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11.220 Quantitative Reasoning & Statistical Methods for Planners I Spring 2009

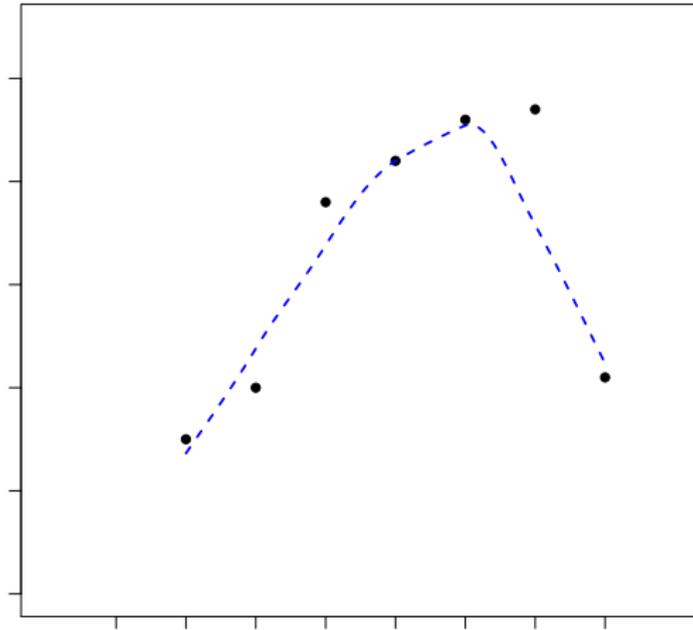
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Quantitative Reasoning and Statistical Methods

Ezra Glenn

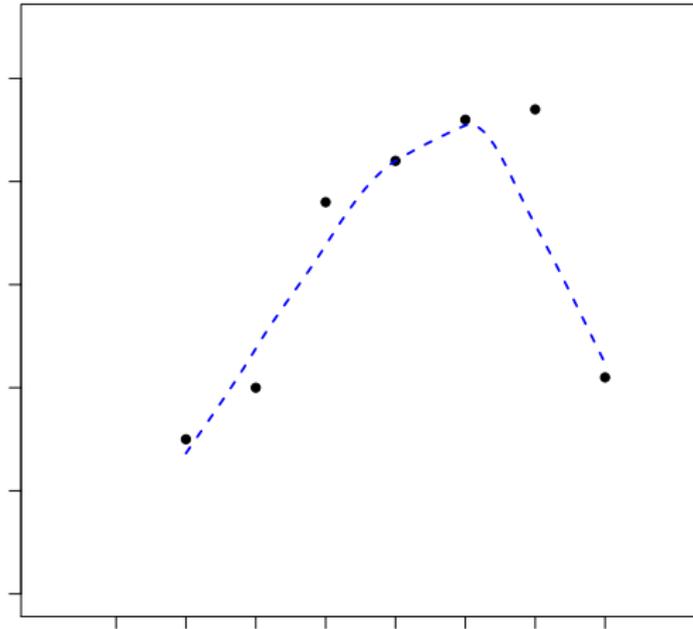
February 2, 2009

“High-rise syndrome in cats”, M.O. Whitney and C. J. Mehlhaff,
