effect of intervention are not published or are published in local non-indexed journals.

- **Strong**
- **Weak**

QUIÉN NECESITA LA PCV

Recommendations	Class[a]	Level[b]	GRADE
Total risk estimation using multiple risk factors (such as SCORE) is recommended for asymptomatic adults without evidence of CVD.	I	C	Strong

Very high risk

- Documented CVD of any type.
- Diabetes with one or more risk factors or end organ damage.
- Severe chronic kidney disease.
- A calculated SCORE ≥10%.

High risk

- Markedly elevated single risk factors (dyslipidaemias, severe hypertension).
- Diabetes without risk factors or end organ damage.
- Moderate chronic kidney disease.
- A calculated SCORE of 5-10%.

Moderate risk

- A calculated SCORE of 1-5%.
- Many middle-aged subjects belong to this category.

Low risk

SCORE <1% and free of any qualifiers that would put them at moderate risk.

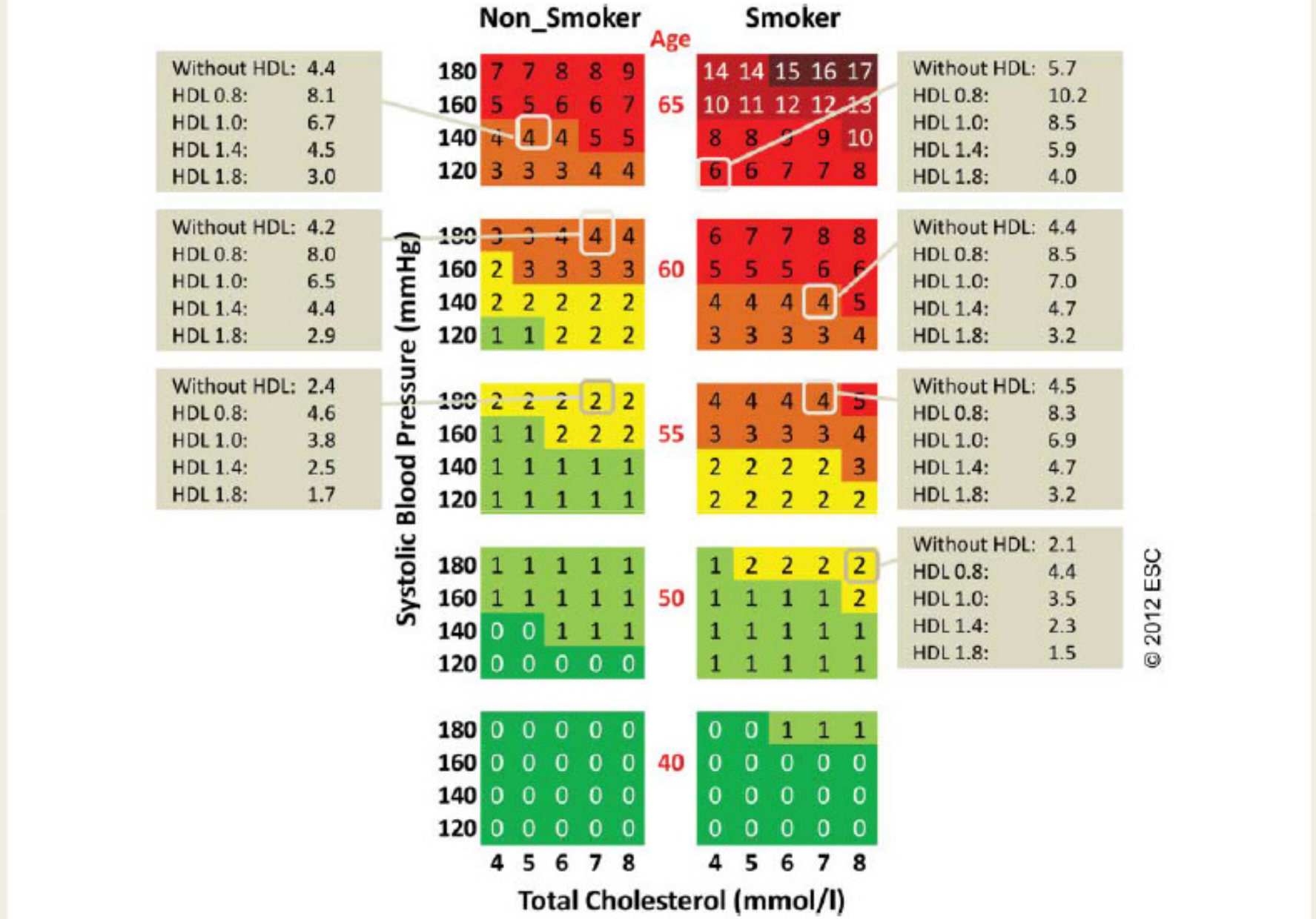
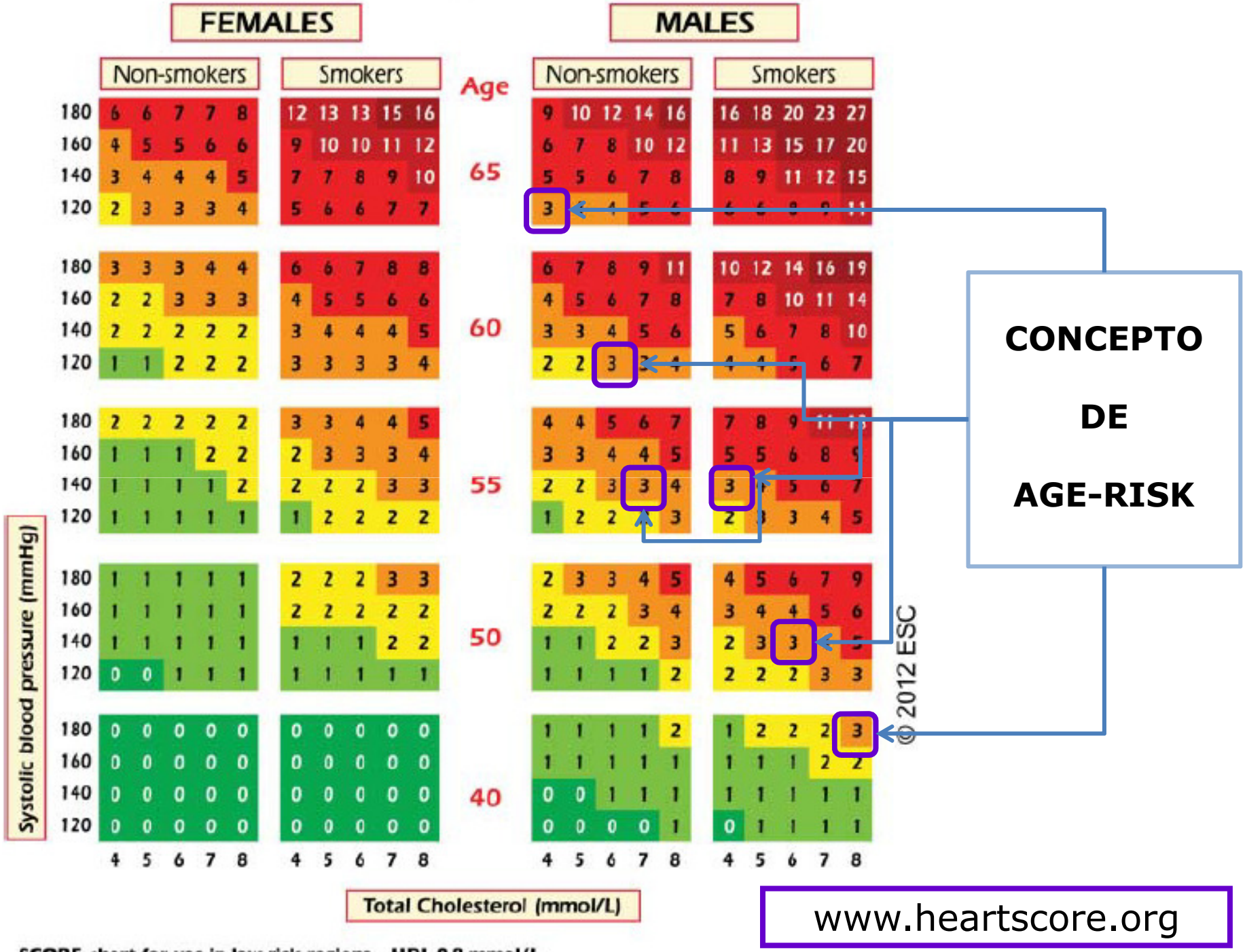


Figure 4 Risk function without high-density lipoprotein-cholesterol (HDL-C) for women in populations at high cardiovascular disease risk, with examples of the corresponding estimated risk when different levels of HDL-C are included.


