



The Potential Contribution of Cancer Genomics Information to Community Investigations of Unusual Patterns of Cancer: Workshop Priorities

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Workshop

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CDC and ATSDR Roles in Investigating Cancer Clusters

- **The National Center for Environmental Health (NCEH) facilitates agency response to inquiries associated with cancer and environmental concerns**
 - Provides technical assistance in study design, analysis, and interpretation of results when requested from STLT partners
- **ATSDR offers technical support when requested to assist state, tribal, local, and territorial (STLT) partners conducting investigations of known environmental hazards**
- **On occasion, NCEH and ATSDR conduct epidemiological investigations of cancer cluster concerns at the request of and in partnership with state health departments**

History of CDC Guidelines

1990

- Guidelines for Investigating Clusters of Health Events

2011

- Strengthening Protections for Children and Communities From Disease Clusters Act Introduced

2013

- Guidelines for Investigating Suspected Cancer Clusters and Responding to Community Concerns

2016

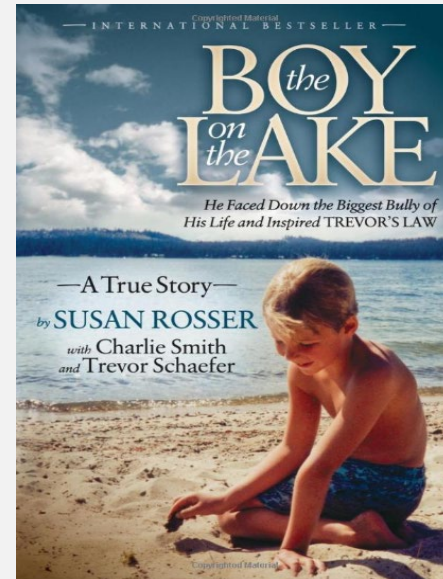
- Frank R. Lautenberg Chemical Safety for the 21st Century Act (Section 21 – Trevor's Law)

2019

- Congressional Appropriation to HHS

2022

- Examining Unusual Patterns of Cancer and Environmental Concerns



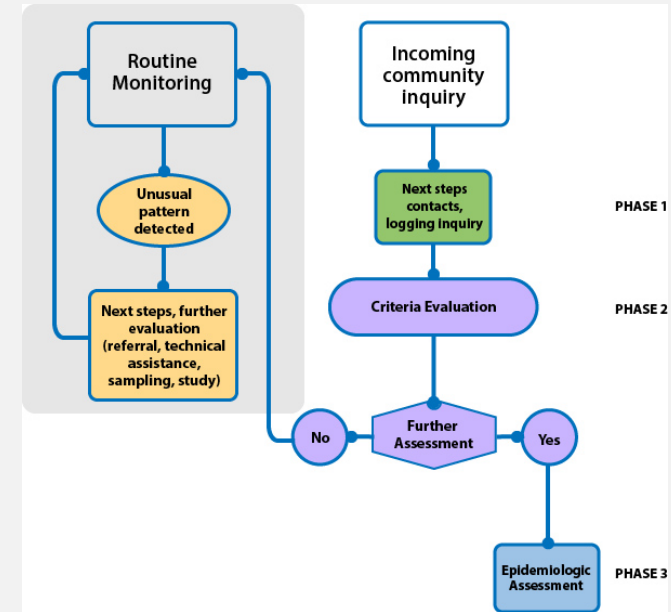
Previously Cleared

Topic Areas of Interest with Potential New Methods and Research

- Epidemiologic investigations of cancer clusters in community and residential settings
- Geospatial and temporal methods
- Rare event and small area statistical methods
- **Scientific advancements in cancer genomics**
- Approaches for engaging, educating, and communicating with affected communities

Key Elements of the 2022 Guidelines

- Proactive evaluation and routine monitoring of cancer data
- Ten new criteria for evaluation and modification of cluster definition to include etiological considerations
- New forms, templates, and communication resources
- Enhanced communication and community engagement strategies



Previously Cleared

Scientific Advancements in Cancer Genomics

- **Toxicogenomic effects of environmental hazards**
- **Genetic susceptibility to environmental exposures**
- **Epigenetics of cancer**
- **Pediatric versus adult cancer genomics**
- **Epidemiologic analysis of genomic data**
- **Novel approaches for grouping cancers by molecular characteristics**
- **Other –omics**
- **Communication about environmental exposures and cancer risk**

Gathering Inputs Regarding Scientific Advancements in Cancer Genomics

- Literature review
- Expert Panel Forum presentation on mutation signatures of environmental exposures in human cancer
- Consultations with subject matter experts

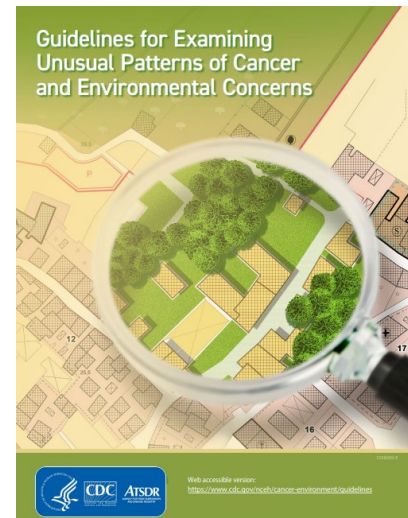
Workshop Priorities

- **Examine the state of the science of cancer genomics and environmental exposures**
- **Explore recommendations on the applicability of genomic research to identify and prevent unusual occurrences of cancer, particularly in pediatric populations**
- **Identify gaps and suggest areas of future research that could be applicable to investigating unusual occurrences of cancer**

Thank you!

For more information:

[https://www.cdc.gov/nceh/cancer-environment/
ccguidelines@cdc.gov](https://www.cdc.gov/nceh/cancer-environment/ccguidelines@cdc.gov)



For more information, contact NCEH/ATSDR
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