Journal of American Veterinary Medical Association, 1987;
191(11):1399-403.

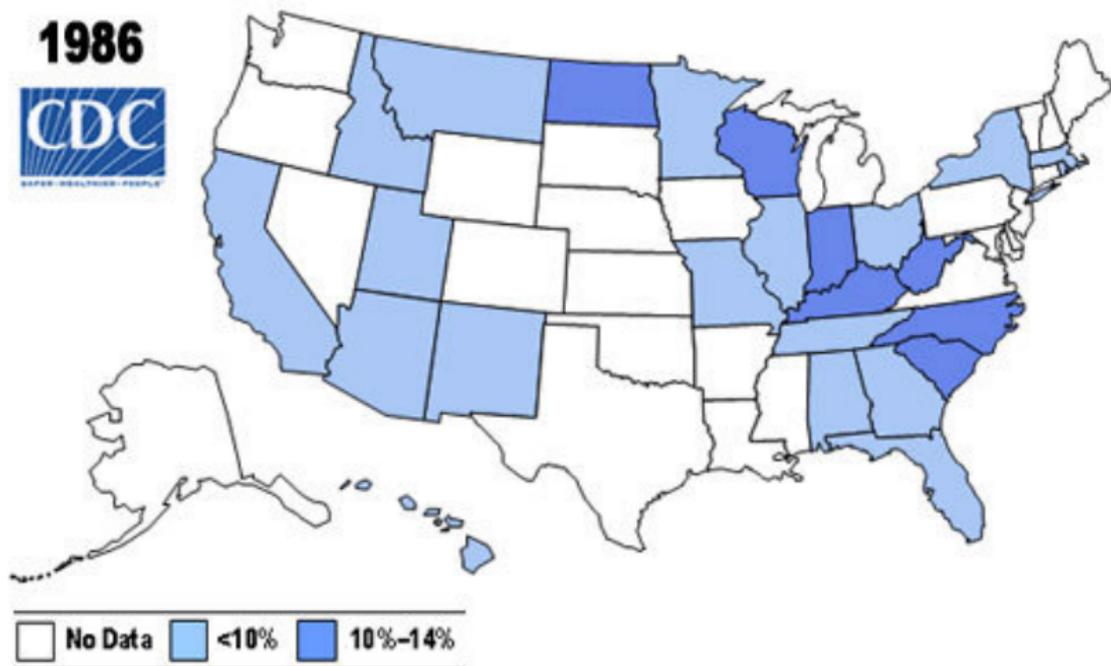


floors	samples
1	0
2	8
3	14
4	27
5	34
6	21
7-8	9
9-32	13

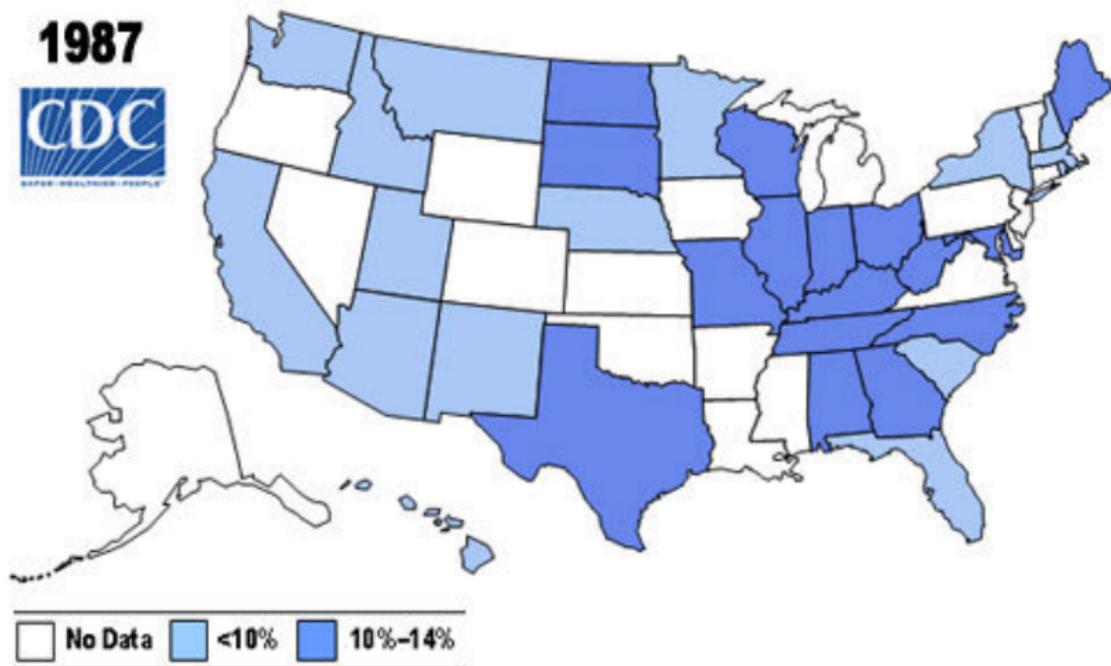
Table: Number of Samples Collected by Height of Building



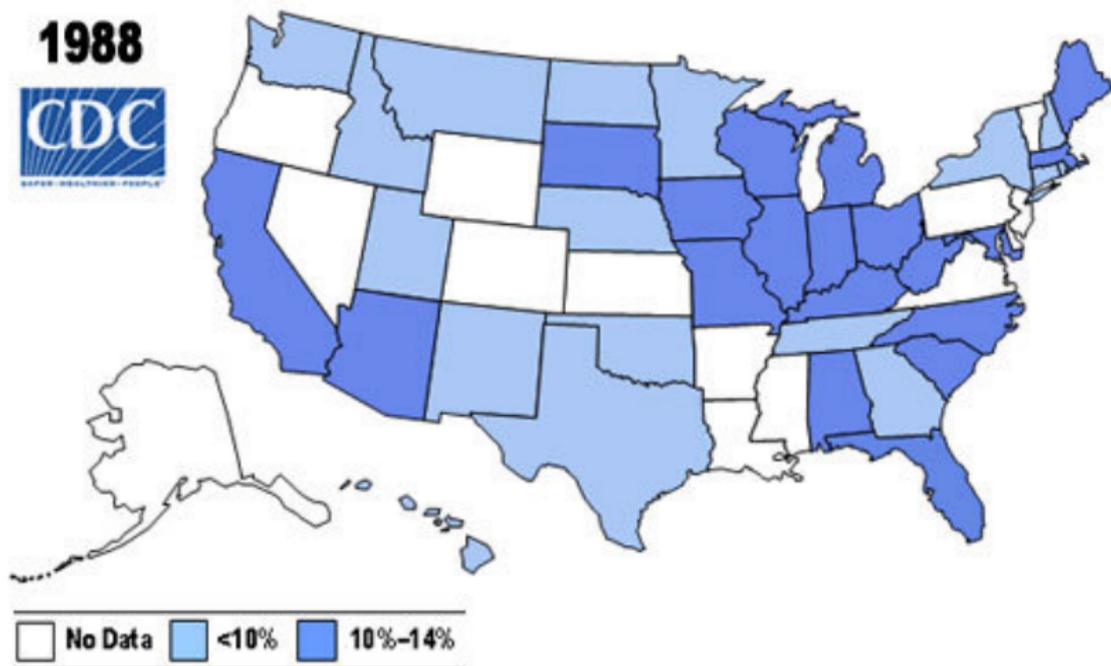
1986



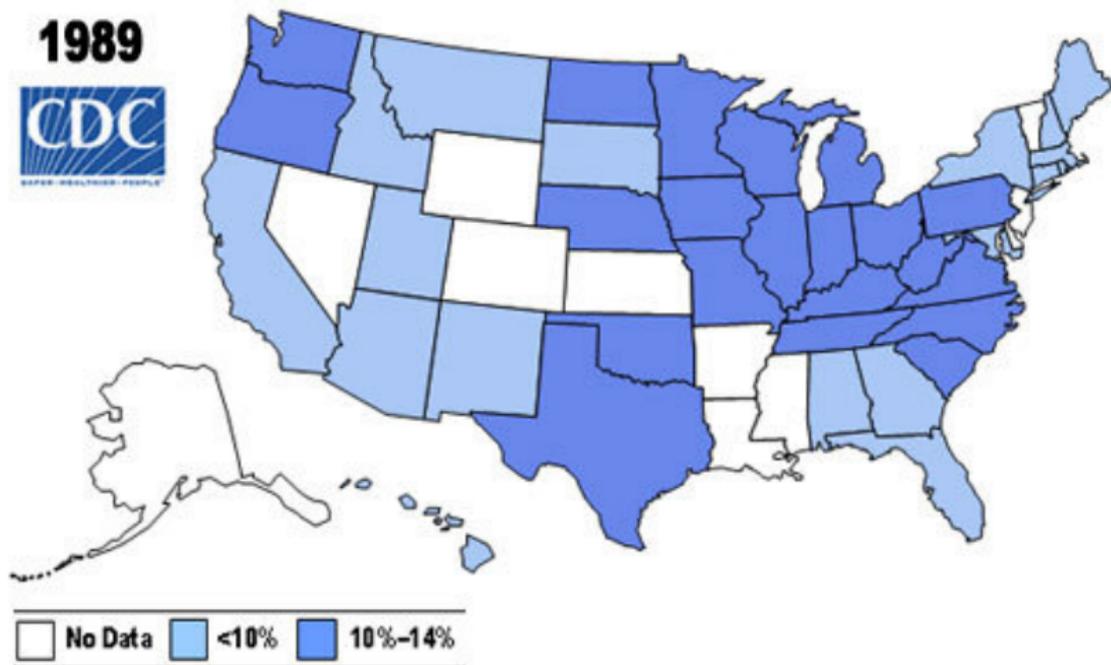