FEMALES
MALES
Non-smokers
Smokers
Non-smokers
Smokers
Age
65
60
55
50
40
Systolic blood pressure (mmHg)
Total Cholesterol (mmol/L)
CONCEPTO
DE
AGE-RISK
© 2012 ESC
www.heartscore.org
SCORE chart for use in low risk regions - HDL 0.8 mmol/L

En Jóvenes

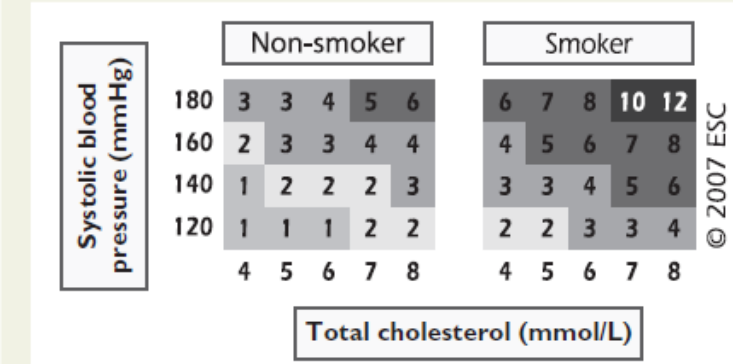


Figure 5 Relative risk chart for 10-year mortality. Conversion of cholesterol mmol/L → mg/dL: 8 = 310, 7 = 270, 6 = 230, 5 = 190, 4 = 155.

En mayores

- Puede encontrarse RCV alto (5-10%) solo en función del sexo y edad.
- Riesgo de uso excesivo de medicación.

Risk estimation using SCORE: Qualifiers

- The charts should be used in the light of the clinician's knowledge and judgement, especially with regard to local conditions.
- As with all risk estimation systems, risk will be over-estimated in countries with a falling CVD mortality rate, and under estimated if it is rising.
- At any given age, risk appears lower for women than men. However, inspection of the charts shows that their risk is merely deferred by 10 years, with a 60 year old woman resembling a 50 year old man in terms of risk.
- Risk may be higher than indicated in the chart in:

- Sedentary or obese subjects, especially those with central obesity
- Those with a strong family history of premature CVD
- Socially deprived individuals and those from some ethnic minorities
- Individuals with diabetes- the SCORE charts should only be used in those with type 1 diabetes without target-organ damage; other diabetic subjects are already at very high risk.
- Those with low HDL cholesterol* or increased triglyceride, fibrinogen, apoB, Lp(a) levels and perhaps increased high-sensitivity CRP.
- Asymptomatic subjects with evidence of pre-clinical atherosclerosis, for example plaque on ultrasonography.
- Those with moderate to severe chronic kidney disease (GFR <60 mL/min/1.73 m^2)

Low socio-economic status, lack of social support, stress at work and in family life, depression, anxiety, hostility and the type D personality, contribute both to the risk of developing CVD and the worsening of clinical course and prognosis of CVD.

