

The MDHHS Cancer Investigation Program, Local Health Departments and the Public

Strengthening Communications in Michigan Cancer Investigations

Michigan Premier Public Health Conference
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Presentation Objectives



- Raise awareness of the program among local health departments and other public health professionals.
- Showcase Michigan Department of Health and Human Services (MDHHS) Cancer Investigation Program.
- Elicit feedback on the program.

Identify and investigate unusual patterns of cancer in a sub-county area that may be associated with environmental exposures.

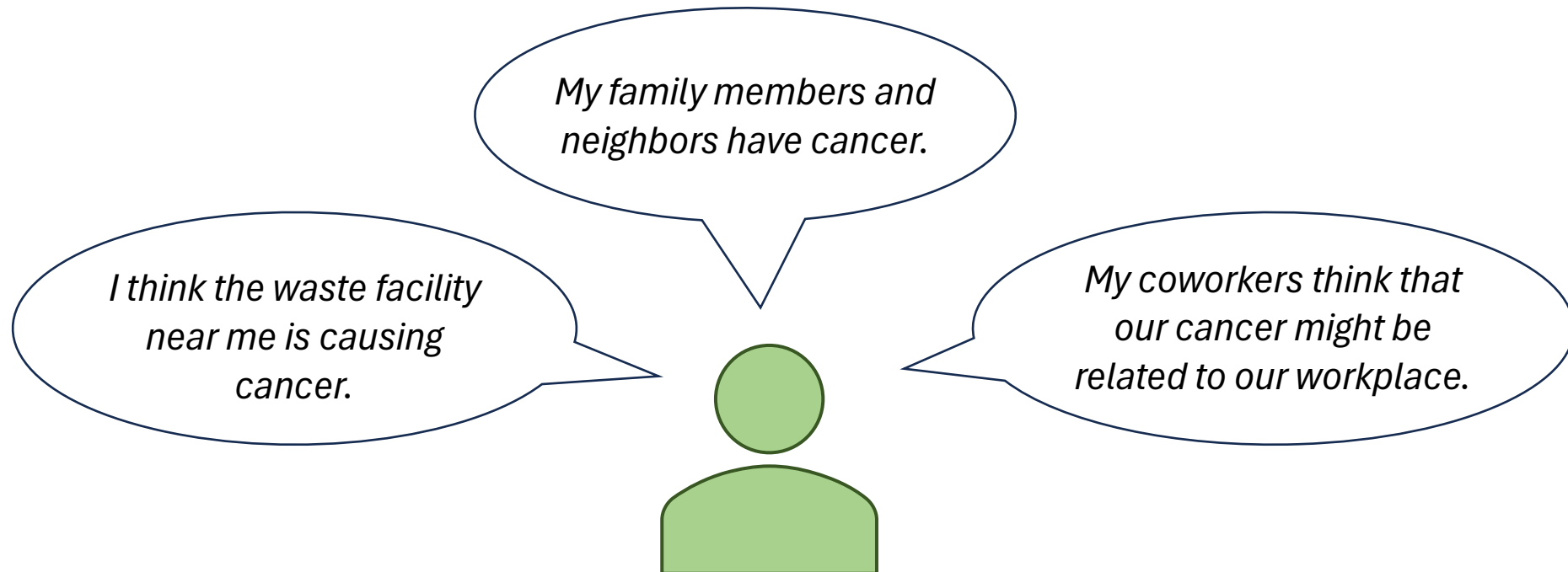
This work is required by the Michigan Public Health Code.

- MDHHS "shall make investigations and inquiries as to... the causes, prevention, and control of environmental health hazards, nuisances, and sources of illness."

Who Contacts the Cancer Investigation Program?

Community Cancer Concerns

There are many different reasons why individuals concerned about cancer have contacted the Cancer Investigation Program.



