Texas Winter Storm & Power-Crisis:
Death Toll Excess Mortality Estimate

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Outline

• What is Excess Mortality?

• Excess Mortality and COVID-19.

• Excess Mortality and Natural Disasters.

• Excess Mortality Estimate of Texas 2021 Winter Storm.
Excess Mortality

• Number of deaths above and beyond what is expected in ordinary times based on historical data.

• Has long been observed and used in research.
Excess Mortality

A. Weekly deaths (Hamburg)

Caesmann, Caprettini, Voth & Yanagizawa-Drott (2021)
Excess Mortality & COVID-19

United States: Weekly Deaths by Year 2015-2021
Source: Karlinsky & Kobak 2021
Excess Mortality & Natural Disasters

• Hurricane Maria in Puerto Rico.

• September 20\textsuperscript{th} 2017.

• Original official toll: 64 Deaths.
Excess Mortality & Natural Disasters

Total excess mortality post-hurricane using the migration displacement scenario is estimated to be 2,975 (95% CI: 2,658-3,290) for the total study period of September 2017 through February 2018.

Milken Institute (2018)
Excess Mortality Estimate of Texas 2021 Winter Storm

Texas: Weekly Deaths 2015-2021
Black: Expected Deaths in 2020
Excess Mortality Estimate of Texas 2021 Winter Storm

Texas: Weekly Deaths 2015-2021
Black: Expected Deaths in 2020
Excess Mortality Estimate of Texas 2021 Winter Storm

Weekly Deaths in Texas and Neighboring States January 2021 - March 2021
Red: Excess Deaths; Orange: COVID Deaths
Dashed lines: Feb 10 to Feb 27
Excess Mortality Estimate of Texas 2021 Winter Storm

Weekly Deaths in Texas and Neighboring States January 2021 - March 2021
Red: Excess Deaths; Orange: COVID Deaths
Excess Mortality Estimate of Texas 2021 Winter Storm

Difference between Excess Deaths to COVID Deaths
Texas and Neighboring States January 2021 - March 2021.
Dashed Line denotes Mean Difference across weeks shown

Arizona
Arkansas
Louisiana
New Mexico
Oklahoma
Texas

Weekly Difference Deaths
Excess Mortality Estimate of Texas 2021 Winter Storm

Preliminary Excess Mortality Estimate Death Toll:

814
References


