

Promoting Transdisciplinary Collaboration in University and Community Settings: Lessons Learned and Exemplars of Success

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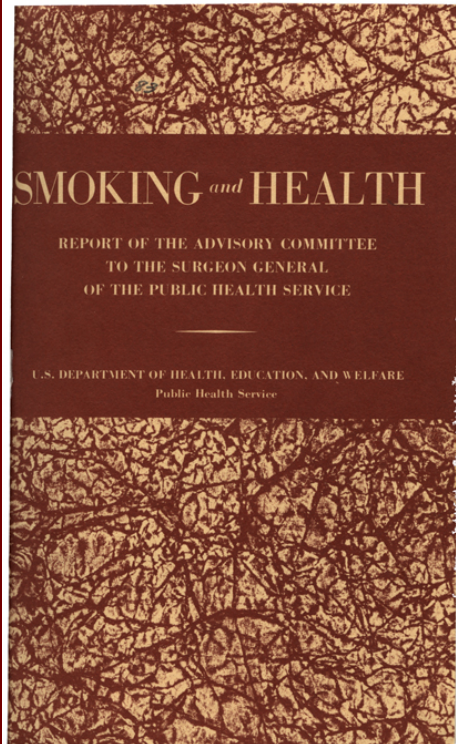
Harvard School of Public Health
Dana-Farber Cancer Institute



Public Health -- In Action

Epidemiology

- Identify behavioral RFs for preventable diseases



Public Health -- In Action

Epidemiology

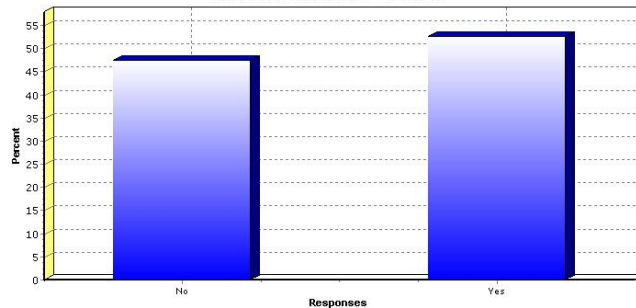
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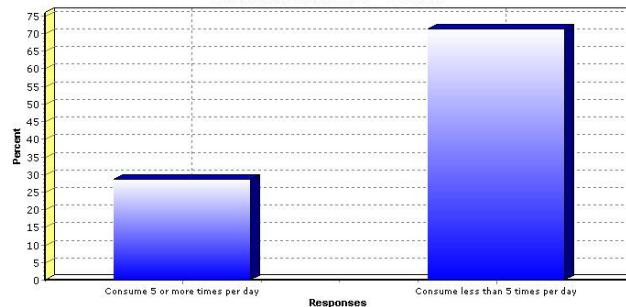
Behavioral Science

- High prevalence of behavioral RFs for preventable diseases

**Moderate physical activity
Massachusetts - 2005**



**Consumption of Fruits and Vegetables per day
Massachusetts - 2005**



Public Health -- In Action

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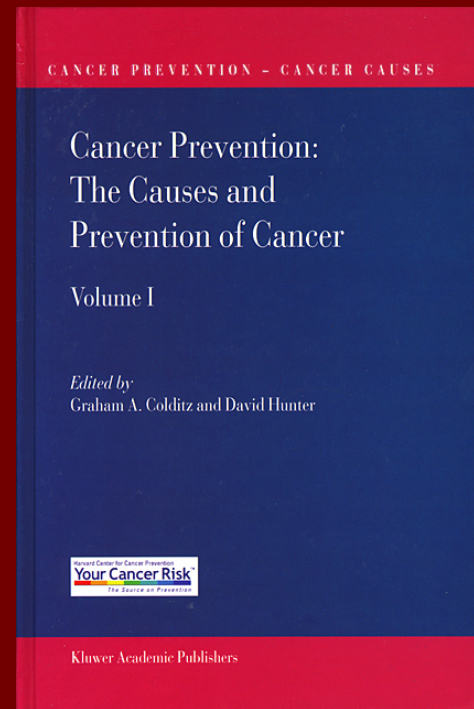
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Epidemiology

- Available Ca Prevention/ED strategies could reduce US cancer mortality by 60%



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Behavioral Science

- Develop new strategies for increasing efficacy of Ixs



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Behavioral Science

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Why Should Public Health Embrace TD Science?



