

Kansas RRT 2024 Year in Review

Ben Hopkins, Adam Inman, Debra Brasel, Jamie Spencer, Dan Neises, and Samad Ishrati
Kansas Department of Agriculture and Kansas Department of Health and Environment



Introduction

In 2024, the Kansas Rapid Response Team (KS RRT), had a busy year responding to outbreaks, recalls, and planning an exercise. The responses to Monensin in horse feed, Diamond Shruumz chocolate bars, cones, and gummies, and the food safety functional exercise are highlighted here.



Monensin in Horse Feed

- 8/26/2024 – The Kansas Department of Agriculture Dairy and Feed Safety Program (KDA-DFS) received RFR notification from FDA of potential Monensin poisoning.
- 8/27/2024 – KDA-DFS inspector initiated an investigation. The feed in question was manufactured August 20, 2024, and delivered bulk August 23, 2024.
- Observations: The previous batch contained 12,000 g/t Monensin. The run was approximately 1,800 pounds short of expected yield. Pasture Gold was not to contain medication. Run of Pasture Gold weighed almost 1800 pounds more than expected. The firm stated that the surge hopper empty indicator was not functioning properly.
- Monensin is used as a feed additive for cattle to control parasites, improve feed efficiency, and increase milk production. It is safe for cattle, but not horses.
- 8/28/2024 – FDA inspector joined the investigation.
- A food safety plan not complete and not written for this specific plant. The firm was not following good manufacturing practices. Drug carryover prerequisite program not properly implemented. Yield discrepancies were not investigated. The firm claimed they are within their allowable limits. Run scale discrepancies are from almost 6,000 pounds to 350 pounds with the average around 2,000 pounds. No investigations were performed. The firm manufactures feed for cattle (dairy calf, heifer, dairy heifer, and beef), sheep, goats and swine. This mill does not manufacture feed for horses. The implicated batch was labeled as feed for cattle and was found to be adulterated with Monensin. 2021 carryover study showed 200-pound flush was adequate to minimize unsafe carryover of medicated feed.
- More than 80 horses were dead or sick.
- Oklahoma sample results showed 1,600 g/t Monensin in Pasture Gold feed sample collected.
- KDA-DFS worked with Oklahoma Department of Agriculture and FDA on this investigation.
- Follow-up investigation to follow.

Diamond Shruumz

Diamond Shruumz was a brand of edible product classified as a food with unapproved additives that used several chemicals found in *Amanita* mushrooms, which FDA considers unsafe for human consumption. Distribution was nationwide and product was mostly found in smoke shops and vape shops, areas not normally regulated by KDA.

- KDA involvement:
- On 7/3/2024, KDA received distribution information from FDA for shipments of Diamond Shruumz products to Kansas retailers in 2024. All these firms received a phone call to verify if they knew about the recall and have already pulled the product. For retailers that did not answer the phone call or did not know about the recall, they received an in-person recall audit check from a KDA inspector.
 - On 7/3/2024, KDA received distribution information from FDA for shipments of Diamond Shruumz products to Kansas retailers in 2023. Many of these retailers were duplicates from the 2024 list, but there were several new retailers that had not previously been contacted. All these new retailers received an in-person recall audit check and all of them still had product on shelves. KDA inspectors educated them on the recall and they voluntarily removed or destroyed the product.

- KDHE involvement:
- 7/10/2024 – Issued news release with a link to an online survey for affected individuals to report their illness. Two individuals that met the case definition were identified.
 - 7/11/2024 – Alert was sent to healthcare providers and local health departments included information on reporting cases to KDHE.
 - 7/22/2024 – Attempted telephone interviews for 20 individuals who ordered the product directly from the company in 2024. Interviewers made 70 calls and sent 38 text messages. Eight individuals were interviewed; one reported significant symptoms.
 - Queried emergency department data for possible cases. One of 204 records reviewed met the case definition for the outbreak.

- A total of 20 potential cases were identified for investigation.
- One interviewee reported significant symptoms.
- A summary of the interview effort is located below.

Table 1. Interview Attempts

| Total Number of Calls Attempted | Average Number of Call Attempts Per Interviewee | Total Number of Texts Attempted | Average Number of Text Attempts Per Interviewee |
|---------------------------------|---|---------------------------------|---|
| 70 | 3.3 | 38 | 1.8 |

Table 2. Interview Success

| Total Number of Interviewers | Total Number of Interviewees | Total Number of Interviews Completed | Total Number of Interviewees Lost to Follow-up | Total Number of Refused Interviews |
|------------------------------|------------------------------|--------------------------------------|--|------------------------------------|
| 3 | 20 | 8 (40%) | 11 (55%) | 1 (5%) |

Table 3. Time Spent on Related Meetings and Research

| Cumulative Time Spent Attending Related Meetings (hours) | Cumulative Time Spent on Related Research (hours) |
|--|---|
| 8 | 20 |

Table 4. Total Time Spent on the Investigation Effort

| Average Time Spent Per Interviewer (hours) | Cumulative Time Spent by all Interviewers (hours) |
|--|---|
| 8.4 | 25.25 |

Figure 1. Tables showing Diamond Shruumz interview metrics.