Other risk recommendations

- Genetic testing has no place in CVD risk assessment (III, B, strong).
- Psychosocial factors should be taken into account in risk assessment (IIA, B, strong).
- Fibrinogen, high sensitivity CRP and/or homocysteine may be measured as part of refined risk assessment in patients with an unusual or moderate CVD risk profile (IIB, B, weak).
- In patients with a moderate CVD risk profile the use of carotid IMT, ABI (ankle-brachial index) (IIA, B, strong) or CT-scan calcium score (IIa, B, weak) may be considered.
- Risk assessement should be conducted in patients with sleep-apneic disease (IIA, A, strong), or those with erectile dysfunction (IIa, B, strong).

www.escardio.org/guidelines

European Heart Journal 2012:33;1635–1701
European Journal of Preventive Cardiology 2012;19: 4:585-667

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Objetivos Terapéuticos en PCV

LDL-Colesterol

The recommended target levels are <5 mmol/L (less than ~190 mg/dL) for total plasma cholesterol and <3 mmol/L (less than ~115 mg/dL) for LDL cholesterol for subjects at low or moderate risk.	I	A	Strong
In patients at high CVD risk, an LDL cholesterol goal <2.5 mmol/L (less than ~100 mg/dL) is recommended.	I	A	Strong
In patients at very high CVD risk, the recommended LDL cholesterol target is <1.8 mmol/L (less than ~70 mg/dL) or a ≥50% LDL cholesterol reduction when the target level cannot be reached.	I	A	Strong

Presión Arterial

- Systolic blood pressure should be lowered to <140 mmHg (and diastolic blood pressure <90 mmHg) in all hypertensive patients.

Diabetes

- The target HbA1c for the prevention of CVD in diabetes of <7.0% (<53 mmol/mol) is recommended.
- Blood pressure targets in diabetes are recommend to be <140/80 mmHg.

CÓMO SE APLICA LA PCV

Behavioural change

	Class	Level	GRADE
Established cognitive-behavioural strategies (e.g. motivational interviewing) to facilitate lifestyle change are recommended.	I	A	Strong
Specialized healthcare professionals (e.g. nurses, dieticians, psychologists, etc.) should be involved whenever necessary and feasible.	IIa	A	Strong
In individuals at very high CVD risk multimodal interventions, integrating education on healthy lifestyle and medical resources, exercise training, stress management and counselling on psychosocial risk factors, are recommended.	I	A	Strong

Psychosocial risk factors (stress, social isolation, and negative emotions) that may act as barriers against behaviour change should be addressed in tailored individual or group counselling sessions

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The 'Five A's' for smoking cessation strategy for routine practice

A - ASK	Systematically inquire about smoking status at every opportunity.
A - ADVISE	Unequivocally urge all smokers to quit.
A - ASSESS	Determine the person's degree of addiction and readiness to quit.
A - ASSIST	Agree on a smoking-cessation strategy, including setting a quit date, behavioural counselling and pharmacological support.
A - ARRANGE	Arrange a schedule for follow-up.

Public health measures such as smoking bans, tobacco taxation, and media campaigns are efficient aids in preventing smoking uptake and supporting smoking cessation

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European Heart Journal 2012:33;1635–1701
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Regarding nutrition

	Class	Level	GRADE
A healthy diet is recommended as being the cornerstone of CVD prevention.	I	B	Strong

- Saturated fatty acids to account for <10% of total energy intake, through replacement by polyunsaturated fatty acids.
- Trans unsaturated fatty acids: as little as possible, preferably no intake from processed food, and <1% of total energy intake from natural origin.
- <5 g of salt per day.
- 30–45 g of fibre per day, from wholegrain products, fruits and vegetables.
- 200 g of fruit per day (2-3 servings).
- 200 g of vegetables per day (2-3 servings).
- Fish at least twice a week, one of which to be oily fish.
- Consumption of alcoholic beverages should be limited to 2 glasses per day (20 g/d of alcohol) for men and 1 glass per day (10 g/d of alcohol) for women.

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Estrategia poblacional en nutrición

Garantizar la disponibilidad de información fiable y accesible

1.Establecer un etiquetado nutricional más informativo y fácilmente comprensible. Semáforo Nutricional

2.Campañas poblacionales sostenidas en el tiempo de promoción de la alimentación saludable. Currículum escolar

3.Alegaciones nutricionales y de salud basadas en perfiles nutricionales.

Construir un entorno que facilite las opciones saludables

1.Poner en marcha políticas agroalimentarias que faciliten la producción y distribución generalizada de productos saludables a precios asequibles para toda la población.

2.Prohibir la publicidad dirigida a menores de productos alimentarios altamente energéticos y pobres en nutrientes.