Community Cancer Concerns

- Who might contact the MDHHS Cancer Investigation Program with cancer concerns?
 - Concerned citizens.
 - Community organizations.
 - Other programs within MDHHS.
 - Local public health departments.
 - Elected government officials or offices.
 - Other government agencies.



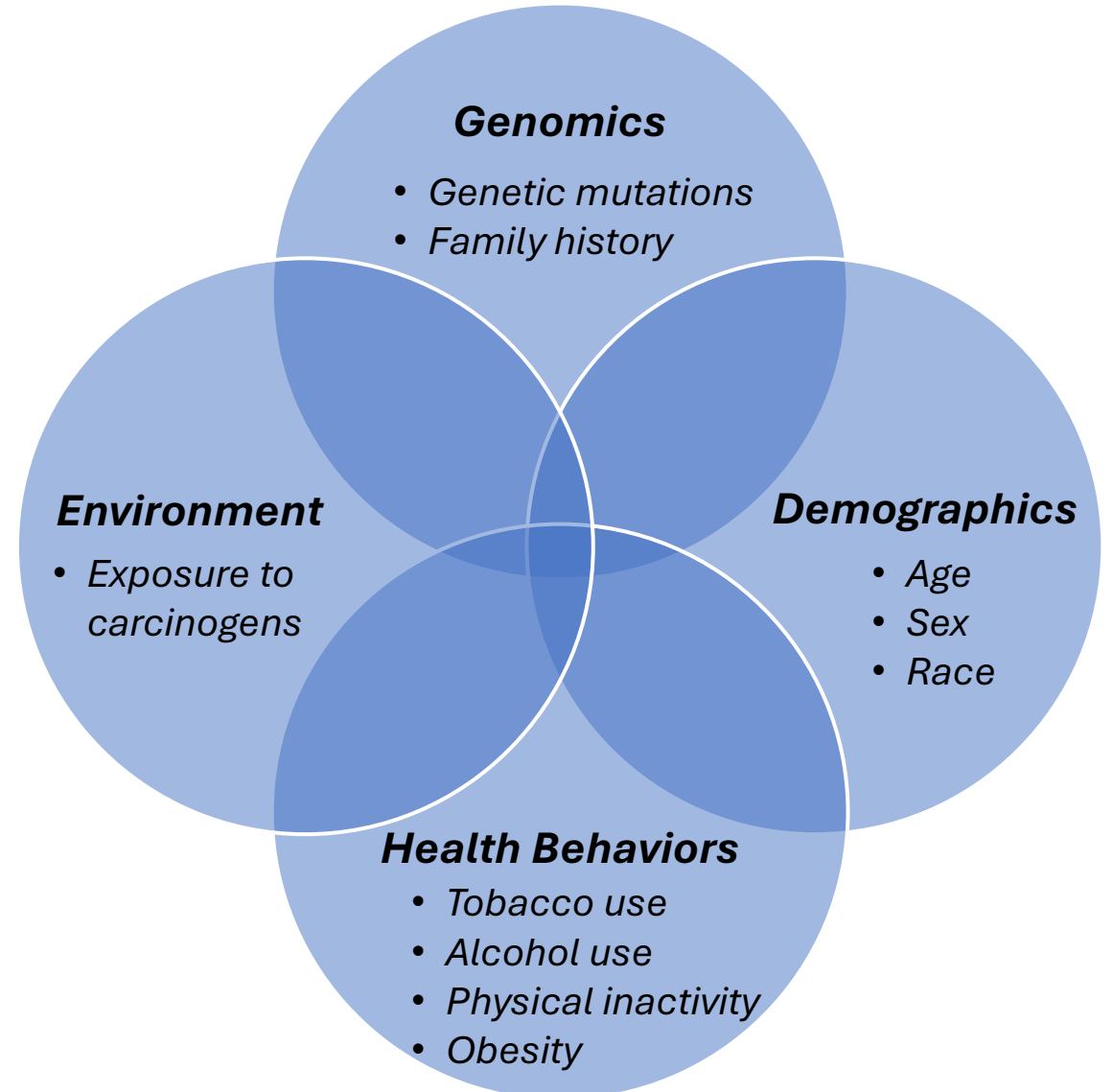
What to Know About Cancer

Key Cancer Concepts

- Not a single disease - refers to more than 100 different diseases in which the body's cells begin to grow uncontrollably.
 - Different causes, risk factors, latency periods.
- Cancer is very common.
 - One in three people diagnosed during their lifetime in U.S.
- Cancer is second leading cause of death in Michigan.