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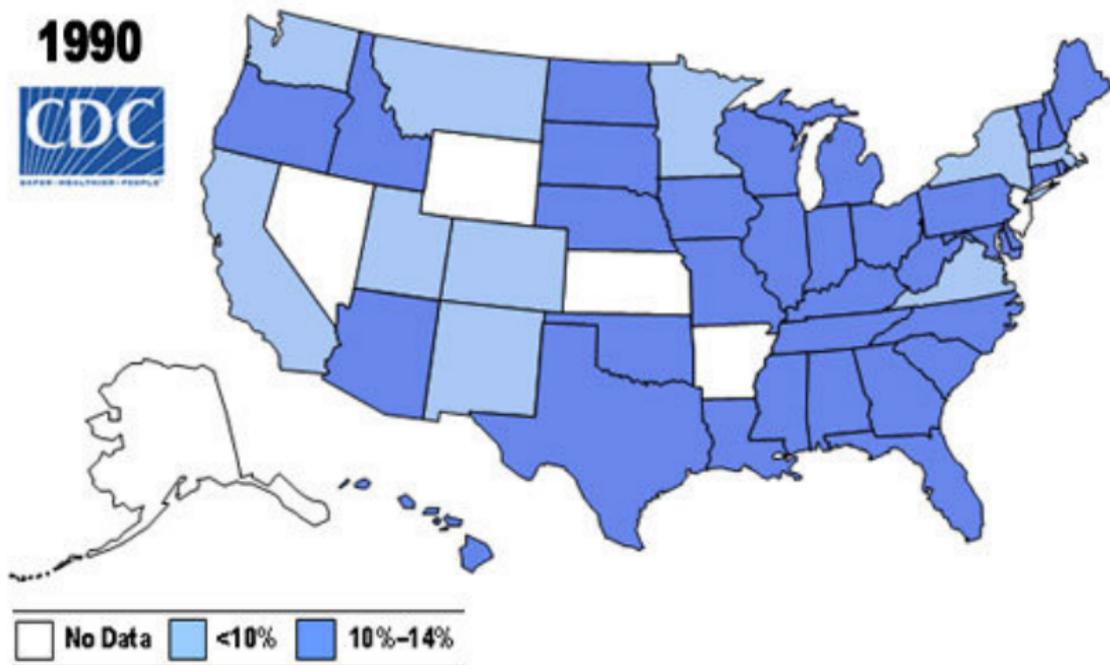
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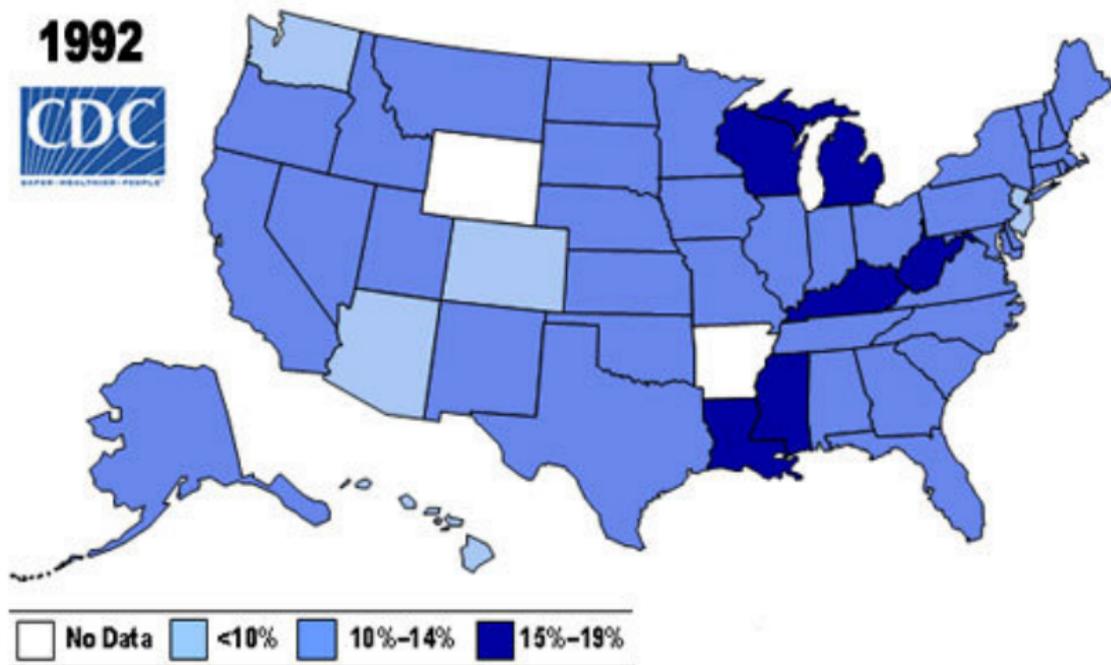
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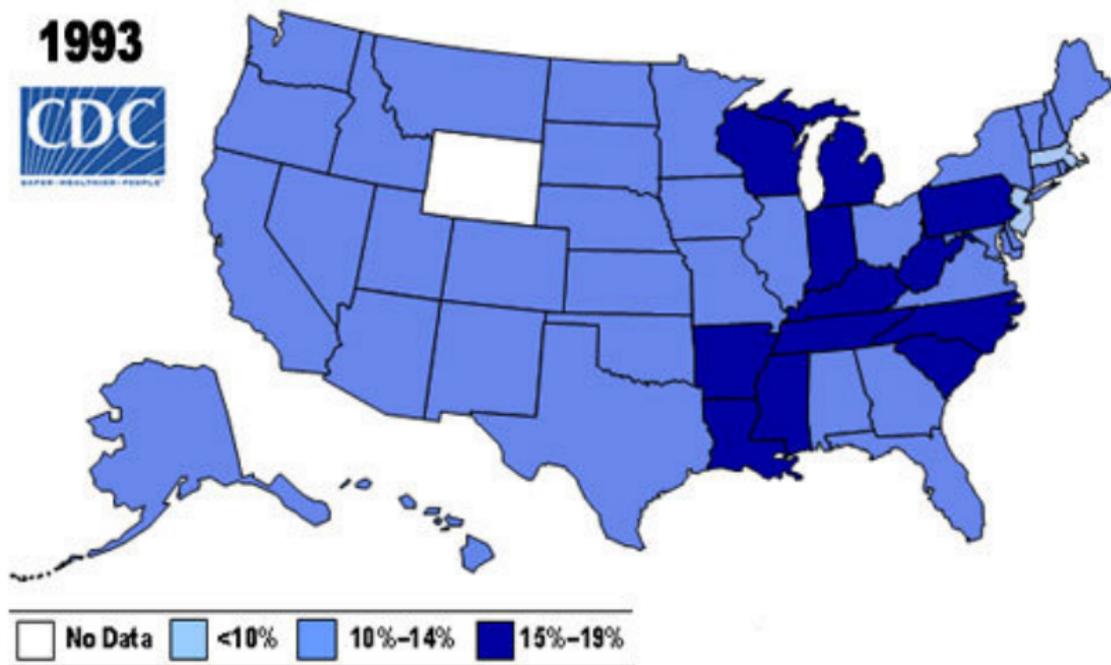
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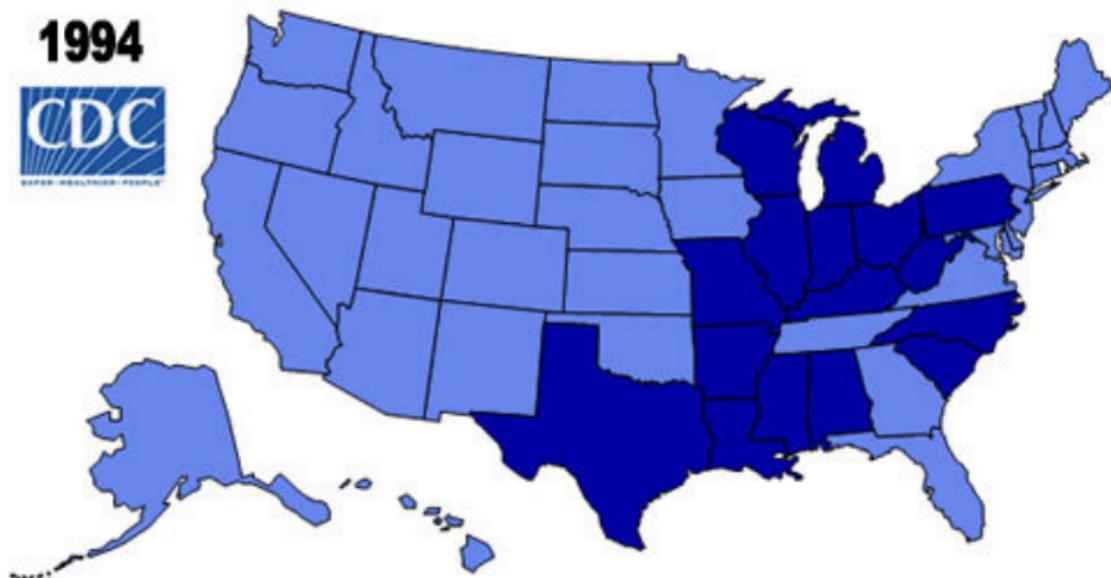