3.Establecer subsidios/impuestos para promover alimentación saludable.

4.Sustituir en los colegios e institutos las máquinas expendedoras de alimentos y bebidas por fuentes de agua.

5.Reformular los productos alimentarios procesados para reducir su contenido en azúcares y sal.

Physical activity

	Class	Level	GRADE
Healthy adults should spend 2.5-5 hours a week on physical activity or aerobic exercise training of at least moderate intensity, or 1-2.5 hours a week on intense exercise. Sedentary subjects should be strongly encouraged to start light-intensity exercise programmes.	I	A	Strong
Physical activity/aerobic exercise training should be performed in multiple bouts lasting ≥10 minutes and spread throughout the week.	IIa	A	Strong
Patients with previous acute myocardial infarction, CABG, PCI, stable angina pectoris or stable chronic heart failure should undergo moderate-to-vigorous intensity aerobic exercise training ≥ 3 times a week and 30 min per session. Sedentary patients should be strongly encouraged to start light-intensity exercise programmes after adequate exercise-related risk stratification.	I	A	Strong

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Regarding body weight

	Class	Level	GRADE
Weight reduction in overweight and obese people is recommended as this is associated with favourable effects on blood pressure and dyslipidaemia, which may lead to less CVD.	I	A	Strong

Perímetro de Cintura

- **Nivel de intervención 1: Límite ganancia de peso**
  - **> 94 cm en hombres**
  - **> 82 cm en mujeres**
- **Nivel de intervención 2: Reducción de peso**
  - **>102 cm en hombres**
  - **> 88 cm en mujeres**

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Hipertensión Arterial

Recommendations	Class[a]	Level[b]	GRADE
Lifestyle measures such as weight control, increased physical activity, alcohol moderation, sodium restriction, and increased consumption of fruits, vegetables, and low-fat dairy products are recommended in all patients with hypertension and in individuals with high normal BP.	I	B	Strong
All major antihypertensive drug classes (i.e. diuretics, ACE inhibitors, calcium antagonists, angiotensin receptor antagonists, and beta-blockers) do not differ significantly in their BP-lowering efficacy and thus should be recommended for the initiation and maintenance of antihypertensive treatment.	I	A	Strong
Beta-blockers and thiazide diuretics are not recommended in hypertensive patients with multiple metabolic risk factors increasing the risk of new-onset diabetes.	III	A	Strong
In patients with diabetes, an ACE inhibitor or a renin–angiotensin receptor blocker is recommended.	I	A	Strong
Drug treatment is recommended to be initiated promptly in patients with grade 3 hypertension, as well as in patients with grade 1 or 2 hypertension who are at high or very high total cardiovascular risk.	I	C	Strong
All hypertensive patients with established cardiovascular disease, or with type 2 diabetes, or with an estimated 10-year risk of cardiovascular death ≥5% (based on the SCORE chart) should be considered for statin therapy.	IIa	B	Strong
Antiplatelet therapy, in particular low-dose aspirin, is recommended for hypertensive patients with cardiovascular events.	I	A	Strong

Diabetes

Únicamente se debe estimar el RCV con Score en diabetes tipo 1 sin lesión de órgano diana

Recommendations	Class[a]	Level[b]	GRADE
The target HbA_{1c} for the prevention of CVD in diabetes of <7.0% (<53 mmol/mol) is recommended.	I	A	Strong
Statins are recommended to reduce cardiovascular risk in diabetes.	I	A	Strong
Hypoglycaemia and excessive weight gain must be avoided and individual approaches (both targets and drug choices) may be necessary in patients with complex disease.	I	B	Strong
Metformin should be used as first-line therapy if tolerated and not contraindicated	IIa	B	Strong

Antiplatelet therapy with aspirin is not recommended for people with diabetes who do not have clinical evidence of atherosclerotic disease.	III	A	Strong

Dislipemia

All patients with familial hypercholesterolaemia must be recognized as high-risk patients and be treated with lipid-lowering therapy.	I	A	Strong
In patients with an ACS, statin treatment in high doses has to be initiated while the patients are in hospital.	I	A	Strong

