

# Decision Making Form for Examining Unusual Patterns of Cancer and Environmental Concerns

## Section 1: Considering the number of cancer cases and the rate of cancer in the area of concern

Criteria	Response	Notes
1. For the cancer(s) of concern, is the observed number of cases more than the expected number of cases?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
2. Is the difference (in cases or rates) between the area of interest and the comparison area statistically significant?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
3. Is there an individual year or group of years responsible for an elevated rate suggesting a temporal cluster and/or has the rate of that cancer increased over time?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
4. Are the number or pattern of cancer deaths (as shown in mortality/vital statistic data) elevated or unusual in the area of concern?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
5. Considering the geographic distribution of cancer cases, are cases concentrated in any area suggesting a spatial cluster?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
6. Do the cancers of concern share similar causes/risk factors and are they elevated in the area of concern or neighboring areas (regardless of geopolitical boundaries)?	No <input type="checkbox"/> Yes <input type="checkbox"/>	

## Section 2: Considering environmental risk factors

Criteria	Response	Notes
7. Has an environmental concern been raised as potentially being related to the pattern of cancer in the area of concern?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
8. Is there a plausible pathway of exposure between the suspected environmental contaminants and the cancer(s) of concern in terms of disease etiology?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
9. Does the scientific literature suggest that exposure to environmental contaminants may play a role in the development of the cancers of concern?	No <input type="checkbox"/> Yes <input type="checkbox"/>	
10. What is the latency period for the cancer of concern and is it consistent with the contaminant exposure timeframe?	No <input type="checkbox"/> Yes <input type="checkbox"/>	

**If ALL answers to sections 1 and 2 above are “No”**

1. **No further assessment needed** at this time.
2. **Summarize collected information** in a written report or letter; provide summary to the inquirer/community point of contact. The summary should include the following: 
  - Background information on patterns of cancer observed (rates and geography)
  - An explanation of how the agency investigated the inquiry about unusual patterns of cancer
  - A review of findings regarding the cancer(s) of concern
  - A discussion of risk factors for the cancer(s) mentioned in the original inquiry
  - Agency plans or next steps based on the findings
  - A note or reference about routine monitoring and follow up
3. **Continue routine monitoring as appropriate**, and plan to include this cancer and area of concern in routine evaluations of cancer data (to determine if the pattern changes): 
  - Conduct routine monitoring aimed at identifying unusual patterns of cancer using geospatial/statistical tools (and data that may be routinely available at geographic levels lower than the state as a whole).
  - Maintain the feedback loop with the original inquirer and establish procedures for future updates (e.g., making more geographically granular data available on the health department website).

**If answer to question 1 is “Yes,” AND answer to any other question in section 1 is “Yes”**

**Further assess the cancer pattern.** This assessment may include consultation and/or referral to a cancer prevention and control program for consideration of intervention activities or additional information gathering such as a case series analysis, described more in Phase 3. Further assessment could also include defining the geographic area or time frame of concern using spatial and temporal methods.

**If answer to any question in section 2 is “Yes”**

**Consider information from section 2 (environmental data and environmental risk factors)** during the additional assessment and/or referral to, or collaboration with, another agency (e.g., the local water department, the state environmental regulatory agency, ATSDR).

For more information, see Guidelines for Examining Unusual Patterns of Cancer and Environmental Concerns (<https://www.cdc.gov/nceh/cancer-environment/guidelines/index.html>).