Cancer Etiology

Cancer can reflect interplay of many factors.



What Causes Cancer?

While science has identified certain factors that may increase one's risk of developing cancer, **we do not yet know why one person might get cancer while another person does not.**

What is a Cancer Cluster?

What is a Cancer Cluster?

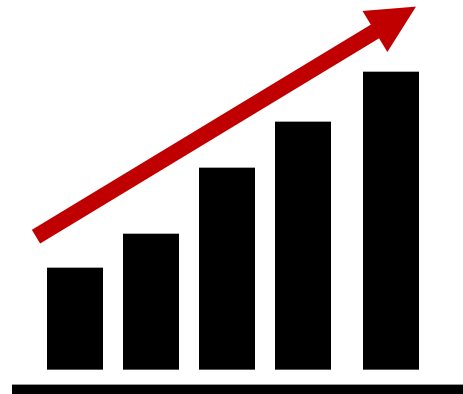
An unusual number of cancer cases in a group within the same location during a window of time.

What is a Cancer Cluster?

An unusual number of cancer cases in a group within the same location during a window of time.

AN UNUSUAL NUMBER

A greater than expected number of cases.



What is a Cancer Cluster?

An unusual number **of cancer cases** in a group within the same location during a window of time.

OF CANCER CASES

All cases involve the same type of cancer or different types of cancer that science has proven to have the same cause.

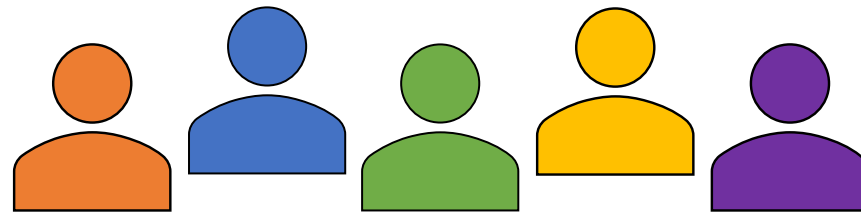


What is a Cancer Cluster?

An unusual number of cancer cases **in a group** within the same location during a window of time.

IN A GROUP

Cancer cases occur among a group of unrelated people with similar characteristics (e.g., children, teachers, males).



What is a Cancer Cluster?

An unusual number of cancer cases in a group **within the same location** during a window of time.

WITHIN THE SAME LOCATION

The group lives within the same area or works in the same place.



What is a Cancer Cluster?

An unusual number of cancer cases in a group within the same location **during a window of time**.

DURING A WINDOW OF TIME

The cancer cases occur over a defined period of time (e.g., two years).



Cancer Clusters

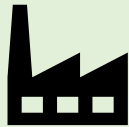
- Cancer clusters are very rare.
- Could be other reasons for clusters (unrelated to environmental source/contaminant).
- Usually just coincidence when several cancer cases occur in small area or group.