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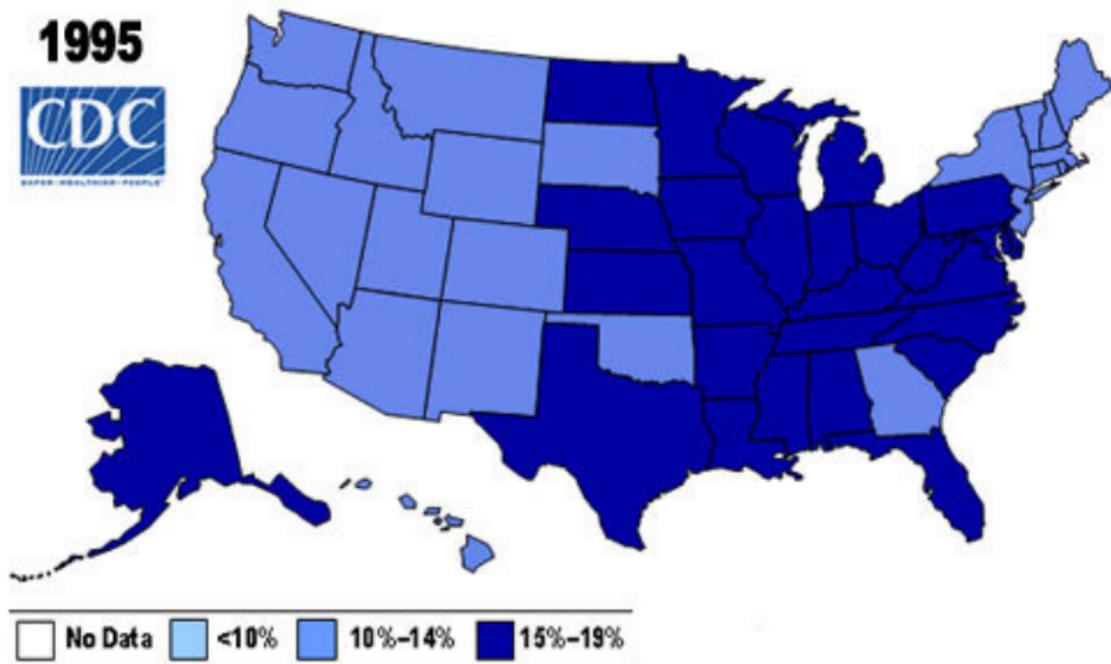
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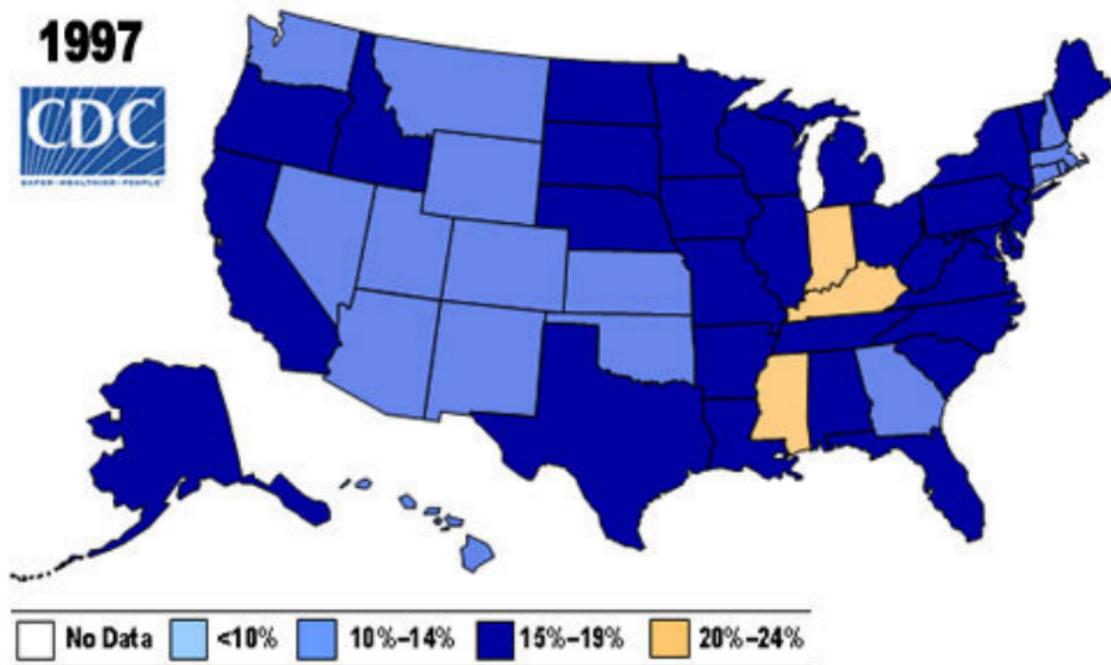
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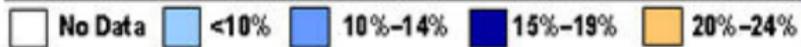
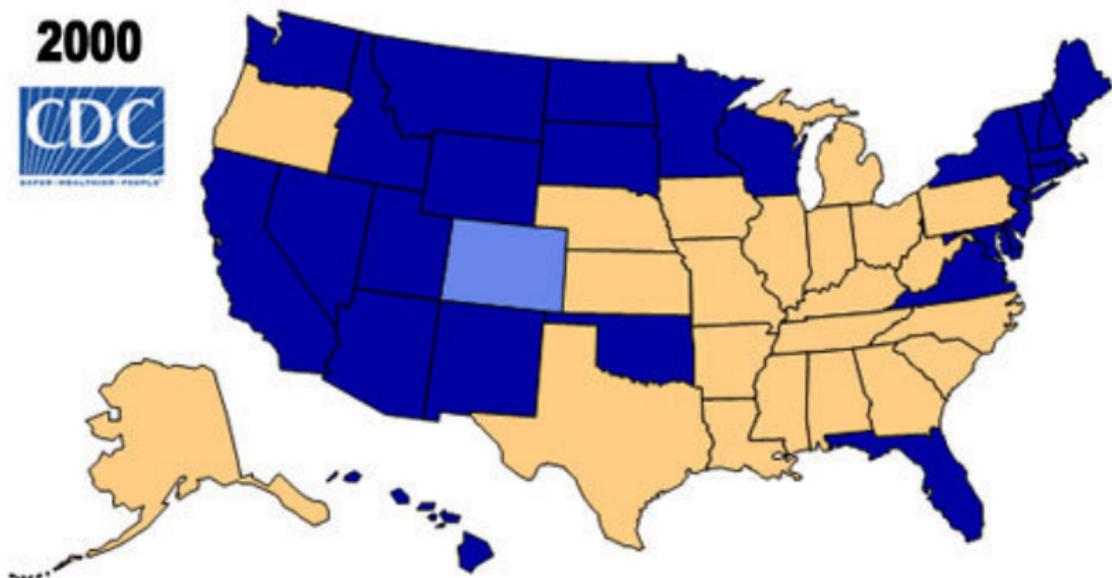
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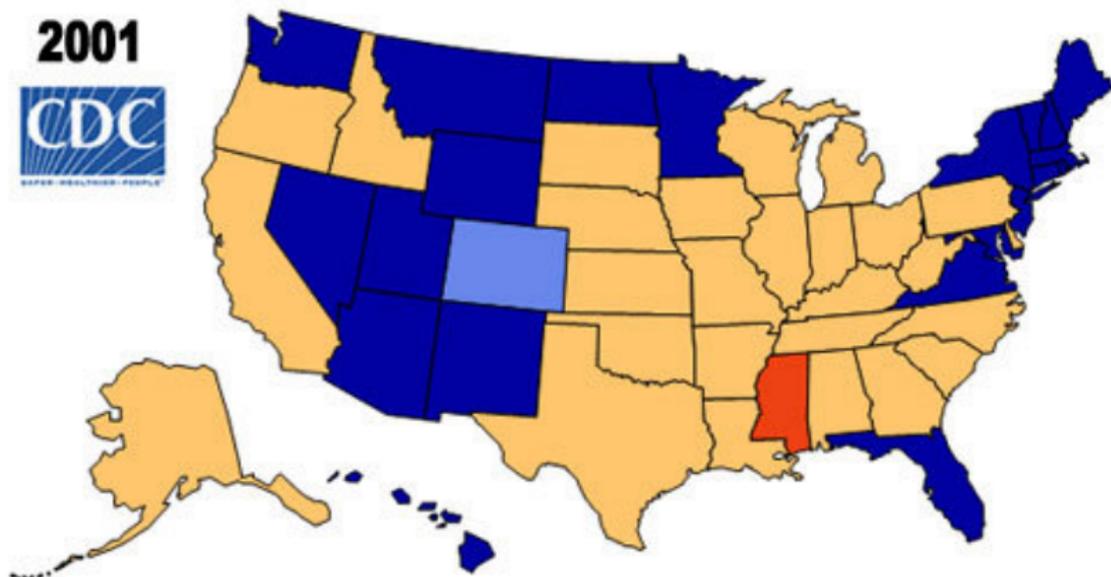
