

BACKGROUND

- U.S. surveys show **declining trust in medical scientists**, including government cancer information.
- Cancer is a major target of misinformation (false cures, misleading prevention claims, and conspiracies).
- Rising engagement with cancer misinformation is further eroding trust in health institutions.
- Trust in medical scientists is critical for **public health engagement and participation in research**.
- Little is known about how trust in researchers shapes willingness to join cancer studies.
- **OBJECTIVE:** Assess public trust in researchers and examine how trust relates to willingness to engage in cancer research activities.

METHODS

- Cross-sectional analysis of a statewide survey of U.S. adults (≥18) conducted Jan–Dec 2023 in South Carolina.
- Participants recruited via random-digit dialing; interviews completed with CATI.
- Survey included sociodemographics and the 12-item Trust in Medical Researcher Scale (TMRS; 0–48).
- Participants also reported willingness to join a cancer study, provide biospecimens, and share medical or lab records.
- Descriptive statistics summarized participant characteristics and trust scores.
- Logistic regression examined associations between trust and willingness to engage in cancer research, adjusting for sociodemographics.
- Significance set at P<0.05; analyses conducted in SAS.

Questions? Citations request? Email: sonawane@musc.edu

RESULTS

Final analytic sample included 1,780 respondents.

Majority of Participants:

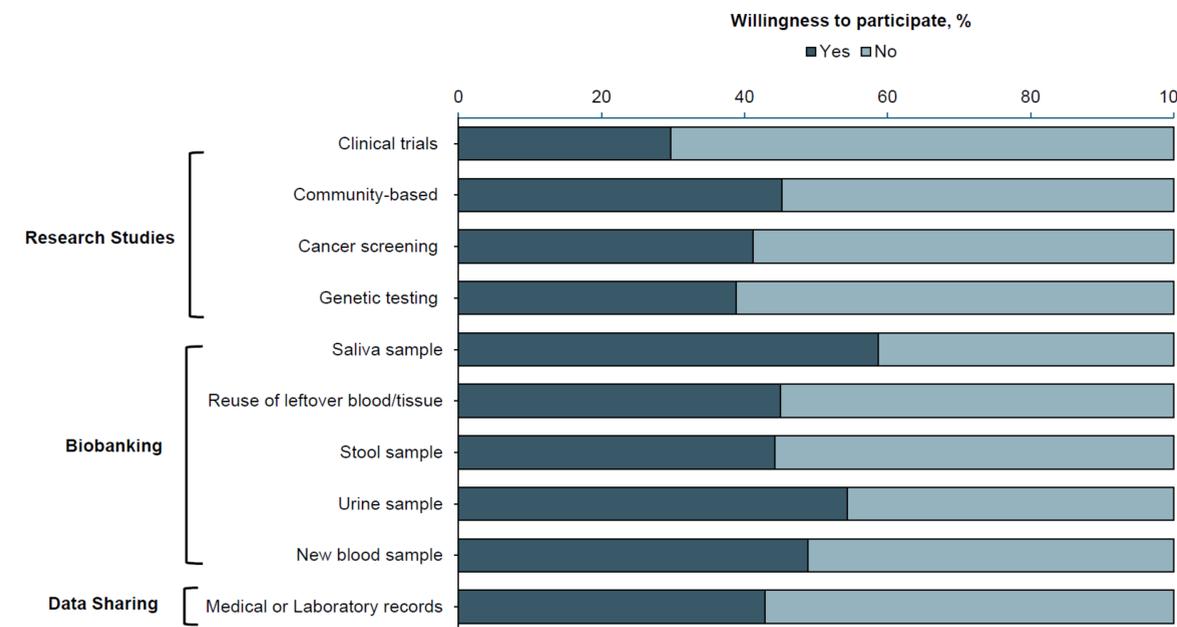
- Age 65+ (24.5%)
- Non-Hispanic (94.5%)
- White (62.7%)
- Female (50.7%)
- High school education (22.8%)
- Living in metropolitan areas (87.3%)

Trust levels:

- Low (score ≤16; 3.9%)
- Moderate (score 17–32; 81.5%)
- High (score ≥33; 14.4%)

Mean trust score in cancer researchers was 27.3 (SD=9.3).

Figure 1. Willingness to engage in cancer research among participants by type of research activity.



Willingness to participate in cancer research was generally modest across activities.

- Fewer than half were willing to join research studies:
 - Clinical trials (29.7%); Genetic testing (38.8%); Cancer screening studies (41.2%); Community-based research (45.2%)
- Willingness to provide biospecimens was *slightly higher*:
 - Saliva (58.7%) and urine (54.4%) were the only activities above 50%.
 - Reuse of leftover blood/tissue (45.0%), stool samples (44.2%), and new blood samples (48.8%) remained below 50%.
- Willingness to *share medical or laboratory records* was low at 42.9%.

RESULTS

Table 1. Trust in researchers and its association with willingness to engage in cancer research.

| Activity type | Willingness to engage in cancer research | | |
|------------------------------------------|-------------------------------------------------|------------------|------------------|
| | Adjusted Odds Ratio (95% Confidence Interval) * | | |
| | High trust | Moderate trust | Low trust |
| Participation in research studies | | | |
| Clinical trials | Ref | 0.52 (0.39-0.69) | 0.44 (0.24-0.81) |
| Community-based | Ref | 0.45 (0.34-0.60) | 0.46 (0.27-0.80) |
| Cancer screening | Ref | 0.36 (0.27-0.48) | 0.48 (0.28-0.84) |
| Genetic testing | Ref | 0.44 (0.33-0.58) | 0.58 (0.34-1.00) |
| Biobanking | | | |
| Saliva sample | Ref | 0.23 (0.17-0.34) | 0.29 (0.16-0.54) |
| Reuse of leftover blood/tissue | Ref | 0.45 (0.34-0.60) | 0.51 (0.29-0.89) |
| Stool sample | Ref | 0.57 (0.43-0.75) | 0.62 (0.35-1.07) |
| Urine sample | Ref | 0.42 (0.31-0.58) | 0.43 (0.25-0.76) |
| New blood sample | Ref | 0.38 (0.28-0.51) | 0.36 (0.20-0.62) |
| Data Sharing | | | |
| Medical or Laboratory records | Ref | 0.39 (0.29-0.52) | 0.21 (0.12-0.39) |

*Models were adjusted for age, sex, race, ethnicity, education, and area of residence. Willingness to engage in research was modeled separately for each type of engagement. Information on race (21), ethnicity (1) and sex (8) was missing for some participants. Trust was measured using the Trust in Medical Researcher Scale (TMRS); trust levels included low (TMRS score ≤16), moderate (TMRS score 17-32), and high trust (TMRS score ≥ 33).

CONCLUSION

- **Public trust in researchers is low**—only 14% of adults reported high trust—creating a major barrier to cancer research engagement.
- **Fewer than half of respondents were willing to participate in most cancer research activities**, reflecting broader declines in trust and rising exposure to health misinformation.
- Trust appears to be a foundational driver of research engagement, influencing participation even in low-burden activities.
- Limited trust may hinder recruitment and reduce the representativeness of cancer research, threatening progress in prevention, treatment, and survivorship..
- **Targeted trust-building strategies are urgently needed** to strengthen public participation and ensure the generalizability and equity of cancer research.

ACKNOWLEDGMENTS

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