Mapping

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Maps that georeference non-spatial quantitative information may be especially difficult for the casual observer to properly interpret. Maps of COVID-19 incidence were produced during the pandemic and used by many people for both public and personal decision-making. One study looked at how knowledge risk perception and behavioral intentions were influenced by six different maps of COVID-19 prevalence in the US on May 11, 2022.

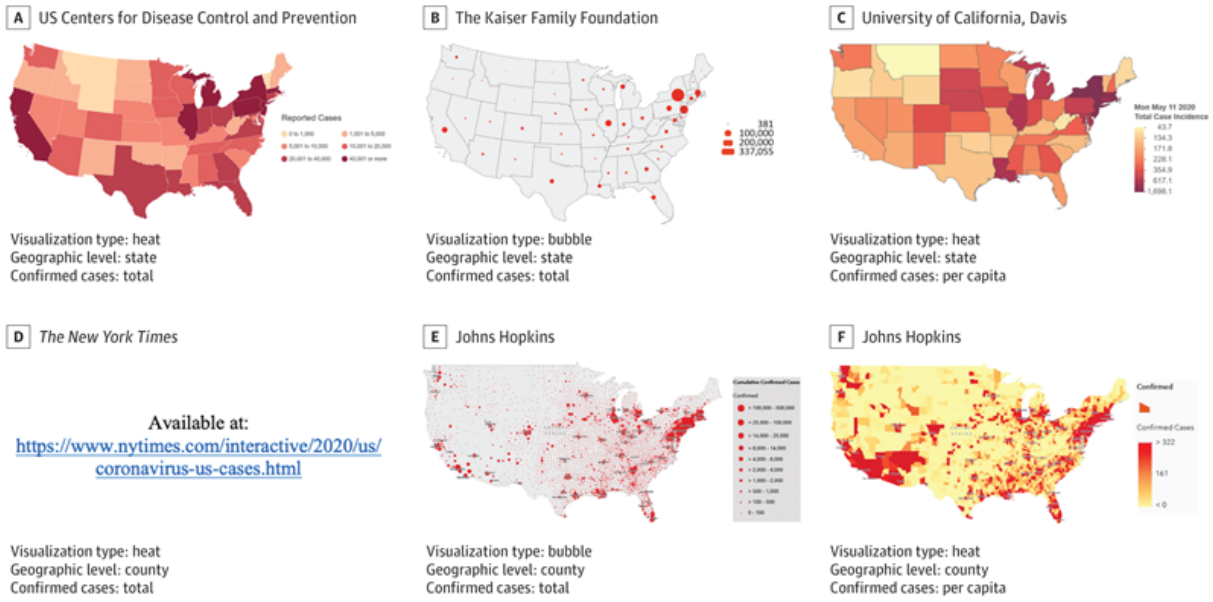

Figure 1 Six maps of COVID-19 prevalence in the US on May 11, 2020 used in a study assessing the effectiveness of different map features on the public understanding of the COVID-19 pandemic.

Some key findings of the study included:

- Maps of prevalance (per capita cases) translated poorly to knowledge about total cases.
- Choropleth maps were superior to bubble plots, perhaps because they de-emphasize the relative importance of large population centers and rural areas
- Small areas with high prevalence are hard to indicate on national maps
- Popular understanding was improved by aggregating information to the state level
- Maps of per capita prevalence were more informative than maps of total cases
- Viewing maps (versus not view maps) had no measurable impact on individual risk perception
- Viewing maps (versus not view maps) made viewers slightly more optimistic about societal risk
- Viewing maps (versus not view maps) had no influenze on behavior
- Viewing maps led to less accurate knowledge about total cases compared with having no information at all