Food Safety Functional Exercise

In 2024, KDA-FSL collaborated with KDA Emergency Management and Kansas Division of Emergency Management (KDEM) to build a functional exercise focused on an outbreak and recall event in the state of Kansas. All KDA-FSL staff were involved, with participation from KDHE-Epidemiology and the KDA Laboratory. The exercise featured a Simulation Cell that provided injects over the phone and through email to push the scenario forward.

The scenario started with a multi-state outbreak that implicated several Kansas restaurants. It led to collecting product samples, traceback records, all the way through recall audit checks. KDHE-Epi helped push the investigation forward while the KDA Lab reviewed sample records. The exercise identified a strong need for additional sampling training for field staff and helped us get an idea of where to target training for the next year.



Figure 4. Pictures from the food safety functional exercise.

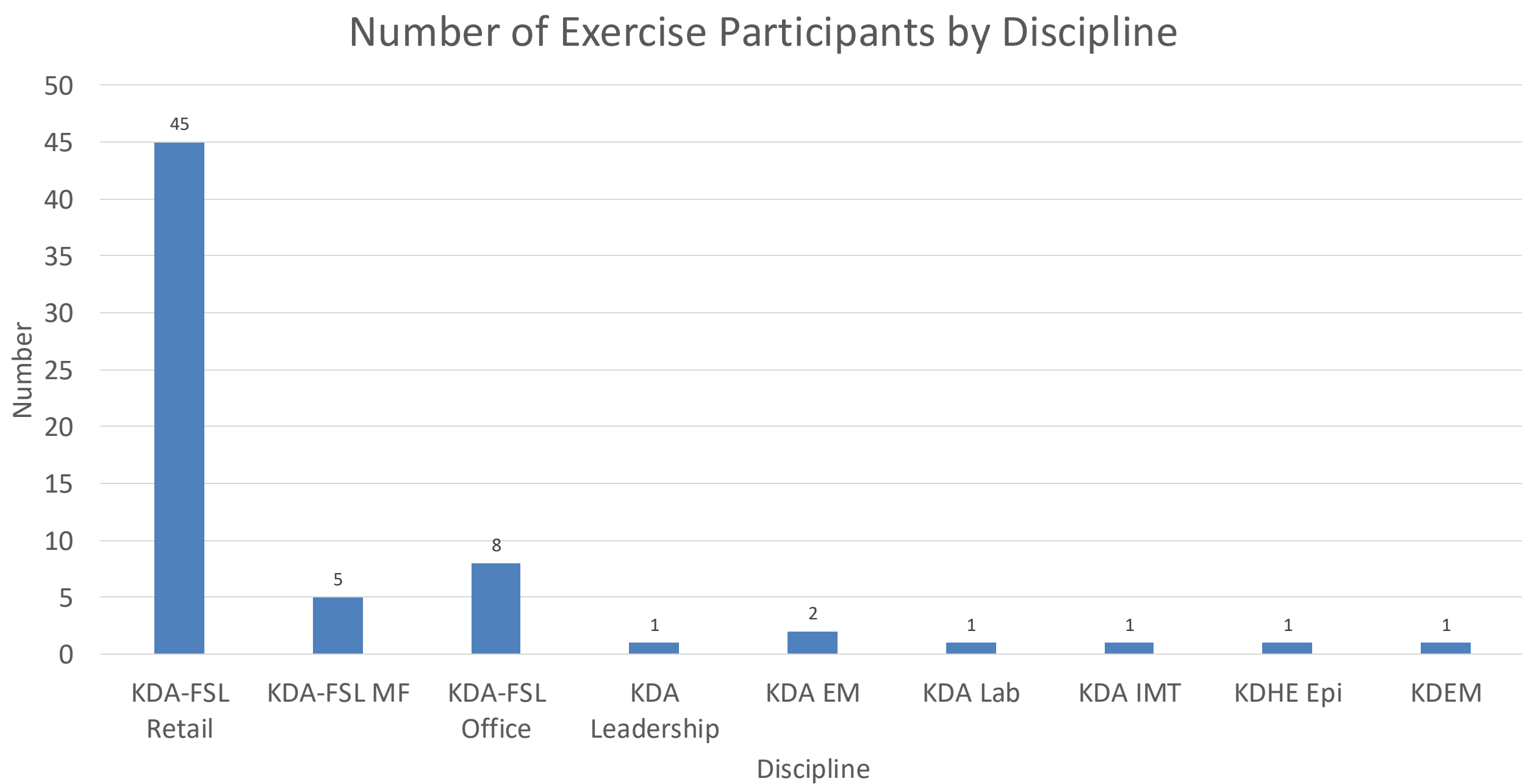


Figure 2. Bar chart of participants by agency and program.



