





# EVALUATION 2009

Orlando, Florida

**CONTEXT AND EVALUATION**

Conference: Nov 11-14

Workshops: November 9-11 & 15





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# Ethical Evaluation in contexts where Costs, Benefits, and Net Value Matter:



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Ethical Evaluation  
in contexts where  
Costs, Benefits, and Net Value Matter:

Evaluating  
Costs and Benefits Ethically



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Ethical Evaluation  
in contexts where  
Costs, Benefits, and Net Value Matter:

# Evaluating Costs and Benefits Ethically

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# Avoiding the Special Pitfalls



# Avoiding the Special Pitfalls of Using Monetary Units



Avoiding the Special  
Pitfalls

of Using Monetary  
Units to Measure  
Resources "In"  
and Outcomes "Out"



# Mark Thompson:



# Mark Thompson:

Analysis itself does not create a  
conscience;



# Mark Thompson:

Analysis itself does not create a  
conscience;

... it only reflects the consciences of  
those who use it.



How to evaluate more  
ethically ...



# How to evaluate more ethically ...

- Be more inclusive (of perspectives)



# How to evaluate more ethically ...

- Be more inclusive (of perspectives)
- Be cognizant of biases, and adjust for them
  - biases in observers and judges
  - biases in the very data we collect



# How to evaluate more ethically ...

- Be more inclusive (of perspectives)
- Be cognizant of biases, and adjust for them
  - biases in observers and judges
  - biases in the very data we collect
- Consider the results, too, of evaluation practices.







In cost-inclusive  
evaluation ...



In cost-inclusive  
evaluation ...

Ethical Problems of  
Evaluation are  
**Magnified**



*What are we talking about?*

Cost-Inclusive Evaluation



# *What are we talking about?*

## Cost-Inclusive Evaluation

- evaluates costs,



# *What are we talking about?*

## Cost-Inclusive Evaluation

- evaluates costs,
- evaluates activities,



# *What are we talking about?*

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- evaluates costs,
- evaluates activities,
- sometimes biopsychosocial processes



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- evaluates costs,
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- sometimes biopsychosocial processes  
and
- evaluates outcomes



# *What are we talking about?*

## Cost-Inclusive Evaluation

- evaluates costs,
- evaluates activities,
- sometimes biopsychosocial processes  
and
- evaluates outcomes  
of those activities & processes



“Costs...”



# “Costs...”

- Value, type, amount of resources
  - used to provide a service or produce a product



# “Costs...”

- Value, type, amount of resources
  - used to provide a service or produce a product
- Examples:
  - time
  - space, equipment, materials
  - transportation



# Activities of a program



# Activities of a program

- Classes
- Therapy sessions
- Drug administration
- Billboard interventions
- Group activities



“Outcomes...”



# “Outcomes...”

- Results of a program
  - what happened as a result of program activities that would not have happened otherwise



# “Outcomes...”

- Results of a program
  - what happened as a result of program activities that would not have happened otherwise
- Can be nonmonetary or monetary, e.g.,
  - increased years of life
  - increased lifetime income



# Types of cost-inclusive evaluation



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- Cost-benefit analysis (CBA)



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  - Time to return on investment (TROI)



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- Cost-effectiveness analysis (CEA)



# Types of cost-inclusive evaluation

- Cost-benefit analysis (CBA)
  - Benefit / Cost ratio
  - Net benefit
  - Time to return on investment (TROI)
- Cost-effectiveness analysis (CEA)
  - Cost-utility analysis (CUA)



Consider the stakes in cost-  
inclusive evaluation



# Consider the stakes in cost-inclusive evaluation

- When benefits must exceed costs for program funding or regulation approval...
  - benefits are often well-measured
  - (sometimes not...)
  - costs, to some, may be ignored



When the value of life is  
monetized, what can happen?



# When the value of life is monetized, what can happen?

- When only programs with QALYs costing



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- When only programs with QALYs costing
  - \$50,000



# When the value of life is monetized, what can happen?

- When only programs with QALYs costing
  - \$50,000
  - or \$129,000



# When the value of life is monetized, what can happen?

- When only programs with QALYs costing
  - \$50,000
  - or \$129,000
- or less may be funded...