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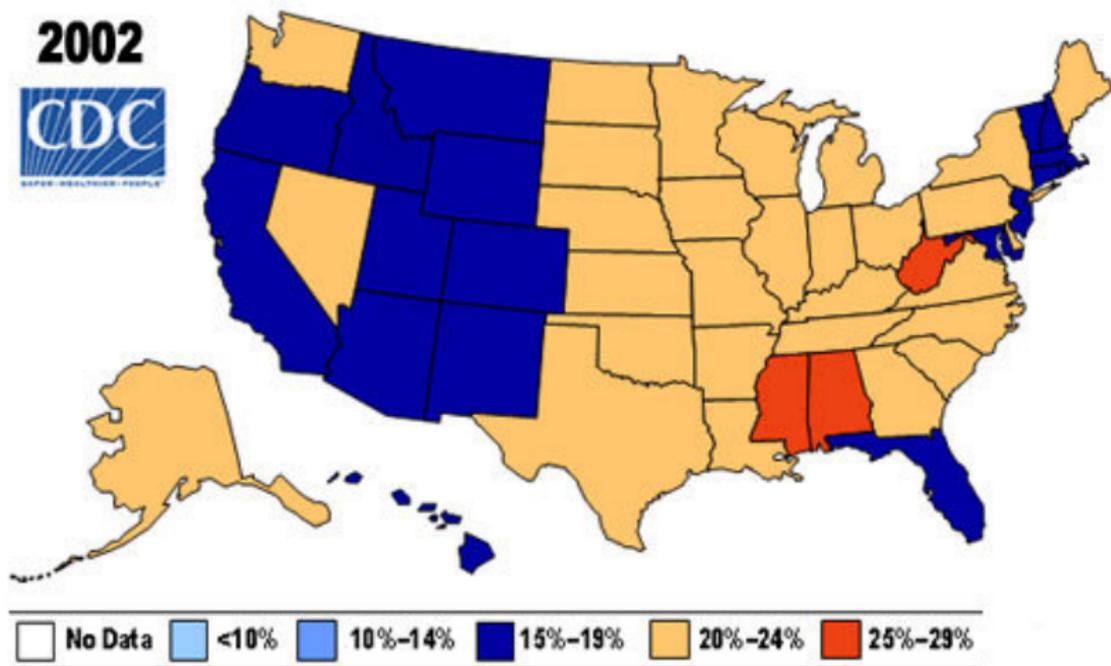
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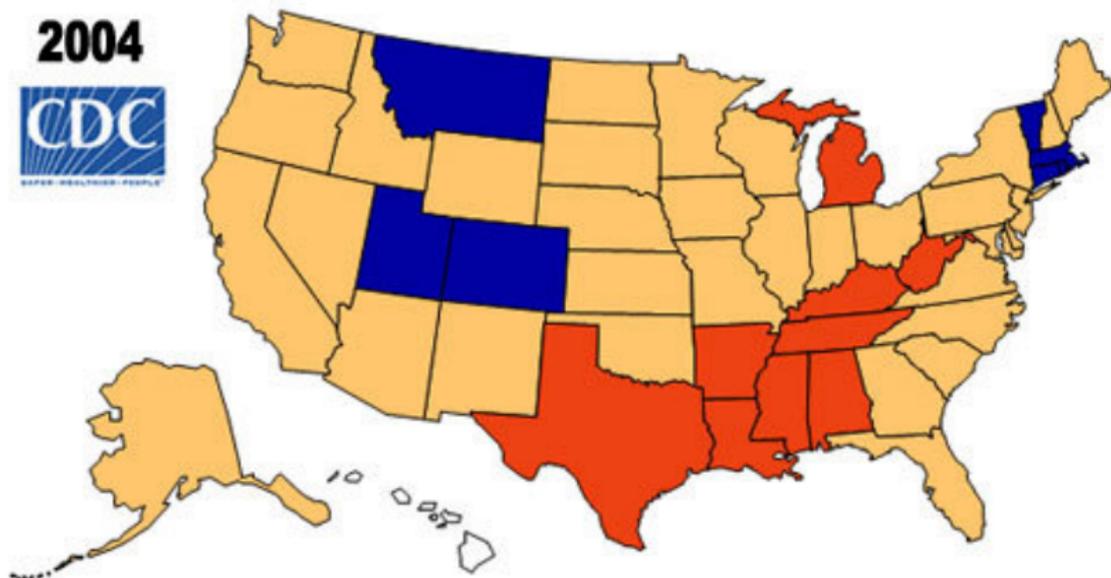
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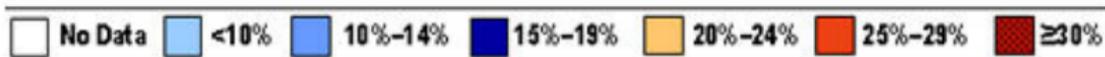
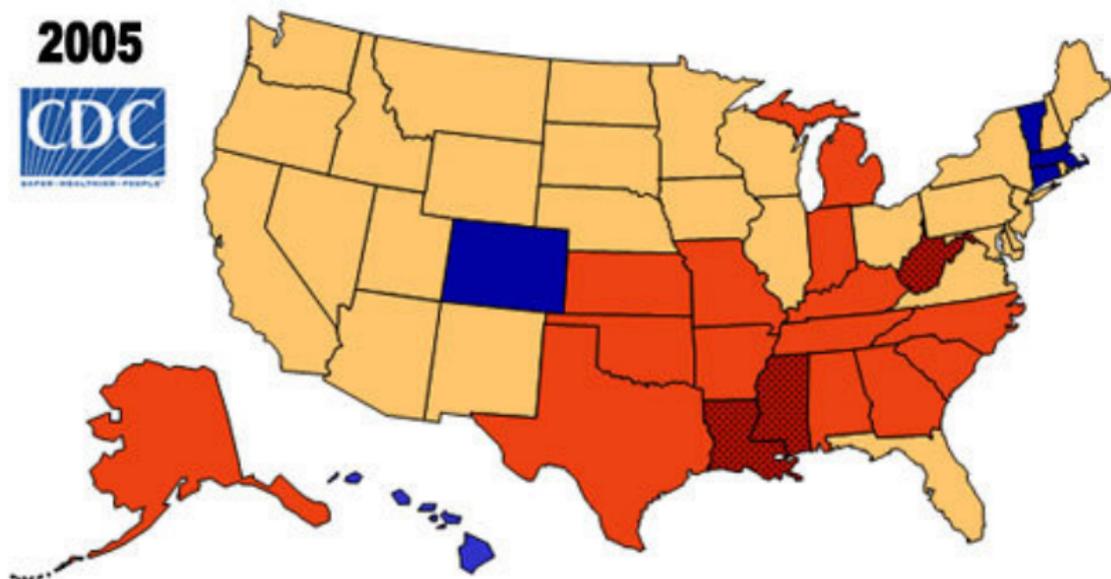
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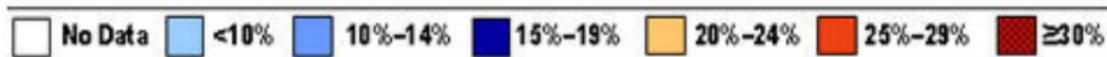