Causes of Clusters

**Chance or
coincidence**



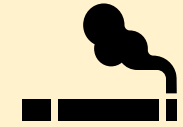
**Environmental
contaminants**



**Access to
health care**



**Behavioral
risk factors**



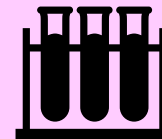
Genetics



**Aging
population**



**Screening
practices**



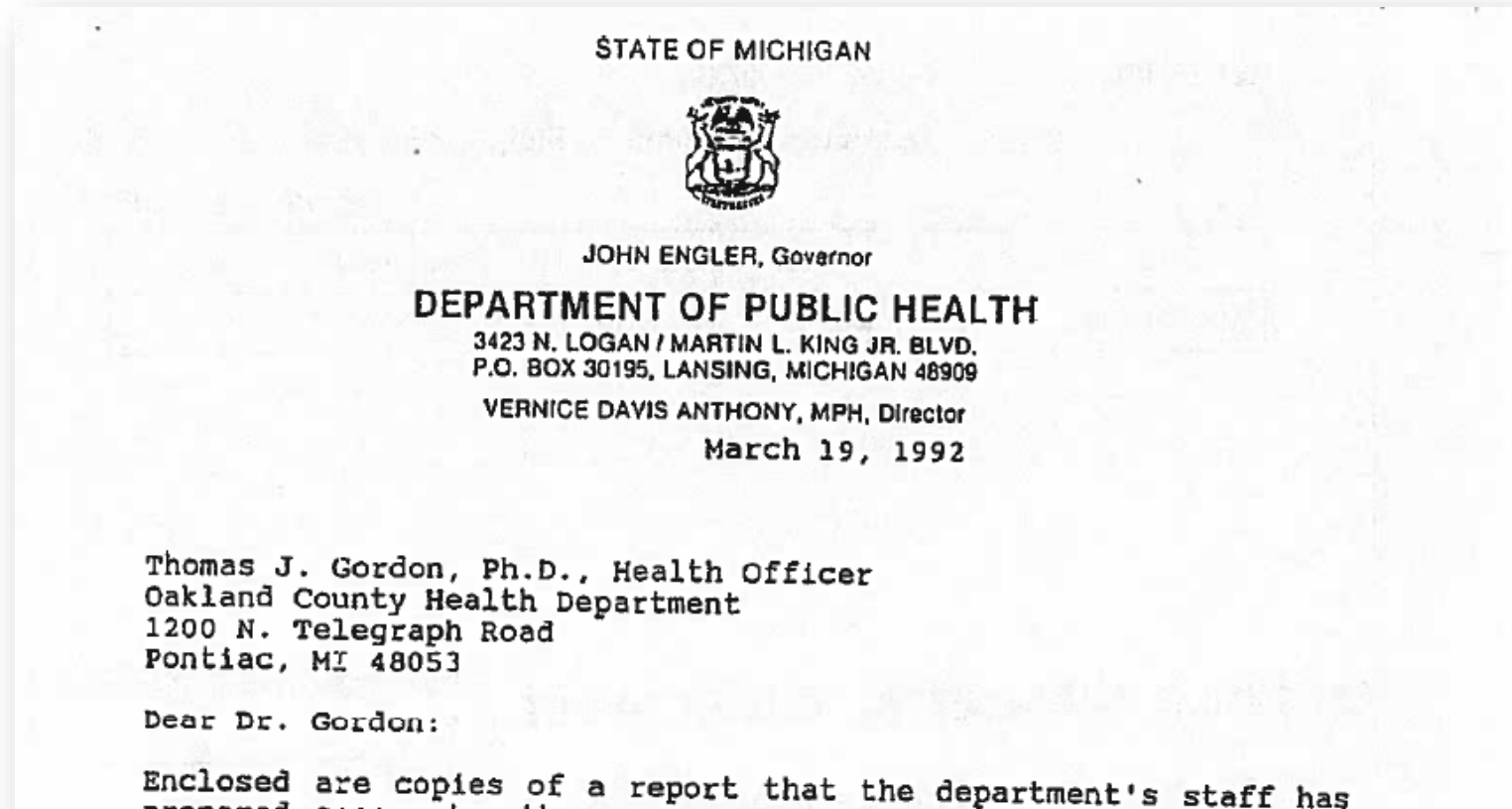
**Other/
unknown**



MDHHS Cancer Investigation Process

Cancer Investigations (Then)

MDHHS has a history of responding to cancer concerns.