# EPA & the value of life:



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- “Consider, for example, a hypothetical regulation that costs \$18 billion to enforce but will prevent 2,500 deaths.”



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- “At \$7.8 million per person (the old figure), the lifesaving benefits outweigh the costs.



# EPA & the value of life:

- “Consider, for example, a hypothetical regulation that costs \$18 billion to enforce but will prevent 2,500 deaths.”
  - “At \$7.8 million per person (the old figure), the lifesaving benefits outweigh the costs.
  - But at \$6.9 million per person, the rule costs more than the lives it saves, so it may not be adopted.” (Associated Press, 2008, July 10)







# Inclusivity of Perspectives



# Inclusivity of Perspectives in cost-inclusive evaluations



*Different perspectives possible  
in cost-inclusive evaluation*



# *Different perspectives possible in cost-inclusive evaluation*




# *Different perspectives possible in cost-inclusive evaluation*




# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		



# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		
		Costs		



# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		
		Costs	Activities	



# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		
		Costs	Activities	Outcomes



# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		
		Costs	Activities	Outcomes
<u>Participant Perspective</u>				



# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		
		Costs	Activities	Outcomes
<u>Participant Perspective</u>	evaluator			



# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		
		Costs	Activities	Outcomes
<u>Participant Perspective</u>	evaluator	societal resources		



# *Different perspectives possible in cost-inclusive evaluation*

		<u>Foci</u> of Evaluation		
		Costs	Activities	Outcomes
<u>Participant Perspective</u>	evaluator	societal resources	program delivery	



# *Different perspectives possible in cost-inclusive evaluation*

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<u>Participant Perspective</u>	evaluator	societal resources	program delivery	productive years



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<u>Participant Perspective</u>	evaluator	societal resources	program delivery	productive years
	provider			



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<u>Participant Perspective</u>	evaluator	societal resources	program delivery	productive years
	provider	time & effort		



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		Costs	Activities	Outcomes
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	provider	time & effort	therapy, paperwork	



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	provider	time & effort	therapy, paperwork	program delivery
	consumer	time & effort	therapy, homework	suicide prevention



# Problems when excluding perspectives on costs



# Problems when excluding perspectives on costs

- ignoring costs (i.e., resources contributed by) to an interest group
  - volunteers
  - consumers
  - family, community
  - other providers



# Examples of ignoring perspectives on costs



# Examples of ignoring perspectives on costs

- outpatient treatment
  - patient time in transit
  - patient transportation costs
  - patient opportunity costs



# Examples of ignoring perspectives on costs

- outpatient treatment
  - patient time in transit
  - patient transportation costs
  - patient opportunity costs
- inpatient treatment
  - removal of caregiver from home



# Examples of ignoring perspectives on costs

- outpatient treatment
  - patient time in transit
  - patient transportation costs
  - patient opportunity costs
- inpatient treatment
  - removal of caregiver from home
- deinstitutionalization



# Examples of ignoring perspectives on costs II



# Examples of ignoring perspectives on costs II

- deinstitutionalization
  - ignore costs to family, community



# Examples of ignoring perspectives on costs II

- deinstitutionalization
  - ignore costs to family, community
- underestimate costs
  - of referrals cause additional costs to other services



# Problems when excluding perspectives on outcomes



# Problems when excluding perspectives on outcomes

- ignoring benefits (i.e., resources accruing) to an interest group
  - volunteers
  - consumers
  - family, community
  - other providers



# Examples of ignoring perspectives on outcomes

- *underestimate* benefits of substance abuse treatment
  - usually: multiplier effects on families
- **overestimate** benefits of deinstitutionalization
  - cost-savings ignore high fixed costs in most institutions, e.g., facilities, tenured staff



# Excluding perspectives on outcomes

- ignoring outcomes (i.e., results of service or product) to interest group
  - volunteers
  - consumers
  - family, community
  - other providers



# Excluding perspectives on outcomes II

- misattributing outcomes (i.e., results of service or product)
- minimizing contributions of volunteers, consumers, family, community, and other providers
- exaggerating contribution of a particular provider







Cognizance of biases...



