

 **There is a Price for Human Life**



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How is the Value of Human Life defined?

- Marginal Cost of Death Prevention or cost to avoid one death
 - represented by changes in statistical chances of dying
- Limited resources, cannot save everyone
 - tradeoffs must be made

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What is the VSL?

- Value of the Marginal Δ of likelihood of death
- Marginal view, not avoidance of certain death

How is VSL Determined?

- Risks people will take & how much they must be paid to take them
 - Stated Preference: based on surveys
 - subject to hypothetical bias; people overvalue risk because they don't actually have to face it
 - Looking at Δ s in employment & wages when risk is introduced

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VSL as Determined by Δ Risk

- A coal miner makes \$10,000/yr more than office job
- Coal miner has 1% higher chance of dying on the job

$$\frac{\$10,000}{\%1.0} = \$1,000,000$$

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The Numbers

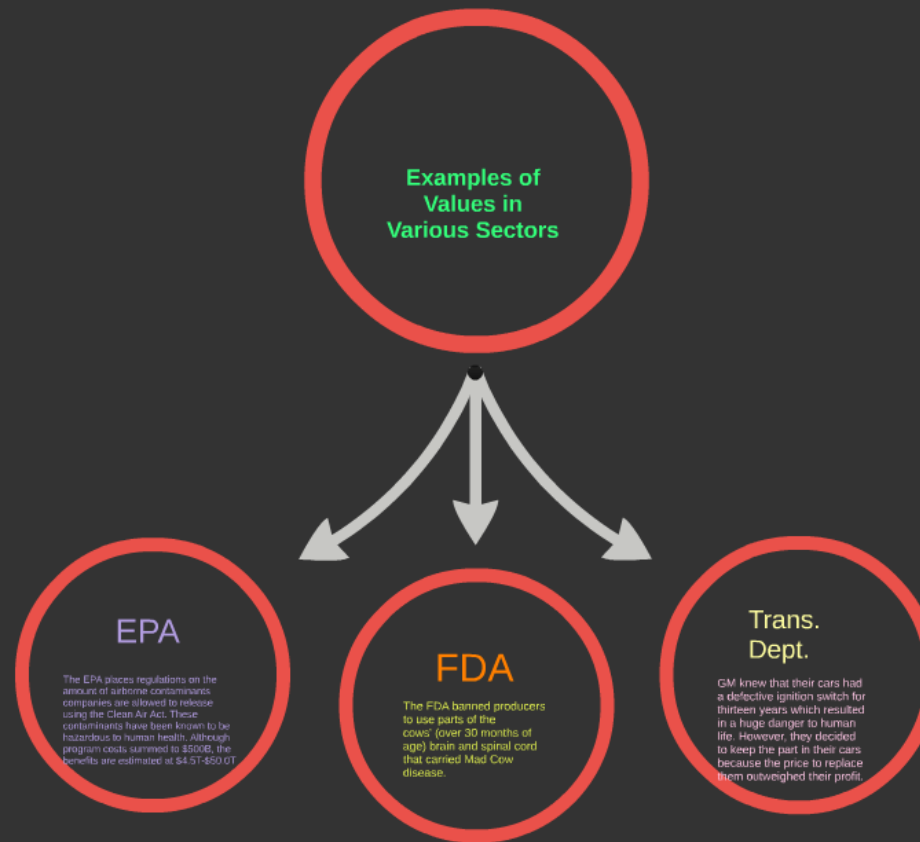
	A	B
1	EPA	\$6.9M
2	FDA	\$7.9M
3	Transp. Dept.	\$6.0M
4	Median Val.	\$7.0M

U.S. Government's pre-determined
values by Agency

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VSL in Public Policy

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Examples of Values in Various Sectors

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graph TD; A((Examples of Values in Various Sectors)) --> B((EPA)); A --> C((FDA)); A --> D((Trans. Dept.));
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EPA

The EPA places regulations on the amount of airborne contaminants companies are allowed to release using the Clean Air Act. These contaminants have been known to be hazardous to human health. Although program costs summed to \$500B, the benefits are estimated at \$4.5T-\$50.0T

FDA

The FDA banned producers to use parts of the cows' (over 30 months of age) brain and spinal cord that carried Mad Cow disease.

Trans. Dept.

GM knew that their cars had a defective ignition switch for thirteen years which resulted in a huge danger to human life. However, they decided to keep the part in their cars because the price to replace them outweighed their profit.

QALY: Quality Adjusted Life Year

- QALY is the unit used when deciding whether or not to intervene with a medical procedure
- takes into account both the quality and the quantity of that specific life
- 1 QALY is one year lived in "perfect health"

1 Year of Life × 1 Utility value = 1 QALY

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