Cancer Investigations (Then)



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2/14/92



CANCER INCIDENCE DATA REVIEW 1985-2015 GENESEE COUNTY, MICHIGAN

Michigan Department of Health and Human Services
Division of Environmental Health

Cancer Investigations (Now)

- 2023: Environmental Health Bureau (EHB) Cancer Investigation Program formally established.
- EHB cancer epidemiologist dedicated to response.
- Collaboration with:
 - EHB Epi Management.
 - Toxicologists.
 - Health Educator.
 - **Local Health Departments (LHDs).**
 - And more.

Discussion Question:

Has your health department received community cancer concerns?

Program Objectives



Identify



Investigate



Intervene

- Process and decision-making developed from CDC's *Guidelines for Examining Unusual Patterns of Cancer and Environmental Concerns*.



Identify

- Cancer epidemiologist collects information:
 - Number of cases.
 - Type(s) of cancer.
 - Location.
 - Year(s) of diagnosis.
 - Environmental hazards of concern.
- Determines need to investigate further.



Identify Example #1

Example #1

Number of cases	"10 maybe more"	← Exact number not essential
Type(s) of cancer	Skin, prostate, lung, cervical	← Mixture of common cancers not etiologically related
Location	"4 live in my neighborhood"; "others were identified from a Relay for Life event"	← Poorly-defined area
Year(s) of diagnosis	1980s-2023	← Long duration
Environmental hazards of concern	none reported	← No environmental hazard



Identify Example #1

- Recommendation:
 - Information not sufficient to investigate further.
 - Provide health education and/or resources to caller.





Identify Example #2

Example #2

Number of cases	6
Type(s) of cancer	Pediatric osteosarcoma
Location	Two neighboring small towns
Year(s) of diagnosis	2021-2023
Environmental hazards of concern	Pesticides (“People are concerned about living on old farmland”)

← Specific cancer

← Defined area

← short duration

← Hazard identified



Identify Example #2

- Recommendation:
 - Investigate health and environmental hazard concerns.





Investigate

Cancer(s) of concern

- Determine if there is excess cancer in area of interest.
- Requires cancer registry data and risk factor data.
- Epidemiologist leads.

Environmental hazards

- Determine exposure that may play a role in development of cancer.
- Requires environmental records.
- Toxicologist leads.



Investigate: Decision-Making

Possible Outcomes:

- 1) No hazard, no excess cancer → *No further assessment needed.*
- 2) Excess cancer → *Further assess cancer pattern.*
- 3) Environmental hazard identified → *Additional assessment/referral to partners.*



Intervene

- Promote public health recommendations.
 - Prevention, continued monitoring.
- Disseminate investigation findings.
 - Emails, letters, reports, presentations.