# Cognizance of biases...

in ourselves, in our analysis frameworks, and  
in our data







Valuing outcomes in  
monetary units can  
foster discrimination



# Monetary valuation strategies for outcomes:



# Monetary valuation strategies for outcomes:

- when the outcome is to live or die, to save lives or not, to add years or not:



# Monetary valuation strategies for outcomes:

- when the outcome is to live or die, to save lives or not, to add years or not:
  - lifetime earnings



# Monetary valuation strategies for outcomes:

- when the outcome is to live or die, to save lives or not, to add years or not:
  - lifetime earnings
  - lifetime consumption expenditures



# Monetary valuation strategies for outcomes:

- when the outcome is to live or die, to save lives or not, to add years or not:
  - lifetime earnings
  - lifetime consumption expenditures
  - willingness to pay (used by EPA)



# Monetary valuation strategies for outcomes:

- when the outcome is to live or die, to save lives or not, to add years or not:
  - lifetime earnings
  - lifetime consumption expenditures
  - willingness to pay (used by EPA)
  - awards for loss of life (e.g., \$500,000 to family for soldier killed in Iraq)



# Examples of bias brought by perspectives on monetized outcomes



# Examples of bias brought by perspectives on monetized outcomes

- Lenton (2002) found that bias in monetary valuation of a client's life was decreased by:



# Examples of bias brought by perspectives on monetized outcomes

- Lenton (2002) found that bias in monetary valuation of a client's life was decreased by:
  - similarity of ethnicity of judge and client



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- Lenton (2002) found that bias in monetary valuation of a client's life was decreased by:
  - similarity of ethnicity of judge and client
  - “blamelessness” of client



# Examples of bias brought by perspectives on monetized outcomes

- Lenton (2002) found that bias in monetary valuation of a client's life was decreased by:
  - similarity of ethnicity of judge and client
  - “blamelessness” of client
  - youth of client



# Examples of bias brought by perspectives on monetized outcomes

- Lenton (2002) found that bias in monetary valuation of a client's life was decreased by:
  - similarity of ethnicity of judge and client
  - “blamelessness” of client
  - youth of client
- yielded higher estimates of the value of client life







Consider, for example ...



Consider, for example ...