Why Should Public Health Embrace TD Science?



Why Should Public Health Embrace TD Science?

- A TD approach is much more likely to provide opportunities for synergy across levels of influence
- Inefficiencies of disciplinary silos
- Disciplinary silos limit solutions to disparities, and may make them worse

Examples of TD Initiatives in University Settings

DF/HCC

DANA-FARBER / HARVARD CANCER CENTER



Facilitators

- Translational research highly valued
- Nodal point interactions created
- Pilot money available only to new nodal points

Examples of TD Initiatives in University Settings

DF/HCC

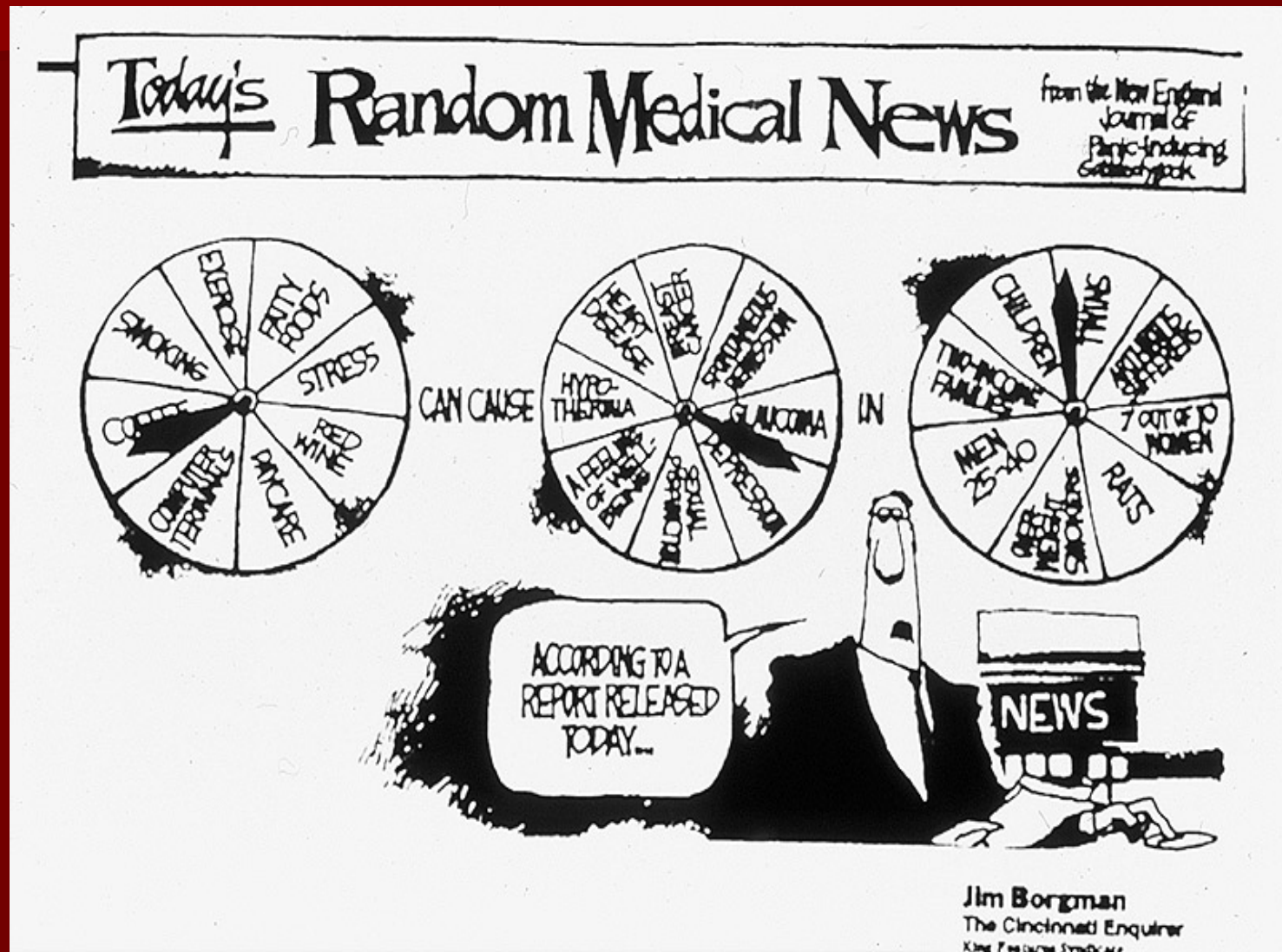
DANA-FARBER / HARVARD CANCER CENTER



Challenges

- Limited metrics for assessing impact
- Center size
- Geographic dispersion
- What happens when the money gets tight?

