

A Multidisciplinary Collaborative Strategy for Addressing the Diamond Shroomz™ Investigation and Response in Michigan

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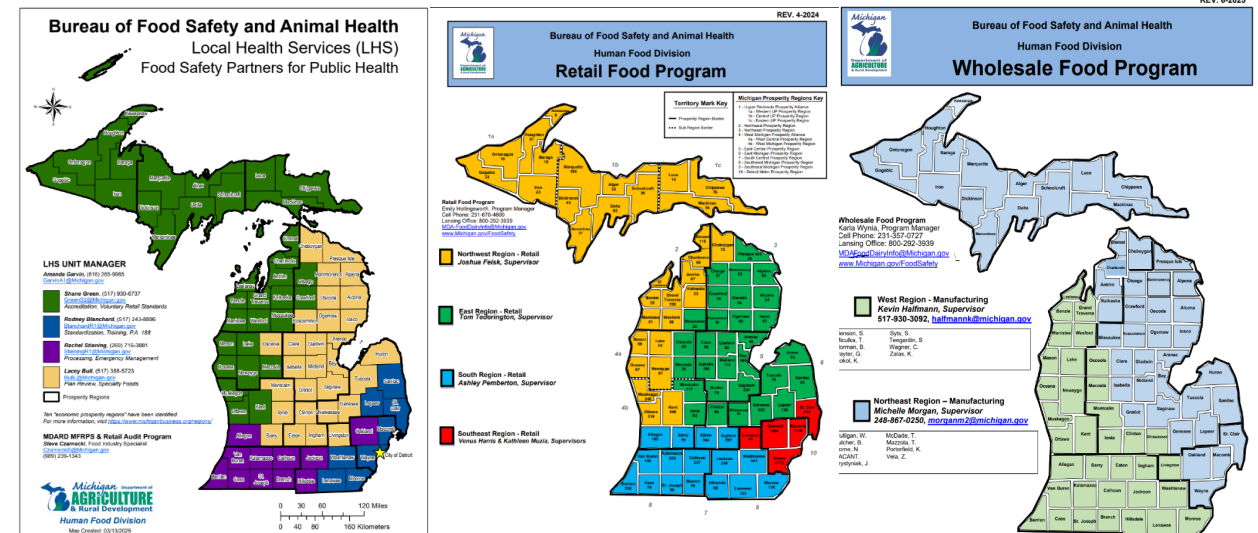
1. Michigan Department of Agriculture and Rural Development (MDARD)
2. Michigan Department of Health and Human Services (MDHHS)



MDARD Overview



- The Michigan Department of Agriculture and Rural Development (MDARD) works to support and regulate Michigan's food and agriculture sector, ensuring food safety, environmental protection and economic development.
- MDARD's Human Food Division - within Bureau of Food Safety and Animal Health
 - Food Regulatory Programs (Wholesale and Retail).
 - Local Health Services Unit.
 - Rapid Response Team.
 - Food Safety/Environmental Health Specialists.
 - Recall Subject Matter Expertise.
 - Epidemiologists.
 - Laboratorians- Outside of the Bureau (Geagley).