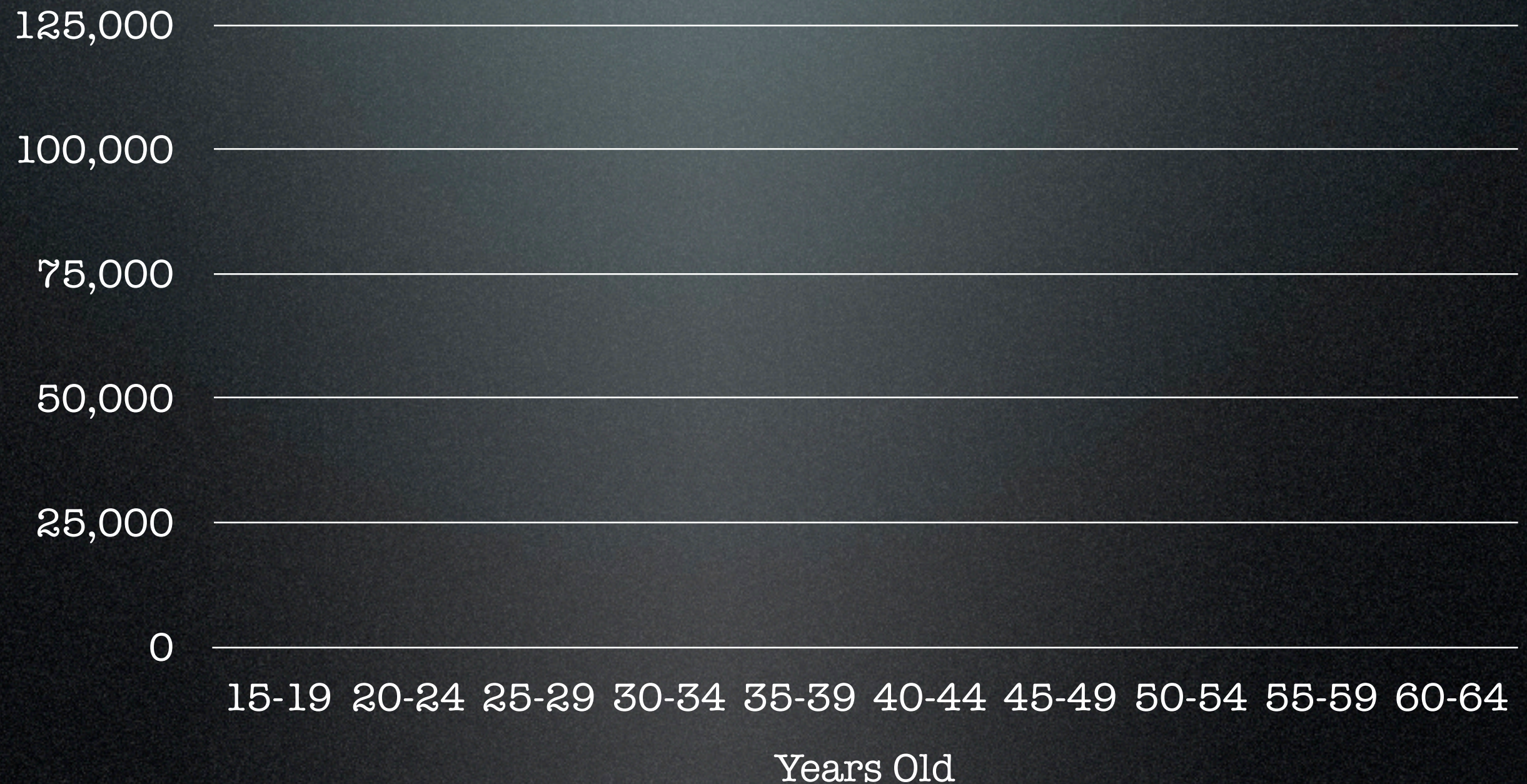
Suicide prevention



Suicide prevention: total working  