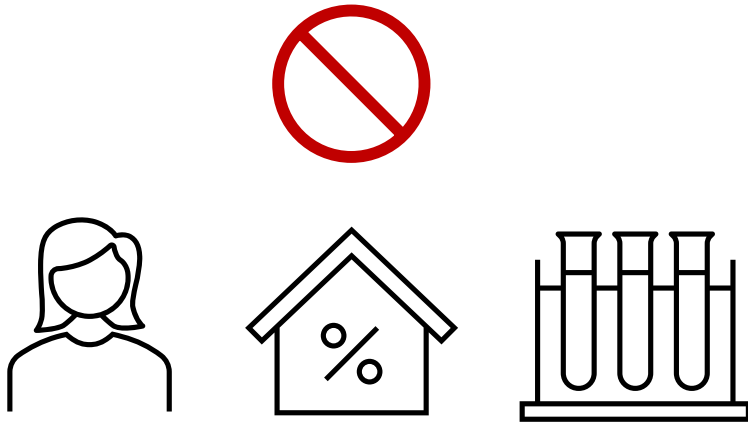


Communication with Local Health Departments

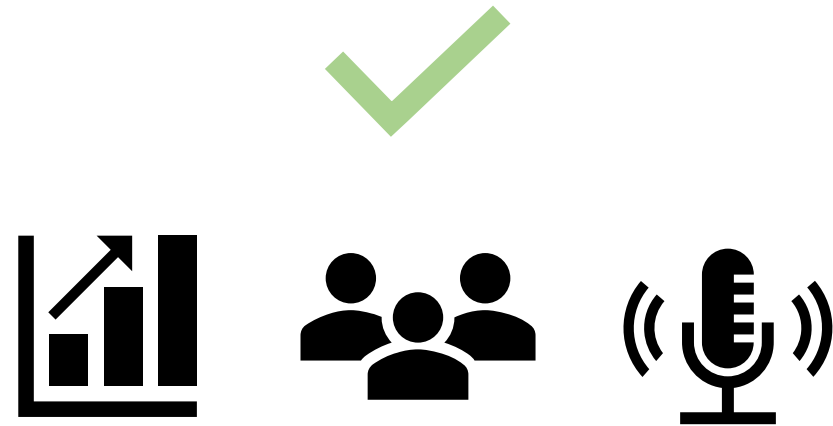
Communication Goals

- Ensure LHDs are well-informed and supported.
- Foster transparent and collaborative partnerships.

When Our Program Contacts LHDs



- A single individual or family with cancer.
- Resolved concern with education and/or referral.



- Significant findings.
- Multiple concerns.
- Media.
- Ongoing investigations.

Initial Notification

- Health Statistics Surveillance unit manager notifies LHD officials of concern, plan.

“Hello,

My name is Kristyn Vang. I supervise the MDHHS Cancer Epidemiologist who leads our community cancer concern response efforts.

*I wanted to **inform you of a community cancer concern** in your area that was reported to us regarding **[cancer] and [environmental concern]**. Our Cancer Investigation Program is currently investigating this concern.*

*I can **share back our findings with you once the response is complete**, unless we identify an environmental hazard or unusual pattern of cancer – in which case we will notify local health department officials sooner.”*

Who is Notified at LHDs

- MDHHS Division of Local Health Services.
- LHD officials including:
 - Health officer.
 - Medical director.
 - Environmental health director.
 - Nurse administrator.
 - Public information officer.

Summary Notification

- Notification includes:
 - Summary of concern.
 - Outcome of investigation.
 - Key findings.
 - Additional details and next steps.