Examples of TD Initiatives in University Settings





Formed among faculty in 1995 to:

- Promote research to speed development of cancer prevention strategies
- Foster education programs for future leaders in cancer prevention
- Communicate to the public what we know about cancer prevention

- Formed a working group from among members of the HCCP
- Defined subset of cancer accounting for 80% of US disease burden
- Defined the definite, probable, and possible causes of these cancers
- Developed scales to convert risk factors to level of risk



- Environmental, nutritional, and lifestyle factors considered to be definite or probable causes of these cancers
- Excluded
 - exposures not related to clinical disease
 - exposures with insufficient evidence to allow inference of causality



- Used expert panel
- Multiple iterations
- Rules for assessing strength of association



Harvard Center for Cancer Prevention

Your Cancer Risk™



The Source on Prevention

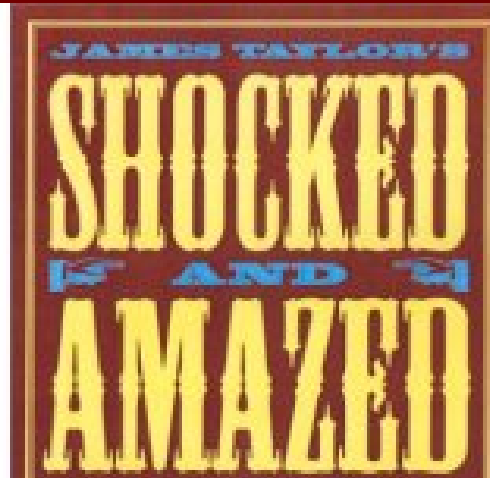


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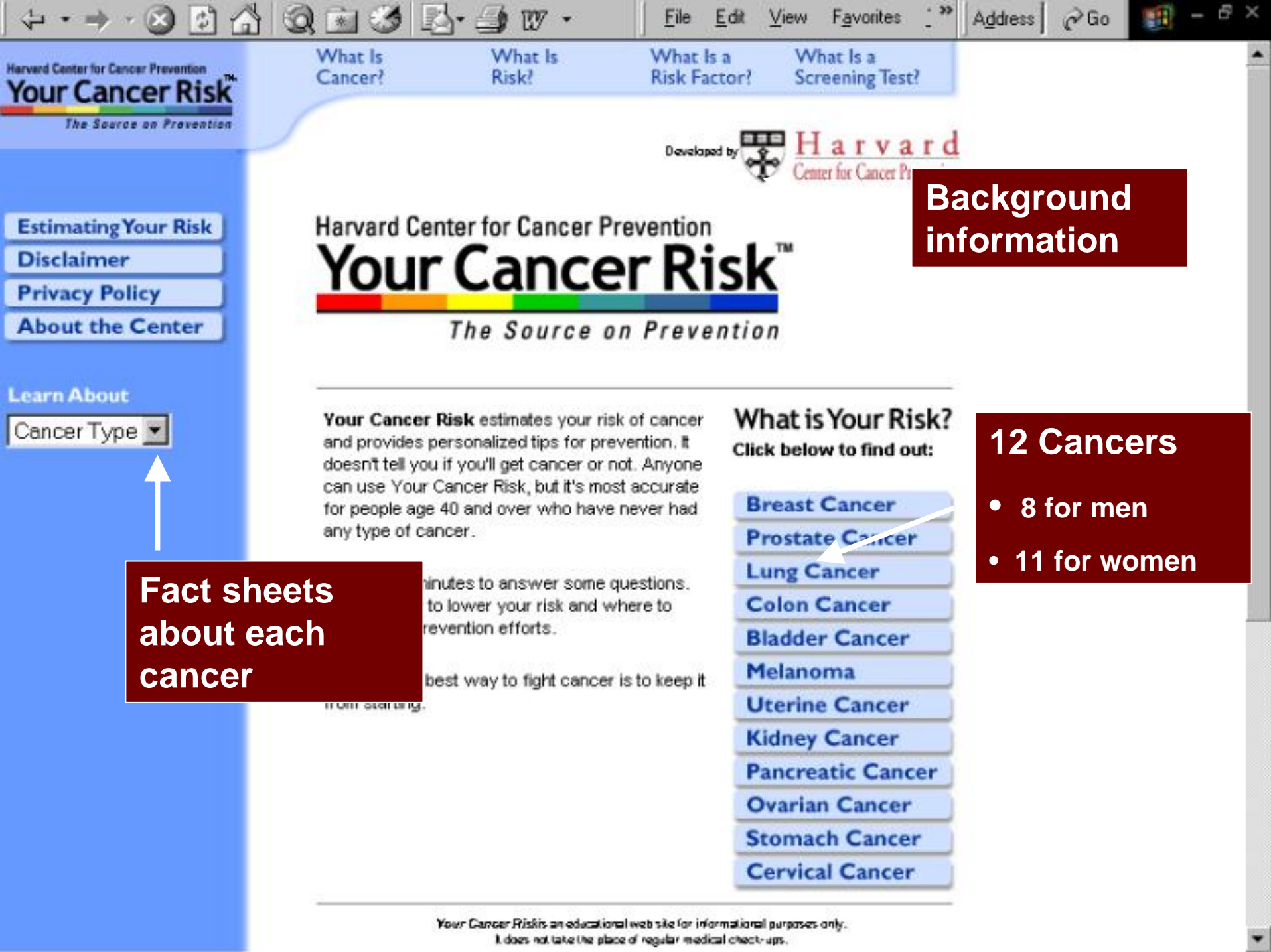
Harvard Center for Cancer Prevention