years of life lost to suicide in US

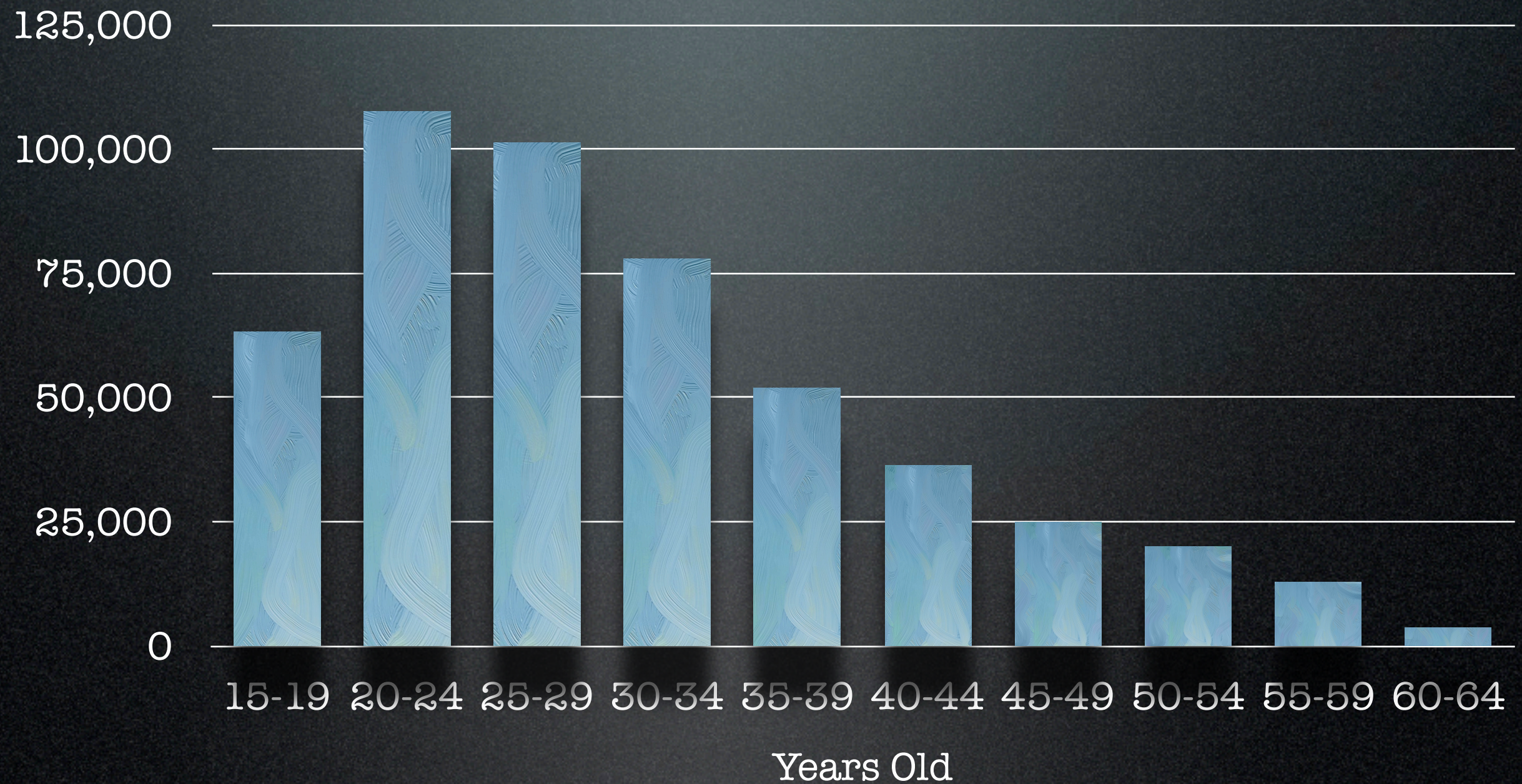