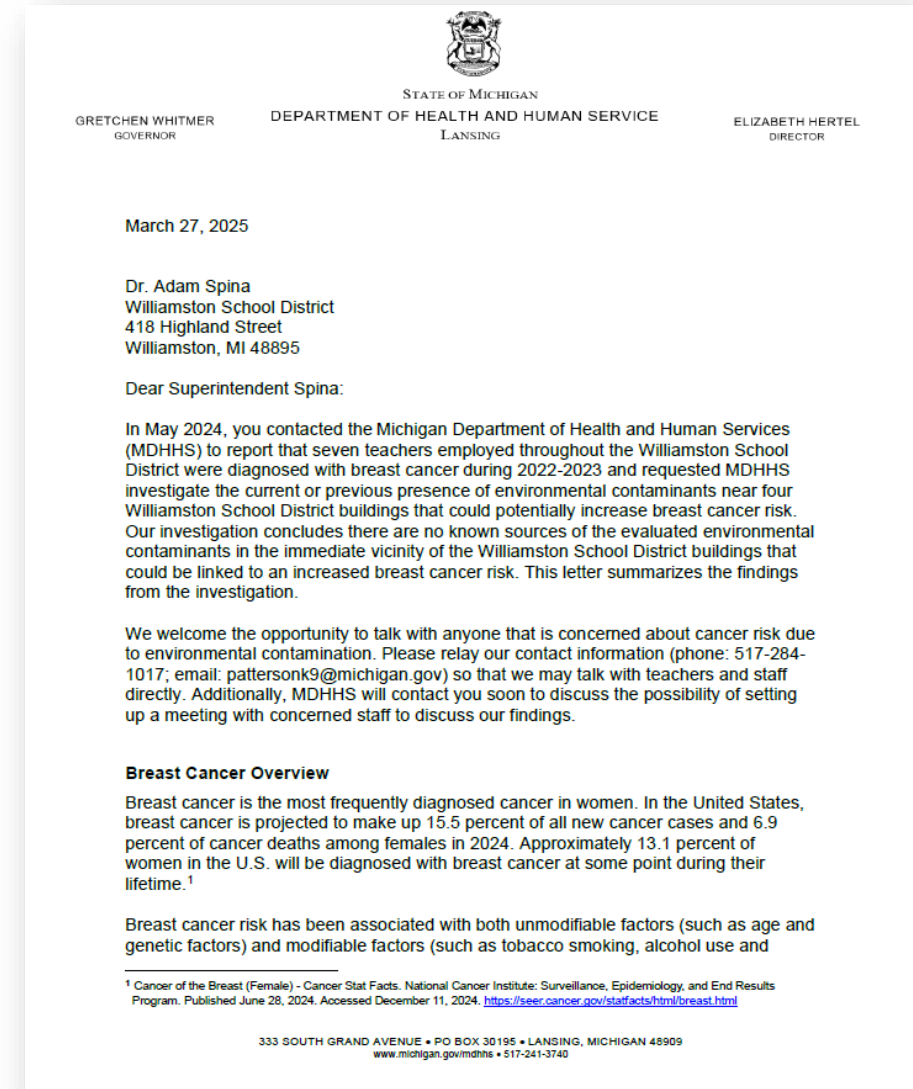
- Team available for follow-up meetings.

Summary Formats

- E-mail
 - Internal use only.
- Letter on official letterhead
 - Can be shared externally.
- Report
 - Can be shared externally.
 - Will be posted to MDHHS Cancer Investigation website.