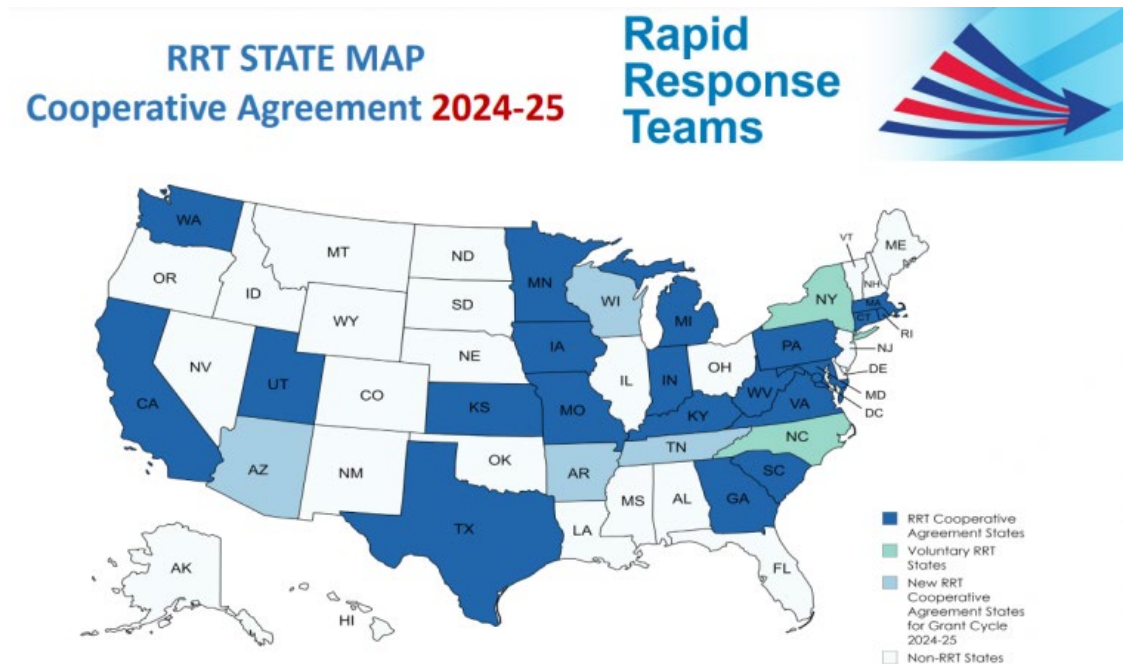


What does the Rapid Response Team (RRT) within MDARD do?



MDARD's RRT

- Multi-disciplinary team focused on increasing effectiveness of food-related incident response.
 - Enhance inter- and intra-agency collaboration and communication.
 - Coordinate responses of foodborne illness and other food-related incidents.
 - Train and exercise staff to be prepared.
 - Establish best practices for responses.
- 23 states currently have RRT agreements with FDA.
- MDARD's team includes members of the Human Food Division, Laboratory, Feed Safety Program and the Executive Office.



MDHHS Environmental Health Bureau



- The Environmental Health Bureau (EHB) uses the best available science to reduce, eliminate, or prevent public health harm from environmental, chemical and physical hazards.

At EHB we...

- 1. Identify** public health hazards.
- 2. Investigate** the hazard and determine if any immediate public health actions are necessary.
- 3. Intervene** to reduce, eliminate or prevent.