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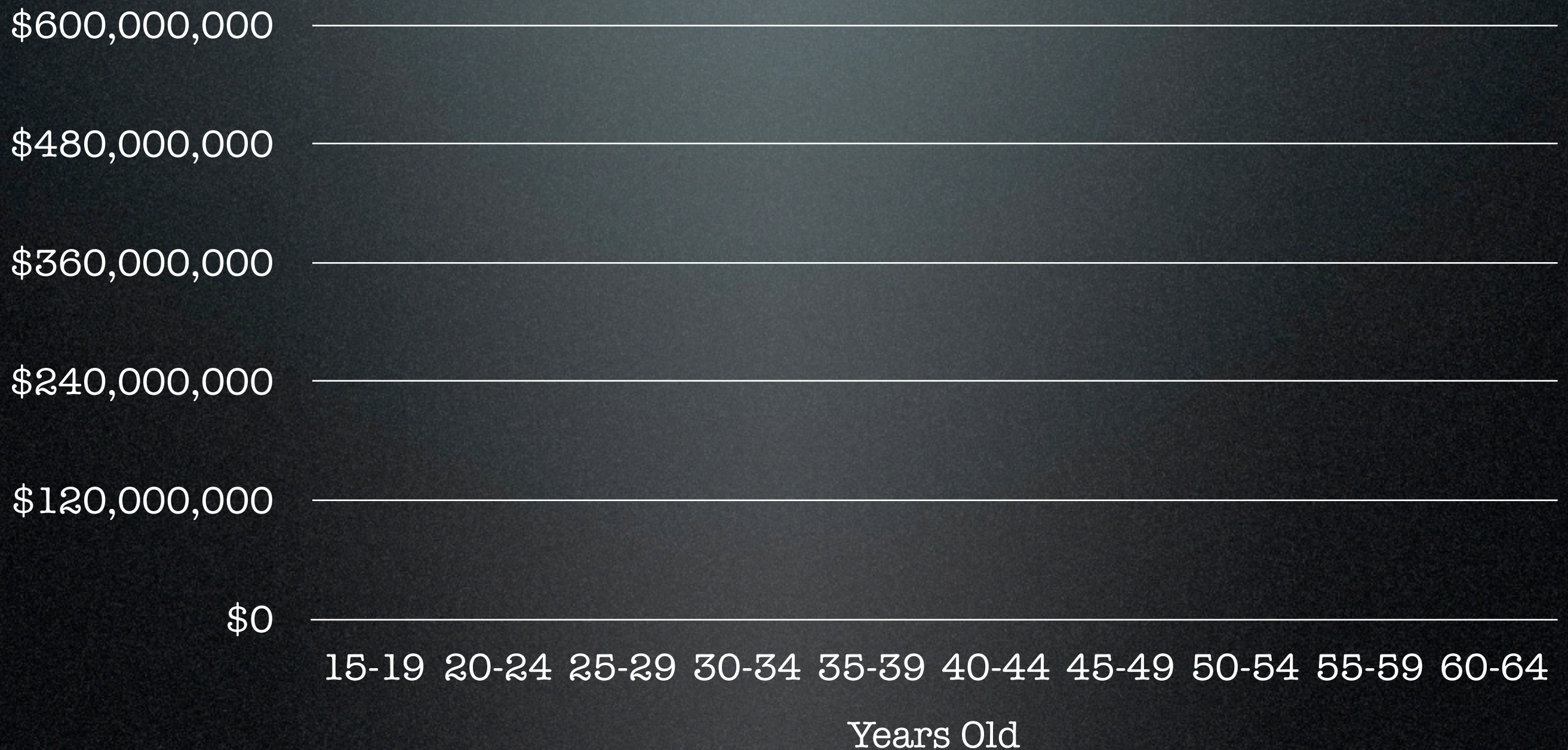