Summary Example - Letter

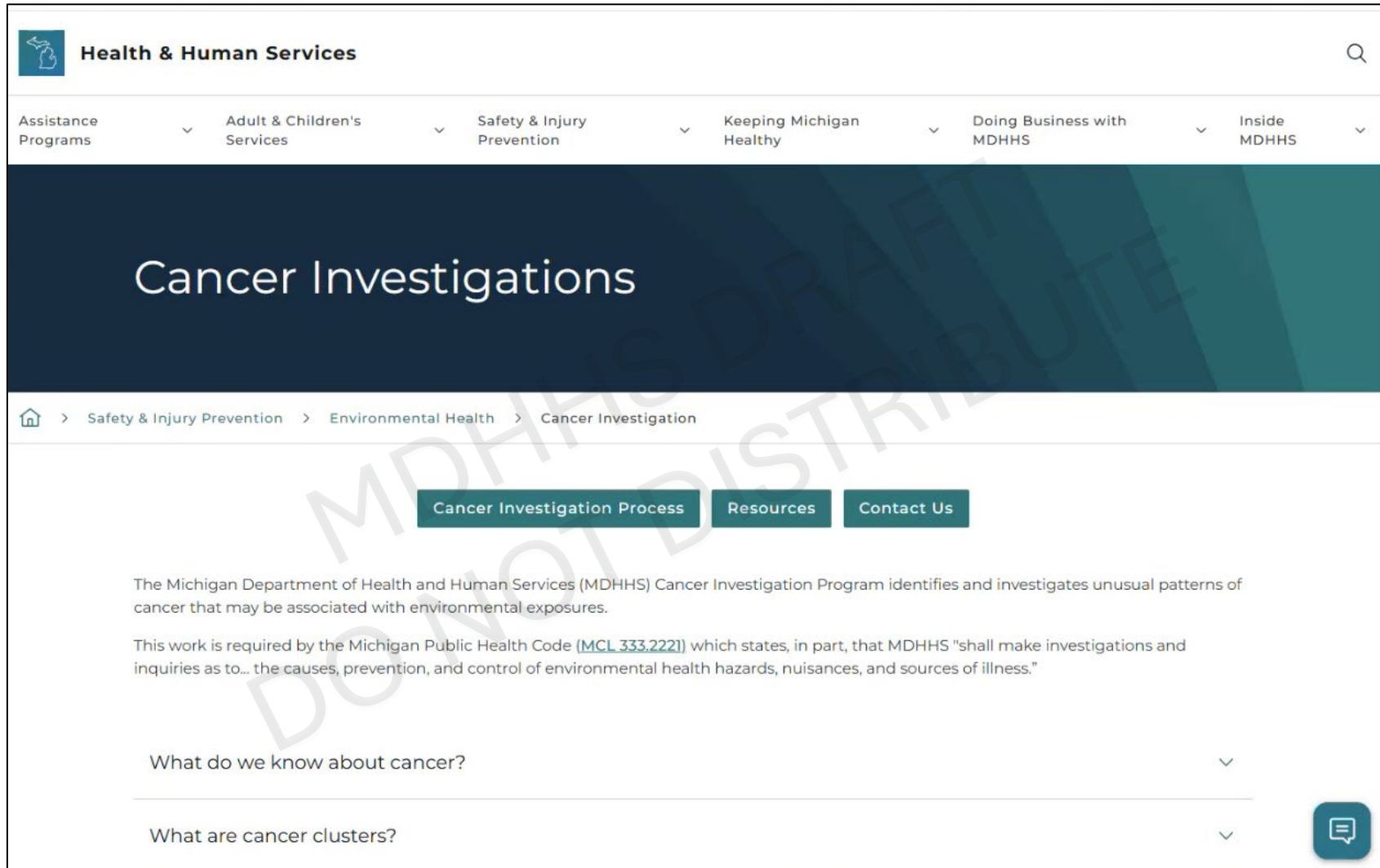
- Letter template
 - Overview of concern and MDHHS conclusions.
 - Cancer Data Assessment.
 - Toxicology Assessment.
 - Recommendations.



NEW: Program Website

- Centralized resource for public and LHDs.
 - Information on cancer clusters and investigations.
 - Program overview.
 - Contact information.
 - Additional resources.

Website Demo



The screenshot shows the MDHHS website page for Cancer Investigations. The header includes the MDHHS logo and navigation menu items: Assistance Programs, Adult & Children's Services, Safety & Injury Prevention, Keeping Michigan Healthy, Doing Business with MDHHS, and Inside MDHHS. The main heading is "Cancer Investigations". Below the heading is a breadcrumb trail: Home > Safety & Injury Prevention > Environmental Health > Cancer Investigation. Three buttons are visible: "Cancer Investigation Process", "Resources", and "Contact Us". The main content area contains a paragraph: "The Michigan Department of Health and Human Services (MDHHS) Cancer Investigation Program identifies and investigates unusual patterns of cancer that may be associated with environmental exposures." followed by another paragraph: "This work is required by the Michigan Public Health Code (MCL 333.2221) which states, in part, that MDHHS 'shall make investigations and inquiries as to... the causes, prevention, and control of environmental health hazards, nuisances, and sources of illness.'" Below this are two expandable sections: "What do we know about cancer?" and "What are cancer clusters?". A chat icon is in the bottom right corner.

Draft is currently under MDHHS review – NOT approved for publication or distribution.

Questions for the Audience

- What challenges or bottlenecks do you encounter with community cancer concerns?
- What would make this process better for you?
- How could communication between MDHHS and LHDs be improved during this process?
- What additional resources or support would be helpful?
- Do you have any other feedback or suggestions for improvement?

Thank you!

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