Obesity, Diabetes, and Covid-19: Three Epidemics Converge

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Obesity and Covid-19 - Links Found

- In May, New York doctors began noticing the elevated risks associated with obesity.
- Obese individuals had a **46% increased risk** of testing positive for Covid-19.
- Those with BMI > 30 experienced:

113% risk of hospitalization

74% risk of needing intensive care





Popkin, Barry, Du, Shufa, Green, William D., et al. "Individuals with obesity and Covid-19: A global perspective on the epidemiology and biological relationships. *Obesity Reviews*.2020: July 30. Accessed: September 20, 2020. https://onlinelibrary.wiley.com/doi/full/10.1111/obr.13128

How does obesity affect the body?

- Obesity is associated with hyperinflammation and shortness of breath, making immune responses more difficult.
- Coronavirus enters the body through an enzyme found in cells that line the lungs and fat tissue.
- The virus has an easier job replicating itself in patients with obesity because it has more targets.

Immune cells examined from 30-year-old people with obesity looked like immune cells found in 80-year-old people.



Why does it matter?

- Over 42% of U.S. adult population is obese = **107 million people**
- In 2000, 30% of U.S. population was obese = **39% relative increase**
- 1 in 10 Americans has diabetes, 1 in 3 has prediabetes.
- In August, the CDC expanded its definition of elevated risk for severe Covid-19 to include individuals with a BMI > 25.

This expansion means that up to 72% of ALL Americans are at higher risk of severe Covid-19 outcomes.



Obesity and Diabetes in Kentucky

- 37% of Kentucky adults are obese #5 Worst in U.S.
- 24% of Kentucky children ages 10-17 are obese #1 Worst in U.S.
- Kentucky Diabetes Ranking #5 Worst in U.S.
- Since 1990, obesity in Kentucky has increased over 200 percent.
- Since 2000, diagnosed diabetes in Kentucky has doubled.

The medical costs for people who have obesity is 42% higher than those of normal weight.



What do we do about it?

- Potential for Public and Private Sector Action
- Coverage for Emerging Tools and Therapies
- Increase Access to Nutrition and Diabetes Education
- Congress to Pass Treat and Reduce Obesity Act (TROA)

More than 20% of Kentuckians surveyed say the pandemic has encouraged weight loss. Over ¹/₃ of Kentucky adults believe the government should make more efforts to combat obesity.