Suicide prevention: *lifetime*  
*income* lost to suicide in US

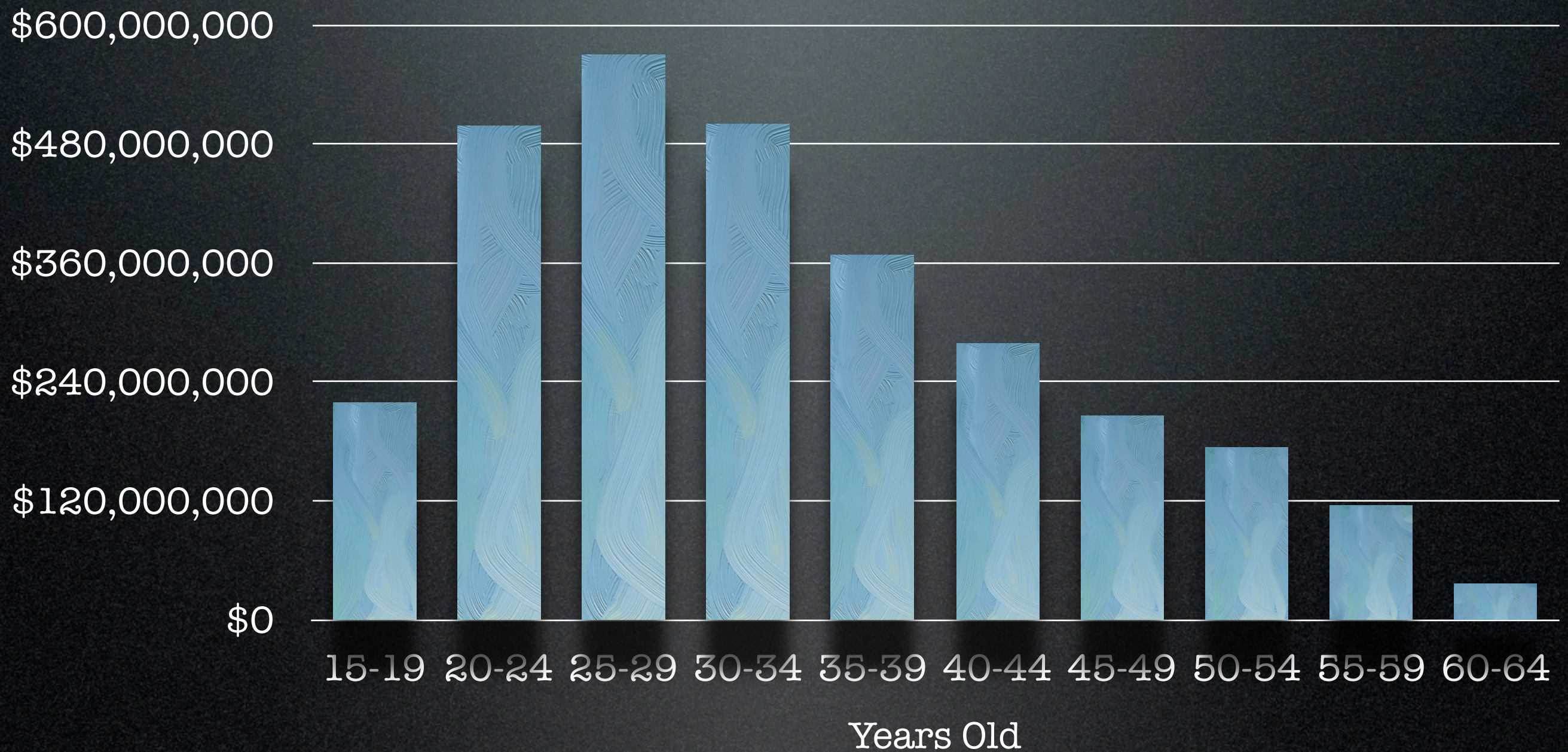


# Suicide prevention: *lifetime* *income* lost to suicide in US





# Suicide prevention: *lifetime* *income* lost to suicide in US





Life valuation strategies that  
*could* reduce discrimination



# Life valuation strategies that *could* reduce discrimination

- Remove inequities in income or life value
  - standard valuation
  - include work performed inside the home
  - statistical adjustment



# Life valuation strategies that *could* reduce discrimination

- Remove inequities in income or life value
  - standard valuation
  - include work performed inside the home
  - statistical adjustment
- Abandon monetary value of outcomes
  - Quality Adjusted Life Years (QALYs)
  - only cost-effectiveness analysis



# Alternative productivity valuation strategies



# Alternative productivity valuation strategies

- Remove inequities in daily income
  - standard valuation of a day of work
  - statistical adjustment for demographic differences in different groups



# Alternative productivity valuation strategies

- Remove inequities in daily income
  - standard valuation of a day of work
  - statistical adjustment for demographic differences in different groups
- Stick with “native” units (e.g., days of work gained) & avoid monetization.



What (would) (will) you  
do?



# References

- American Evaluation Association (2004). *Guiding principles for evaluators*. AEA website.
- Cohen, M. A. (1988). Pain, suffering, and jury awards. *Law & Society Review*, 22, 537-555.
- Lenton, A. P. (2002). The price of prejudice: Social categories influence montary value of life. *Dissertation Abstracts International: Section B*, 63(2-B), p. 1088.
- Melinek, S. J. (1974). A method of evaluating human life for economic purposes. *Accident Analysis & Prevention*, 6, 103-114.
- Pinkerton, S. D., Johnson-Masotti, A. P., Derse, A., & Layde, P. M. (2002). Ethical issues in cost-effectiveness analysis. *Evaluation and Program Planning*, 25, 71-83.
- Thompson, M. S. (1980). *Benefit-cost analysis for program evaluation*. Beverly Hills: Sage.
- Yates, B. T. (1986). Economics of suicide: Toward cost-effectiveness and cost-benefit analysis of suicide prevention. In R. Cross (Ed.), *Non-natural death: Coming to terms with suicide, euthanasia, withholding or withdrawing treatment*. Denver, CO: Rose Medical Center.







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