# Deaths Attributable to Obesity: Making Sense of the Numbers

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**Centers for Disease Control and Prevention National Center for Health Statistics** 



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# **Deaths attributable to Obesity**

- Obesity 300,000 deaths
- What does "attributable" mean?
  - Contributing factor?
  - Principal factor?
  - Only factor?

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- Alcohol 100,000

- 1. Smoking 400,000
- 2. Obesity 300,000
- 3. Alcohol 100,000

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Total 800,000

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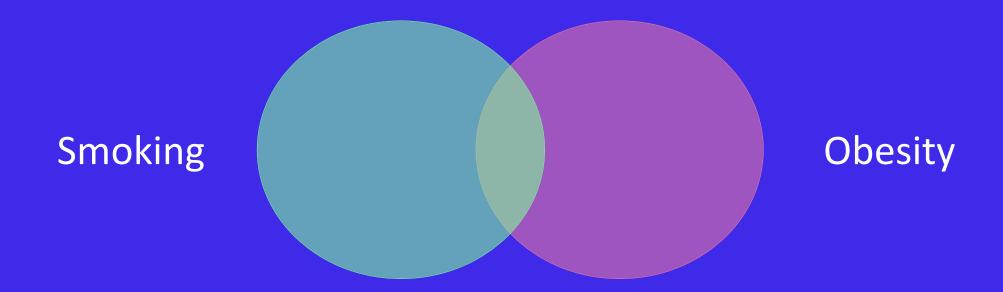
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<b>4</b> •	Obesity	300,000

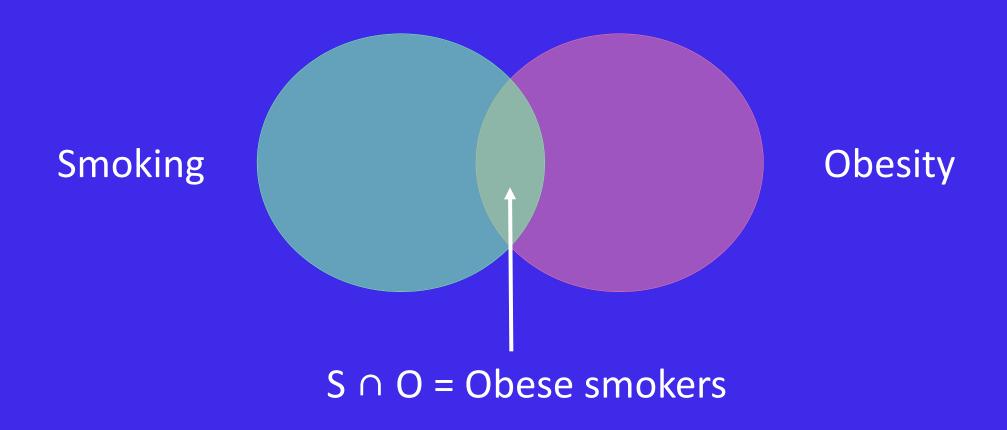
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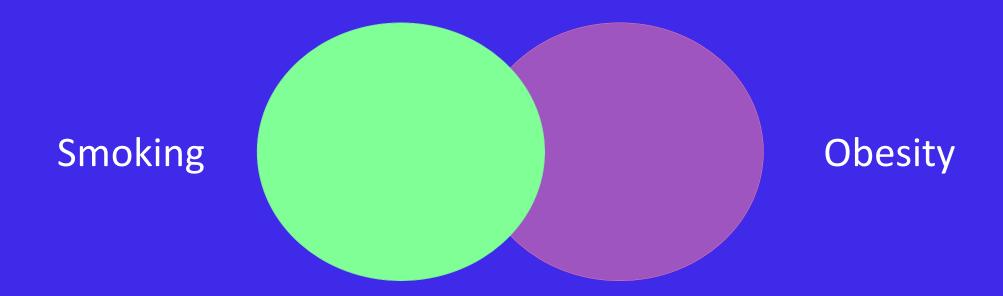
Are the categories mutually exclusive?

- It is difficult to control for all confounding factors when calculating PAFs
- Detail in the mortality data is often lacking to appropriately apply the PAFs
- Should these categories even be mutually exclusive?





- What do we do with the obese smokers?
- Is it appropriate to choose a single risk factor over another?
- If so, which should be chosen?
  - The one most likely to cause death?
  - The one consistent with the underlying cause of death?

