SCIENCE INFLUENCERS

TEXAS A&M UNIVERSITY

Toxin Ingestion Events in Companion Dogs & Assessing the Engagement of an Educational Social Media Campaign.

PRESENTED BY: MARIA FERNANDA ARCOS

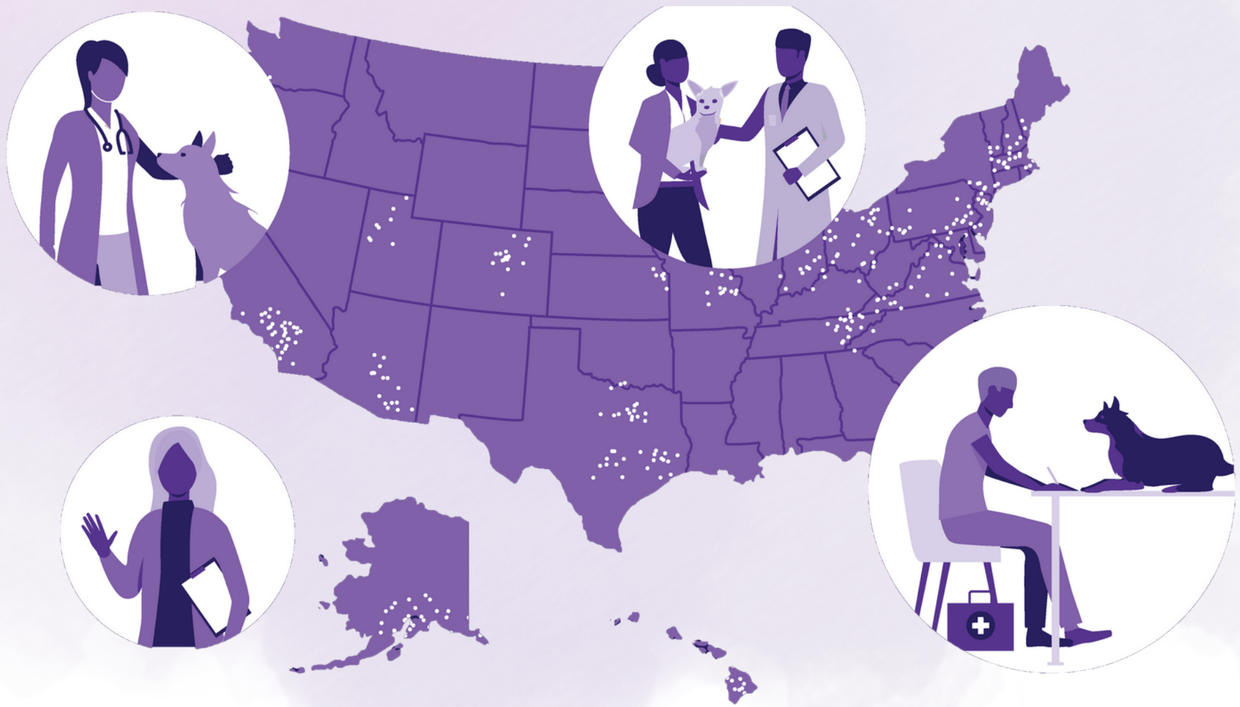
ABOUT ME

‘23 B.S. Agricultural Journalism & Communications

Veterinary Medicine

Communications

ABOUT DAP

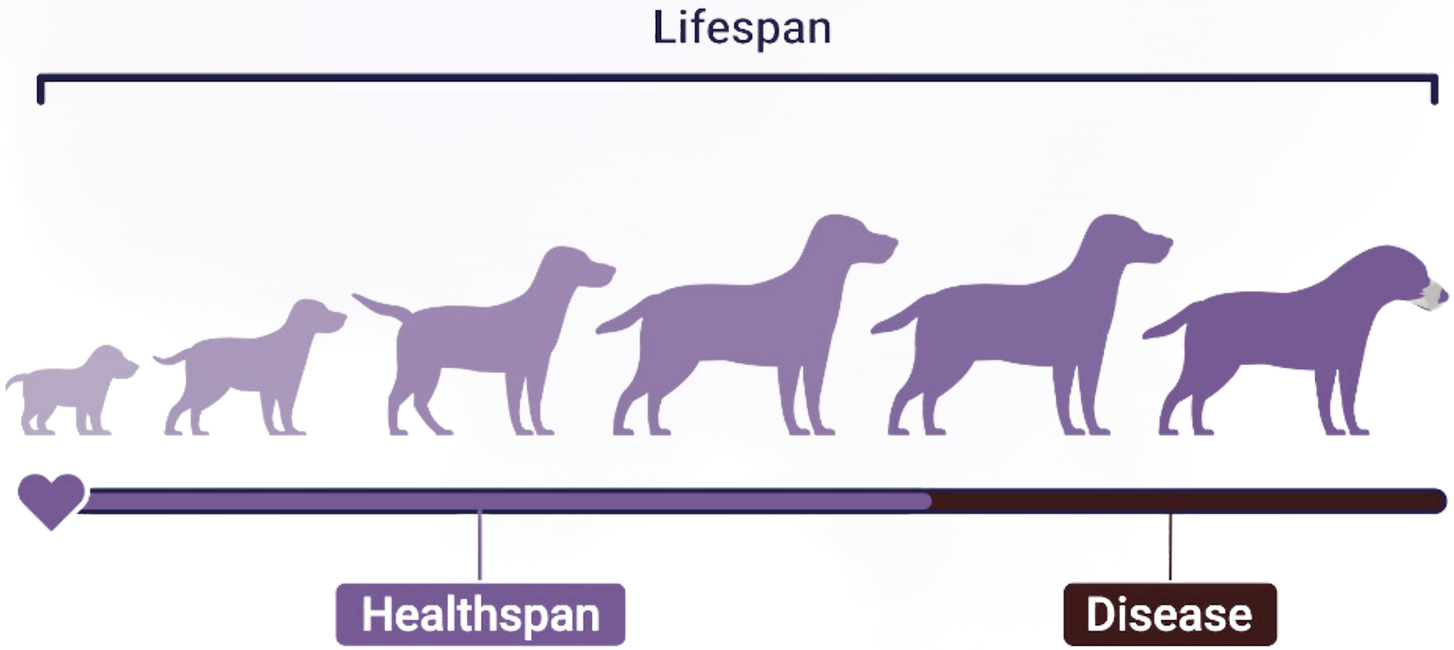


The Dog Aging Project is a **community science project** that relies on the **participation of dog owners around the US** to help collect data for scientific research intended to **identify the biological and environmental factors that can help our dogs live longer healthier lives**

FUN FACT!