Your Cancer Risk™



The Source on Prevention





What Is
Cancer?

What Is
Risk?

What Is a
Risk Factor?

What Is a
Screening Test?

Developed by  **Harvard**
Center for Cancer Prevention

Harvard Center for Cancer Prevention **Your Cancer Risk** *The Source on Prevention*

**Background
information**

[Estimating Your Risk](#)
[Disclaimer](#)
[Privacy Policy](#)
[About the Center](#)

Learn About

Cancer Type ▾

**Fact sheets
about each
cancer**

Your Cancer Risk estimates your risk of cancer and provides personalized tips for prevention. It doesn't tell you if you'll get cancer or not. Anyone can use Your Cancer Risk, but it's most accurate for people age 40 and over who have never had any type of cancer.

What is Your Risk?

Click below to find out:

[Breast Cancer](#)
[Prostate Cancer](#)
[Lung Cancer](#)
[Colon Cancer](#)
[Bladder Cancer](#)
[Melanoma](#)
[Uterine Cancer](#)
[Kidney Cancer](#)
[Pancreatic Cancer](#)
[Ovarian Cancer](#)
[Stomach Cancer](#)
[Cervical Cancer](#)

12 Cancers

- 8 for men
- 11 for women



"'BE CAREFUL'! ALL YOU CAN
TELL ME IS 'BE CAREFUL'?"

It's not just cancer anymore!

www.yourdiseaserisk.harvard.edu

The Harvard Center for Cancer Prevention is pleased to announce the launch of **Your Disease Risk**. Now, in addition to cancer, you can find out your risk of four other important diseases and, as always, get personalized tips for preventing them.



HARVARD CENTER FOR CANCER PREVENTION
HARVARD SCHOOL OF PUBLIC HEALTH

The Harvard Center for Cancer Prevention
Your Disease Risk
THE SOURCE ON PREVENTION

HCCP home

My results: colon cancer

What is your risk?

	Cancer: There's much more to it than just smoking and lung cancer.	What's your cancer risk?
	Diabetes: Over 18 million in the U.S. suffer from it. Take steps now to lower your risk.	What's your diabetes risk?
	Heart disease: The #1 killer in the U.S. is also one of the most preventable.	What's your heart disease risk?
	Osteoporosis: Calcium isn't the only way (or even the best way) to protect yourself.	What's your osteoporosis risk?
	Stroke: Most cases of this feared disease can be avoided with lifestyle changes.	What's your stroke risk?