MDHHS Environmental Health Bureau

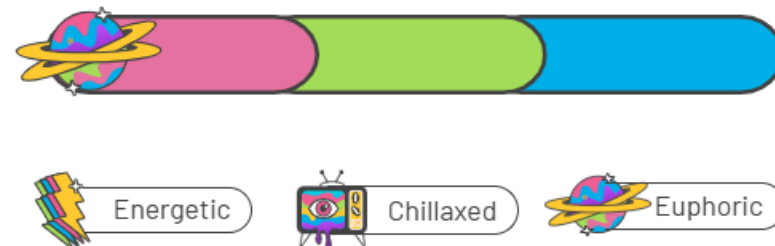


The Diamond Shroomz™ Investigation and Response

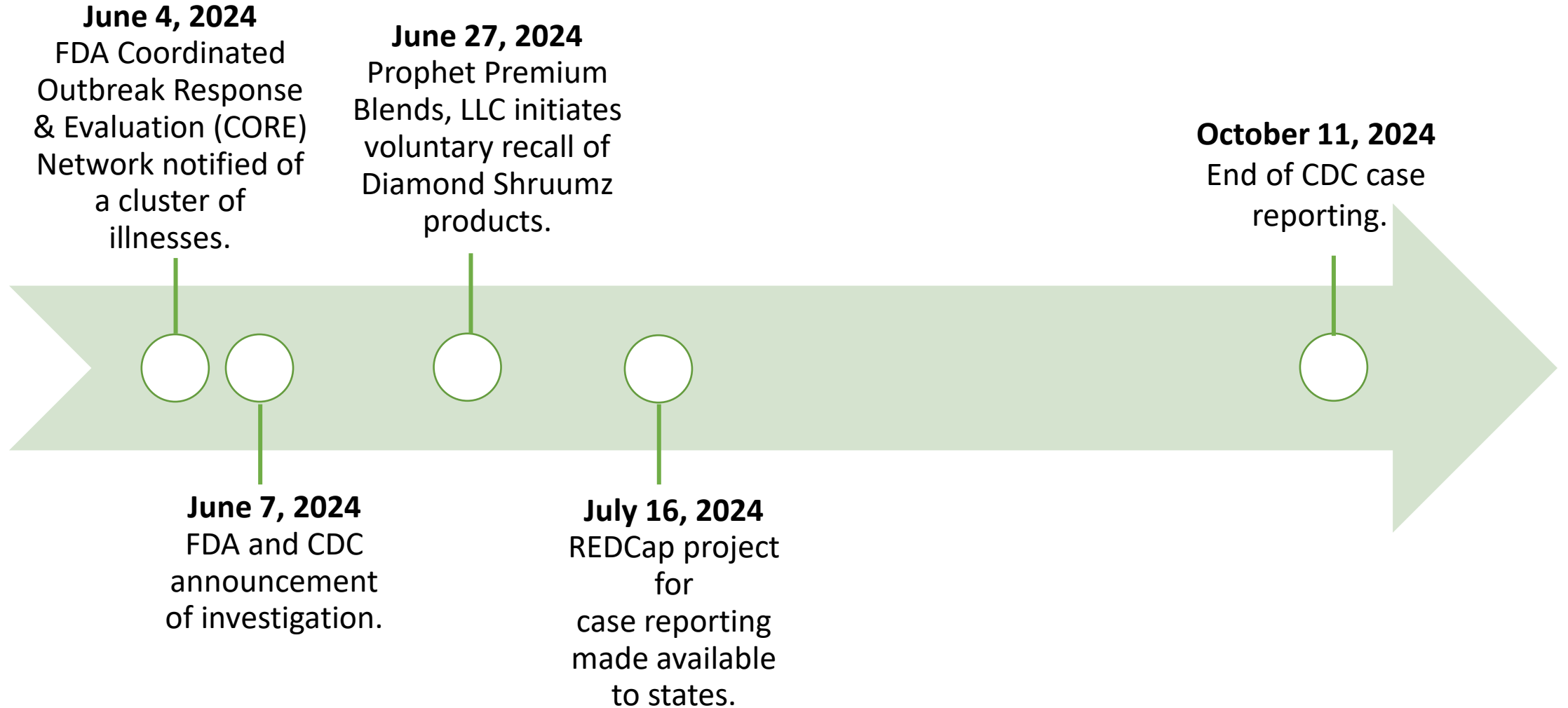


Background

- Diamond Shroomz™ products are marketed as legal, mushroom (non-psylocybin) containing candy.
- Products include chocolate bars, cones and gummies.
- Sold online and at smoke/vape shops, CBD stores and gas stations.



Timeline



MDARD Recall Response



- Notification was sent to all inspectors via recall listserv to watch for products during inspections.
- Distribution list provided by FDA-shared with MDHHS.
- MDARD's Recall Specialist placed phone calls to unlicensed stores that received the product.
 - Ensure they were aware of recall.
 - No longer selling product.
- FDA indicated they planned to visit all Michigan distributors who received product.



Agencies Involved

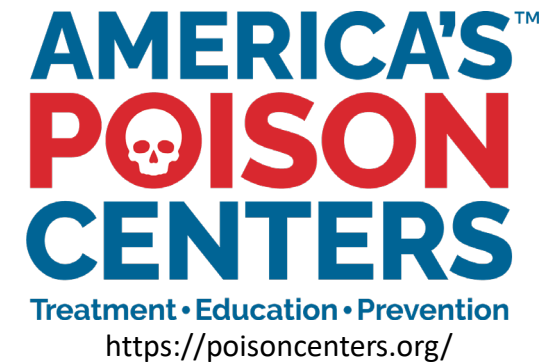


Michigan



- Local Health Departments (LHDs)
- Michigan Poison and Drug Information Center (MiPDC)

Nationally



- CDC
- FDA

Outreach Activities



HEALTH ALERT
NETWORK
(HAN)



