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# Economic Evaluation and Health Promotion

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Prozac or Primary Prevention?

Chemotherapy or Community Action?

Health Care or Health Promotion?

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# THE ECONOMIC IMPERATIVE

Resources are scarce relative to all that we could do  
with them

If we are to make the best use of our collective  
resources then they must be allocated to where they  
have the biggest impact per unit of cost

That is resources should go to those services that are  
the most cost-effective

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# What do we know about the economic value of health promotion?

- Some health promotion interventions improve health AND save money



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# Some Really Good Buys: Programs that Save Money AND Promote Health

## COMMUNITY PROGRAMS

- ❑ Safe-sex negotiation skills training for gay men
  - ❑ (some) Schools-based tobacco control programs
  - ❑ Needle and syringe exchange programs
  
  - ❑ Nutrition programs for low income women and infants
  - ❑ Targeted child care and child development programs
  - ❑ Pneumococcal vaccination
  - ❑ Prenatal screening + Vaccination for Hepatitis B
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# Some Really Good Buys: Programs that Save Money AND Promote Health

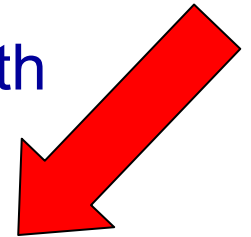
## ■ POLICY AND REGULATION

- ❑ Random breath testing
  - ❑ Fortification of cereals with folic acid
  - ❑ Community-based water fluoridation
  - ❑ Workplace bans on tobacco use
  - ❑ Bans on smoking in public places
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# What do we know about the economic value of health promotion?

- Some health promotion interventions improve health AND save money
- Some health promotion interventions do not improve health AND cost money



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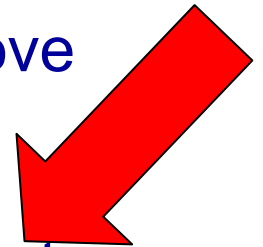
# Some Really Bad Buys: Programs that Cost Money and do not Promote Health

- ❑ Education to encourage folate supplementation vs fortification
  - ❑ Screening for Hepatitis C in a population at average risk of infection vs no screening
  - ❑ Video vs usual care for men attending their Family Practitioner with one or more CVD risk factors
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# What do we know about the economic value of health promotion?

- Some health promotion interventions improve health AND save money
- Some health promotion interventions do not improve health AND cost money
- Most health promotion interventions cost money but improve health in the process



# Investing in Health: Health Promotion

## The Price of One Year of Life in Full Health

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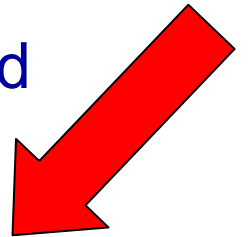
Selective vs universal HBV vaccination	\$4,800 - \$16,000
Nicotine patches vs no patches	\$5,500 - \$13,000
Secondary prevention of CVD	\$10,000
Installation of street lights on highways	\$28,000
Drug treatment hypertension women age 40	\$34,000
Dual driver air-bags vs driver only air bags	\$76,000
Breast cancer screening (15 mths vs 2 years)	\$150,000
Varicella vaccination, adults w/o pre-testing	\$2.3 million

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# What do we know about the economic value of health promotion?

- Some health promotion interventions improve health AND save money
- Some health promotion interventions do not improve health AND cost money
- Most health promotion interventions cost money and improve health in the process
- And they often represent good value for money when compared with health care



# Investing in Health: Promotion v Treatment

## The Price of One Year of Life in Full Health

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Random breath testing	Cost saving
Selective vs universal HBV vaccination	\$4,800 - \$16,000
Nicotine patches vs no patches	\$5,500 - \$13,000
Installation of street lights on highways	\$28,000
Coronary stenting	\$24,000
CABG for severe angina	\$59,000
Lung transplantation	\$100,000
Beta interferon for Multiple Sclerosis	\$610,000

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# Concluding Thoughts

- The economic imperative is not going to go away
  - Health promotion offers a cost-effective way of improving health and well-being
  - It is not a panacea for the problems in the health care system however
  - And one needs to invest in health promotion before one reaps the rewards – not all of the benefits come for free!
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# A Census of Economic Evaluations in Health Promotion<sup>1,2</sup>

Strategic Intent of the intervention	Studies	
Clinical - preventive	237	41%
Developing personal skills	190	33%
Creating supportive environments	117	20%
Strengthening community action	10	2%
Building healthy public policy	8	1%
<b>TOTAL</b>	<b>574</b>	

SOURCE: (1) Rush, Shiell & Hawe. *Health Education Research*, 2004; (2) Shiell et al, mimeo

# A Census of Economic Evaluations<sup>1,2</sup>

<b>Risk Factor Addressed</b>	<b>Studies</b>	
Biological risk factors	279	49%
Behavioural risk factors	233	41%
Environmental risk factors	49	9%
Social risk factors	6	1%
Economic risk factors	1	< 1%
<b>TOTAL</b>	<b>568</b>	

SOURCE: (1) Rush, Shiell & Hawe. *Health Education Research*, 2004; (2) Shiell et al., mimeo