9 ways to prevent disease

- prevention
- risk
- a screening test

http://www.yourdiseaserisk.harvard.edu/hccpquiz.pl?func=start&quiz=heart

Heart Disease

The Harvard Center for Cancer Prevention

Your Disease Risk

THE SOURCE ON PREVENTION

9 ways to prevent disease

What is...?

- prevention
- risk
- a screening test

How to...

- estimate risk

Community Action >>

Diabetes

Heart disease

Osteoporosis

Stroke

Heart Disease

This interactive tool estimates your risk of coronary heart disease and provides personalized tips for prevention. Anyone can use it, but it's most accurate for people who have never had any type of heart disease. If you have heart disease, be sure to talk to your doctor about your risk.

Take a few minutes to answer some questions and find out your risk. It doesn't tell you if you'll get heart disease or not, but it does tell you where to focus your prevention efforts. Because the best way to fight heart disease is to stop it before it starts!

Questionnaire

What is your sex?

☒ Male ☐ Female

Enter your age:

next

Heart disease

- Fact Sheet
- Risk Factors
- Questionnaire

My results: Disease Type

Your Disease Risk home | HCCP home

http://www.yourdiseaserisk.harvard.edu/hccpquiz.pl?page=12&func=d_end&quiz=heart&prev_page=11&q

Results

The Harvard Center for Cancer Prevention

Your Disease Risk

THE SOURCE OF

My results: Disease Type

Personalized screening recommendations

Cancer

Diabetes

Heart disease

Osteoporosis

Stroke

9 ways to prevent disease

What is...?

- prevention
- risk
- a screening test

How to...

- estimate risk

Community Action >>

Compared to a typical man your age, your risk is **above average**

Screening Tip

Get checked regularly by a health care professional for important heart disease.

Verbal and visual results

Above average risk doesn't mean you'll definitely get heart disease. It's just an estimate based on your risk factors, some of which you may not be able to change. If you have any concerns, talk to a doctor.

Tailored risk-lowering messages

Your risk is above average

HIGH

AVERAGE

Your Risk

Watch Your Risk Drop

You have 8 things you can do to lower your risk. To see what your risk could be, click on a box and watch your risk drop:

- ☐ Quit smoking. **TIPS**
- ☐ Decrease the saturated fats in your diet. **TIPS**
- ☐ Decrease the trans unsaturated fats in your diet. **TIPS**
- ☐ Increase your physical activity: work towards at least 30 minutes a day. **TIPS**
- ☐ Control your blood pressure. **TIPS**

Community
Action >>

- You eat 2 or more servings of fish per week. [MORE](#)
- You eat 5 or more servings of fruits

Mis resultados: No Results Yet

Cáncer

Diabetes

Enfermedades del corazón

Osteoporosis

Derrame cerebral

9 FORMAS

de prevenir enfermedades

¿Qué es...

- prevención
- riesgo
- exámenes

¿Cómo...

- estimar el riesgo

Bienvenido a *Cuidar de su Salud*, su recurso para la prevención. Si está buscando Su Riesgo de Cáncer, no se preocupe. Está en el lugar indicado. Simplemente nos hemos expandido. Ahora, sumado al cáncer, usted puede encontrar información acerca de su riesgo de padecer cuatro enfermedades muy importantes y, como siempre, encontrará formas personalizadas de prevenirlas.

Por favor, déjenos saber que opina del nuevo sitio completando la siguiente encuesta:

¿CUÁL ES SU RIESGO?

	CÁNCER: Existe mucho más que fumar y el cáncer de pulmón	 ¿Cuál es su riesgo de cáncer?
	DIABETES: Más de 18 millones de personas en los Estados Unidos lo sufren. Aprenda ahora como reducir su riesgo.	 ¿Cuál es su riesgo de diabetes?
	ENFERMEDADES DEL CORAZÓN: La causa de muerte # 1 en los Estados Unidos es también la más prevenible.	 ¿Cuál es su riesgo de enfermedades del corazón?
	OSTEOPOROSIS: El calcio no es la única manera (o siquiera la mejor) de protegerse.	 ¿Cuál es su riesgo de osteoporosis?
	DERRAME CEREBRAL: En muchos casos, esta temida enfermedad puede ser prevenida mediante cambios de estilo de vida.	 ¿Cuál es su riesgo de derrame cerebral?