MDHHS PRESS
RELEASES



LHD AND
COMMUNITY
PARTNER
NOTIFICATION



PHYSICIAN
NETWORKS
(400,000+
SUBSCRIBERS)



LETTERS/PHONE
CALLS TO
CUSTOMERS
(INDIVIDUALS,
STORES AND
DISTRIBUTORS)



SOCIAL
MEDIA
POSTS

Investigation Efforts



Case Definition

- Illness with moderate or major clinical effects*, or death, occurring in a person who ate any Diamond Shroomz product (chocolate bars, cones, gummies or other) or another chocolate product marketed as containing mushrooms, during January 1, 2024, through the present.

*Clinical effects are classified into:

- Minor: minimally bothersome, resolved quickly, no lasting effects
- Moderate: more pronounced but not life-threatening, usually needing treatment, no lasting effects
- Major: life threatening or has lasting effects

Case Finding



- Emergency Medical Services (EMS) and syndromic surveillance queries.
 - Weekly data pulls.
 - Manual review with prioritization.
 - Discussion of priority cases.

	# of records reviewed	# of medium-priority records ¹	# of records with follow-up	# of cases after follow-up
Syndromic Surveillance	1,228	14 (1.1%)	*	*
EMS – Biospatial	137	12 (8.8%) ¹	*	*

*Counts of fewer than 6 are censored to protect individuals' privacy.

¹A number of the medium-priority EMS records were non-transport, so an associated medical record was unlikely.

Case Investigation



- Medical record review and abstraction.
- Patient interviews.
- Sample submission to FDA.
- Case submission to CDC.
 - Through REDCap (Research Electronic Data Capture).

Joint Investigations – MDHHS and LHDs



- For each potential case identified, the corresponding LHD was notified.
- Meetings were held with the LHD to discuss the potential case and next steps.
- LHDs played a critical role in obtaining medical records, case contact information and assisting MDHHS throughout the investigation.

Sample Collection and Testing

A collaborative effort between MDHHS and MDARD.

- For one case, a sample of the product was made available for testing.
- MDARD staff provided sample collection instructions and supplies.
- MDHHS staff visited the resident's home, picked-up the sample and delivered it to the MDARD lab.
- MDARD notified FDA and coordinated delivery to the FDA lab.
 - Results consistent with findings listed in recall.

FDA Sample Results

Schedule I-controlled Substance

Prescription Drug

Product Type	Flavor	Muscimol	Acetylpsilocin	Psilocin	Pregabalin	Desmethoxyyangonin	Dihydrokavain	Kavain
Chocolate Bar	Birthday Cake		✓					
Chocolate Bar	Birthday Cake		✓					
Chocolate Bar	Birthday Cake		✓	✓		✓	✓	✓
Chocolate Bar	Birthday Cake					✓	✓	✓
Chocolate Bar	Cinnamon		✓			✓	✓	✓
Chocolate Bar	Cinnamon		✓	✓				
Chocolate Bar	Cinnamon	✓				✓	✓	✓
Chocolate Bar	Cookie Butter	✓				✓	✓	✓
Chocolate Bar	Cookie Butter		✓	✓	✓	✓	✓	✓
Chocolate Bar	Cookie Butter	✓				✓	✓	✓
Chocolate Bar	Cookies N Cream	✓				✓	✓	✓
Chocolate Bar	Cookies N Cream		✓	✓	✓	✓	✓	✓

Cases



- Nationally, from January to October 2024:
 - 180 cases reported from 34 states.
 - 73 hospitalizations.
 - 3 potentially associated deaths.
- In Michigan, from January to October 2024:
 - <5 cases reported.
 - 0 hospitalizations.
 - 0 potentially associated deaths.

Lessons Learned & Opportunities for Improvement



1. MDHHS and MDARD are working with federal and STLT agencies to improve these responses going forward.
 - a. Includes CDC/CSTE workgroups and collaboration with other states.
2. Increase regular collaboration and familiarity between MDHHS EHB and MDARD RRT.
 - a. Sharing resources, materials and SOPs.
 - b. Planning collaborative exercises.
3. State agencies will continue to engage LHDs during all stages of response.

Questions?



Thank you!

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