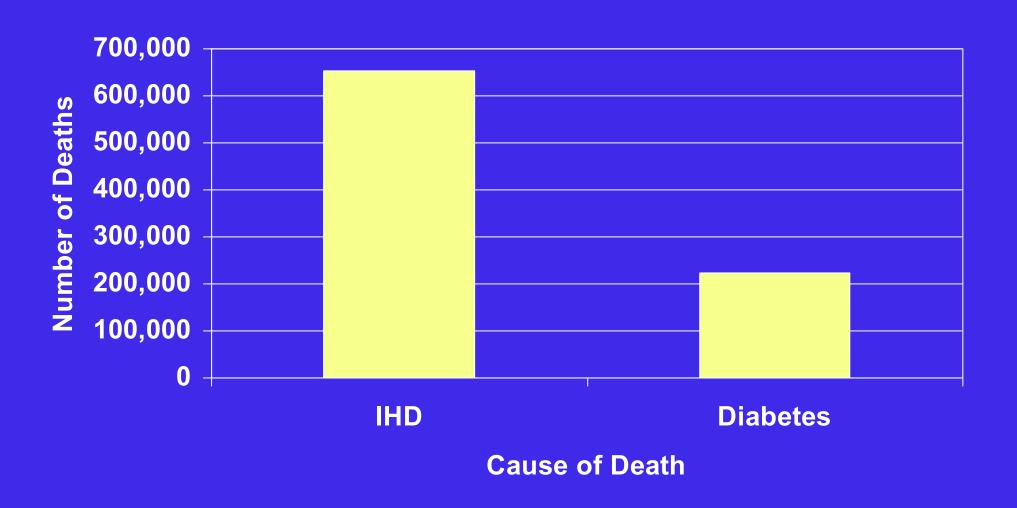


# Is There a Better Way To Approach This?

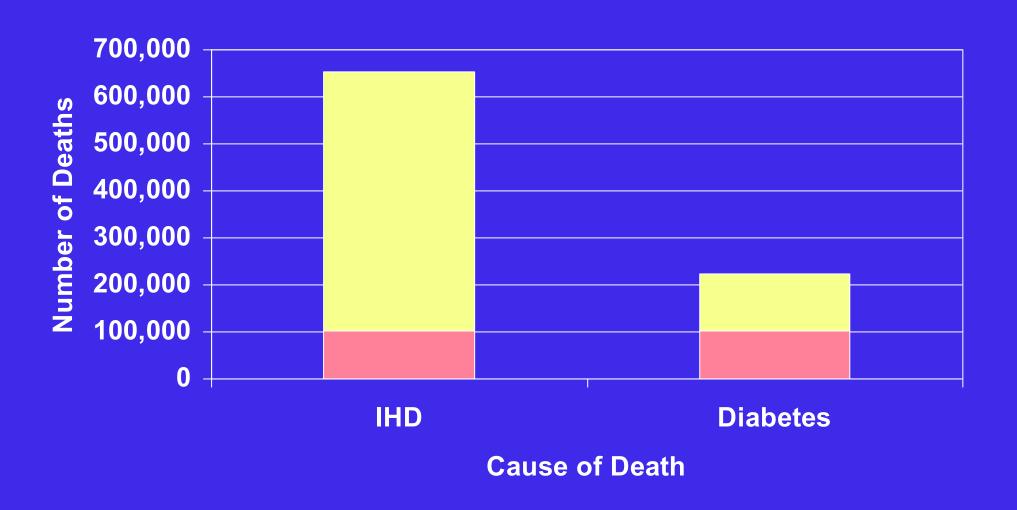
# **Multiple Causes of Death**

- It is common to have more than one injury or disease reported on the death certificate.
- Multiple cause counts measure any mention of the specified condition.
- Diabetes and Ischemic heart disease