Leaf the Greens Alone

Exercise Plan
October 8, 2024

Figure 5. The cover of the Exercise Plan.

Diamond Shruumz (Continued)

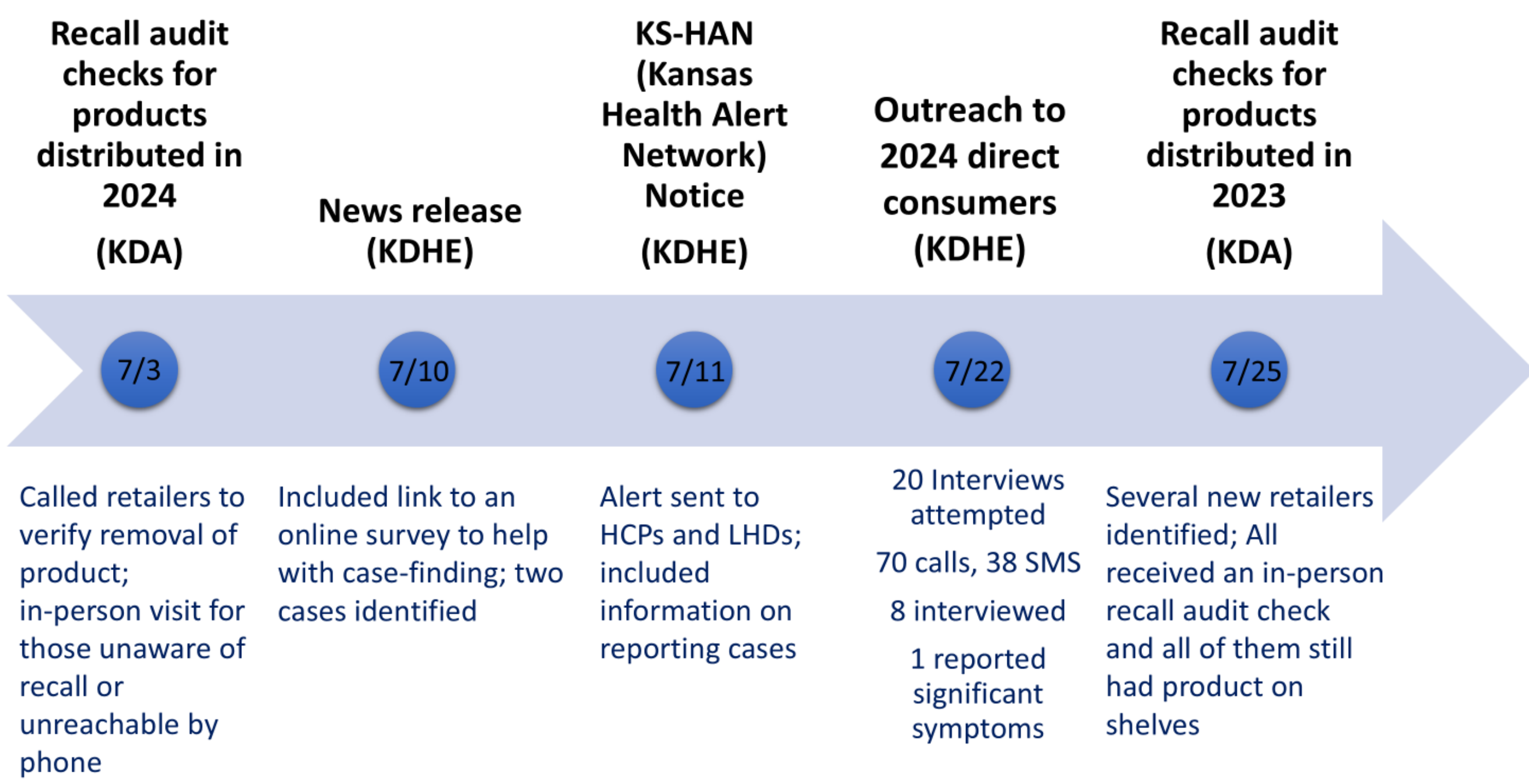


Figure 3. Diamond Shruumz timeline.

Conclusions and Lessons Learned

Monensin: Quick response to complaints can be vital in determining cause and limiting exposure. Inter-agency cooperation between the states and between states and FDA, helps to facilitate complete and thorough investigations by utilizing the skill sets of all involved. Updating Kansas laws to include risk-based preventive controls would give Kansas inspectors the ability to regulate the animal food industry in Kansas to the Food Safety Modernization Act regulations.

Diamond Shruumz: Each department worked within their scope and communicated well with each other. KDHE utilized public messaging and if the scale of this event was larger, KDA would have needed to leverage more in the way of public communication.

Exercise: The hotwash and after-action revealed that staff need to have more training on taking food samples. Most field staff do not take samples each year, and many have gone several years without taking a food sample. Due to this finding, KDA-FSL has already begun incorporating sampling training into district meetings.