Limitations of Existing Research

- Small Sample Sizes
- Homogeneous Samples
- Limited Range of Risk Levels
- Limited Range of Tasks
- Unable to Study Interactions

Experiments Conducted on YourCancerRisk

Text only presentations

- Comparison and halving problems (N = 4264)
- Tripling and adding problems (N = 4270)
- Tradeoff and sequence problems (N = 3757)

Text plus graphics

- Tradeoff problem (N = 1569)

Examples of TD Initiatives in Community Settings

- Community-Based Participatory Research-- Principles
 - build on strengths and resources within the community
 - integrate knowledge and action for mutual benefit of all partners
 - promote a co-learning and empowering process
 - facilitate collaborative, equitable involvement of all partners in all phases of the research.

MASS CONECT

Massachusetts Community Networks to Eliminate Cancer Disparities through Education, Research, and Training

Links DF/HCC and community partners to:

- advance cancer education
- stimulate community-based participatory research
- stimulate state/local level policy initiatives;
- increase use of cancer prevention and clinical services

MASS CONECT

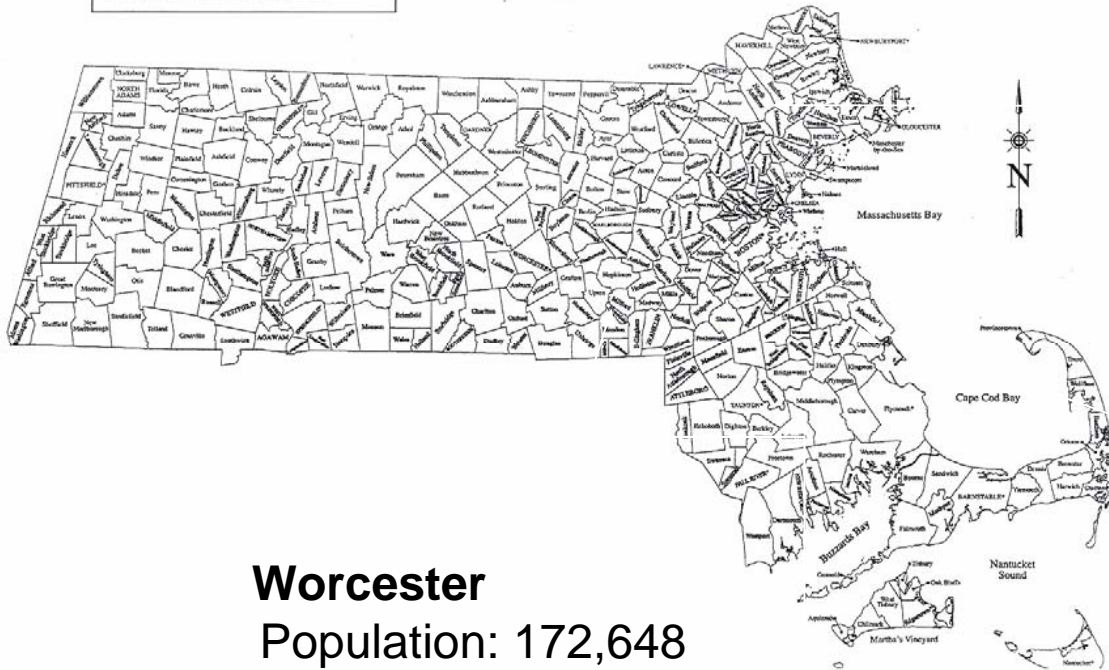
Massachusetts Community Networks to Eliminate Cancer Disparities through Education, Research, and Training

Massachusetts:

Population: 6,349,097

*% Living in high poverty areas: 30%

% Racial/ethnic minority: 15%



Lawrence

Population: 72,043

Boston

Population: 589,141

Worcester

Population: 172,648

*=percentage of population living in census tracts where 10% or more of residents have income below 100% poverty level

Data Source: US Census 2000



Rob
Rogers
Pittsburgh
Post-
Gazette