# Number of Deaths with mention of IHD and Diabetes

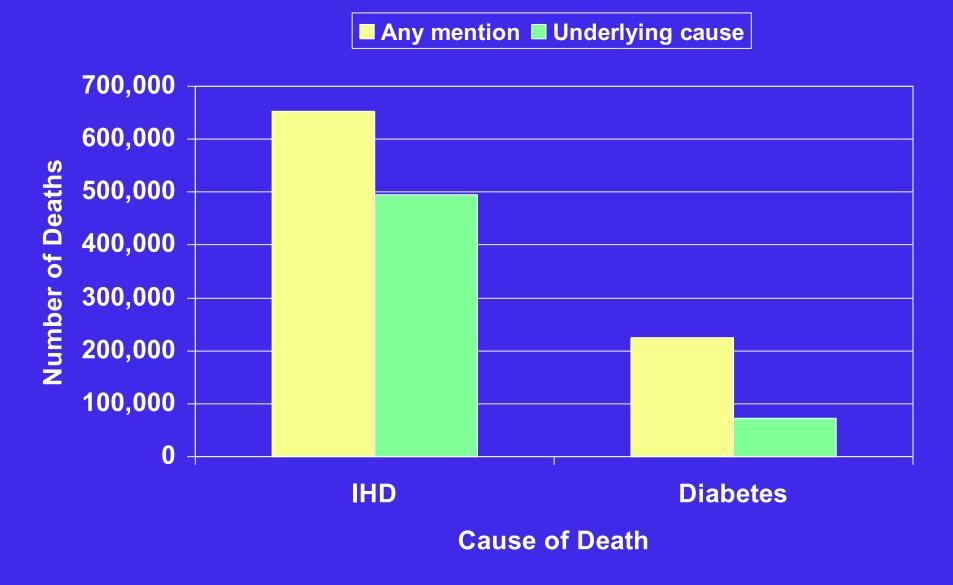


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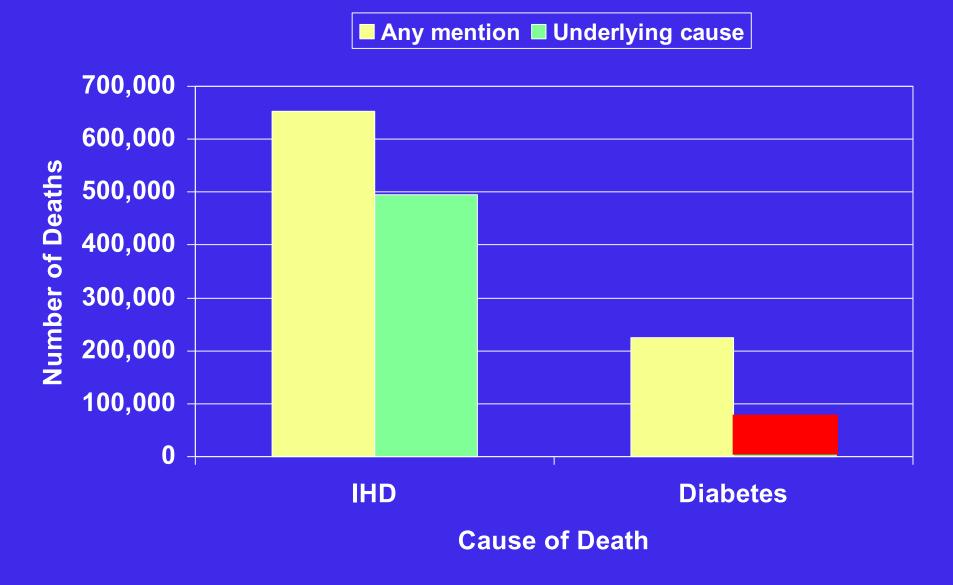
# **Underlying vs. Multiple Causes of Death**

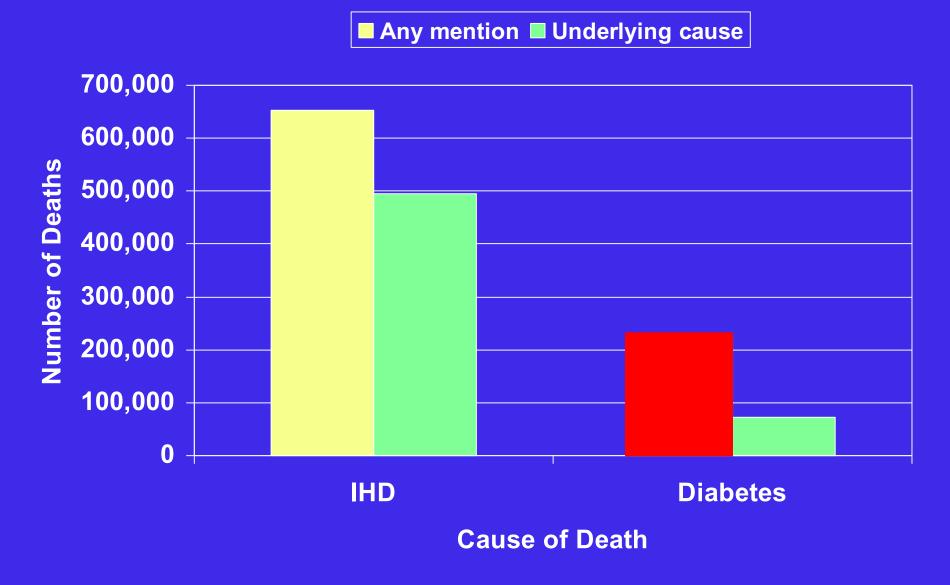
- Choosing a single underlying cause of death
  - The sequence of diseases or injuries leading to death reported on the death certificate
  - Set of standardized rules
- Facilitates comparisons between causes of death



# Underlying vs. Multiple Causes of Death

 Underlying cause is not necessarily the best strategy for showing the overall burden of disease or injury for any particular cause of death





- Obesity 300,000
- Smoking 400,000
- Alcohol 100,000

### Avoid

- Quantitative comparisons
- Ranking attributable deaths
- Adding attributable deaths together

#### Focus should be on:

- Are the number of attributable deaths increasing or decreasing?
- What can we do to reduce the number of attributable deaths?