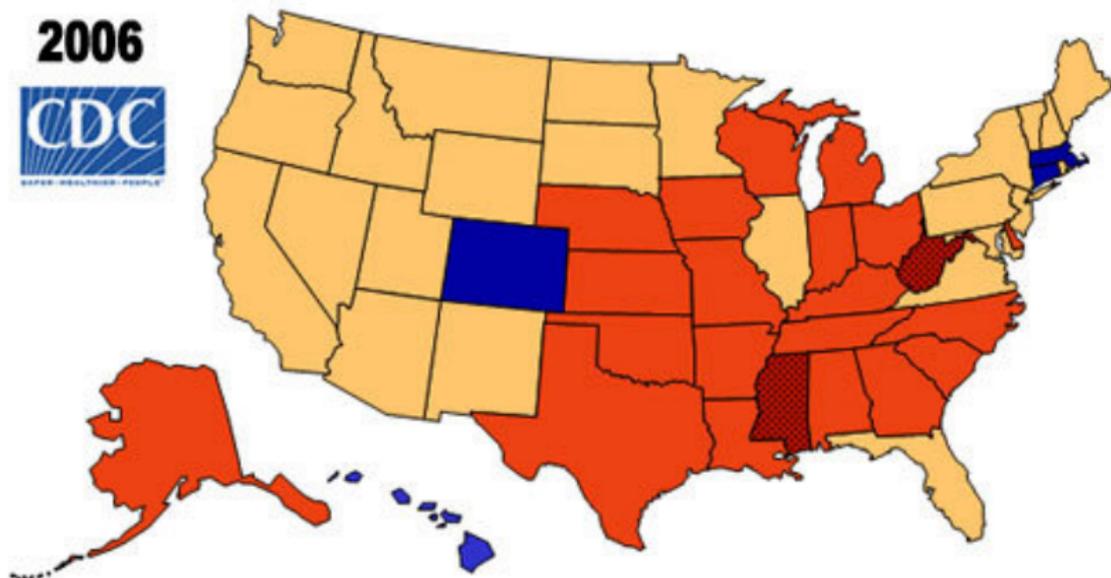
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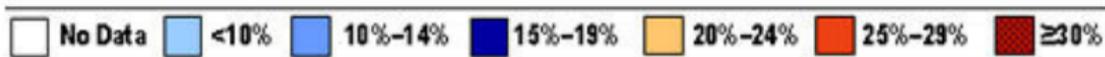
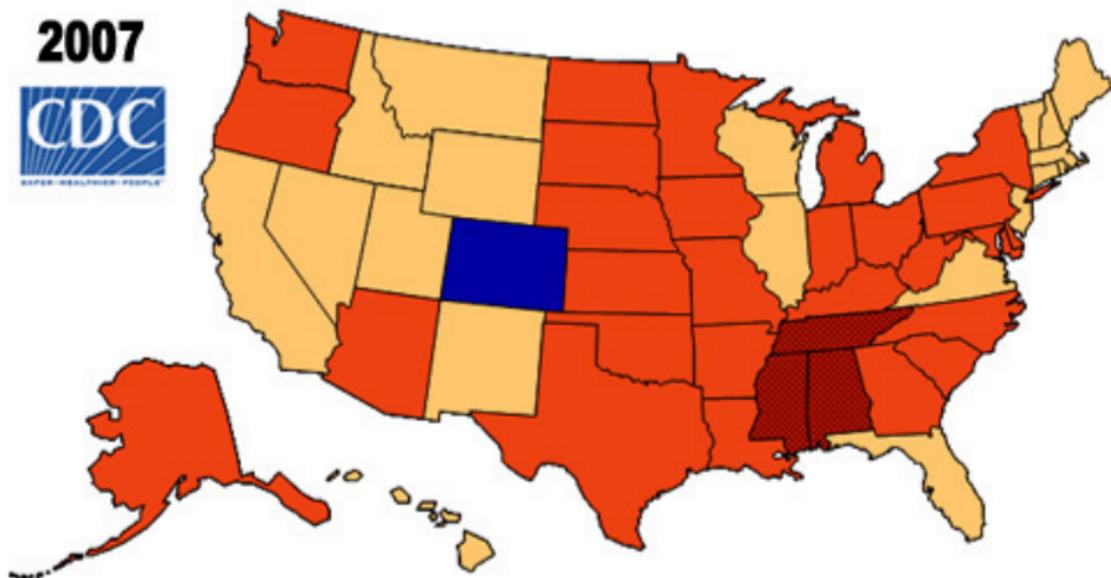
2005



2006



2007



Together in this class, we will learn to:

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- develop an intuitive sense of numbers and understand their scale and meaning through comparisons, stories, and pictures
- measure (or estimate) difficult-to-quantify planning concepts
- gather, manage, and document data and sources
- visualize complex data and relationships
- state and investigate research hypotheses
- recognize and control for random chance, and distill from it hints of meaning where possible
- deal with uncertainty, both practical and existential
- think critically about the limitations of science and quantitative analysis
- communicate with integrity and persuasion to a wide variety of audiences about quantitative information, statistical analysis, and scientific findings

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I also expect you to think about ways to apply all of this to your own work, and to have fun.