Total CV risk (SCORE) %	LDL-C lvels				
	<70 mg/dL <1.8 mmol/L	70 to <100 mg/dL 1.8 to <2.5 mmol/L	100 to <155 mg/dL 2.5 to <4.0 mmol/L	155 to <190 mg/dL 4.0 to <4.9 mmol/L	>190 mg/dL >4.9 mmol/L
<1	No lipid intervention	No lipid intervention	Lifestyle intervention	Lifestyle intervention	Lifestyle intervention, consider drug if uncontrolled
Class[a]/Level[b]	I/C	I/C	I/C	I/C	IIa/A
≥1 to <5	Lifestyle intervention	Lifestyle intervention	Lifestyle intervention, consider drug if uncontrolled	Lifestyle intervention, consider drug if uncontrolled	Lifestyle intervention, consider drug if uncontrolled
Class[a]/Level[b]	I/C	I/C	IIa/A	IIa/A	I/A
>5 to <10, or high risk	Lifestyle intervention, consider drug	Lifestyle intervention, consider drug	Lifestyle intervention and immediate drug intervention	Lifestyle intervention and immediate drug intervention	Lifestyle intervention and immediate drug intervention
Class[a]/Level[b]	IIa/A	IIa/A	IIa/A	I/A	I/A
≥10 or very high risk	Lifestyle intervention, consider drug*	Lifestyle intervention and immediate drug intervention	Lifestyle intervention and immediate drug intervention	Lifestyle intervention and immediate drug intervention	Lifestyle intervention and immediate drug intervention
Class[a]/Level[b]	IIa/A	IIa/A	I/A	I/A	I/A

Terapia Antiagregante

- Se desestima el uso de aspirina en prevención primaria, incluidos los pacientes diabéticos o con insuficiencia renal crónica.

- En pacientes con ECV y alergia o intolerancia a la aspirina, el clopidogrel es la alternativa de elección.

- La doble terapia antiagregante está indicada en pacientes con síndrome coronario agudo durante un año:
    - Excepto alto riesgo sangrado (tto. anticoagulante): Duración de 4-6 semanas (evitar stent recubiertos o farmacoactivos)
    - La evidencia es aún limitada para priorizar prasugrel y ticagrerol (nuevos antagonistas del receptor P2Y12) frente a cloopidogrel, con amplia experiencia de uso y menor coste.

- En ECV crónica y estable la doble antiagregación no es más eficaz y aumenta el riesgo de sangrado

Cumplimiento Terapéutico

Recommendations	Class[a]	Level[b]	GRADE
Physicians must assess adherence to medication, and identify reasons for non-adherence in order to tailor further interventions to the individual needs of the patient or person at risk.	I	A	Strong
In clinical practice, reducing dosage demands to the lowest acceptable level is recommended. In addition, repetitive monitoring and feedback should be implemented. If feasible, multisession or combined behavioural interventions should be offered in the case of persistent non-adherence.	IIa	A	Strong

- Provide clear advice regarding the benefits and possible adverse effects of the medication, and the duration and timing of dosing.
- Consider patients' habits and preferences.
- Reduce dosage demands to the lowest feasible level.
- Ask patients in a non-judgemental way how the medication works for them, and discuss possible reasons for non-adherence (e.g. side effects, worries).
- Implement repetitive monitoring and feedback.
- In the case of lack of time, introduce physicians assistants and/or trained nurses whenever its necessary and feasible.
- In the case of persistent non-adherence, offer multisession or combined behavioural interventions.

Estrategias Implantación CEIPC

- Difusión
  - Publicación en las revistas de las sociedades
  - Edición Especial MSC
  - Guías de Bolsillo
  - Pág. Web: www.ceipc.org
  - Jornadas Nacionales del CEIPC
  - Participación en Foros y Congresos
- Formación: Cursos presenciales y por internet
- Investigación
  - Documento de consenso CEIPC/SEA dislipemias
  - Estudio PCV en las Comunidades Autónomas
  - Estudio Barreras

SINERGIAS, ALIANZAS, REDES Y CONSENSOS

Gracias por su atención

CEIPC

Comité Español Interdisciplinario para la Prevención Cardiovascular

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