The Dog Aging Project (DAP) is one of the **largest open science aging studies** in the world! Actively sharing data with the academic community.

The DAP is an Open Data project. This means everything we learn, we share with everyone. Anyone who is interested will be able to analyze our data to discover more amazing and exciting things to improve dogs' health



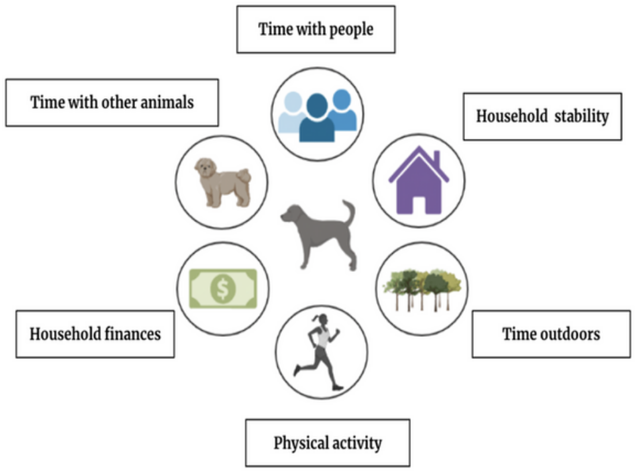
Dogs share our environment (they are exposed to many of the same things we are that could affect our health and aging) and have a sophisticated healthcare system.

- **Yet dogs live their lives about 10 times faster than we do.**
- **Meaning we get to learn about the aging process 10 times faster!**

DATA COLLECTED

Surveys

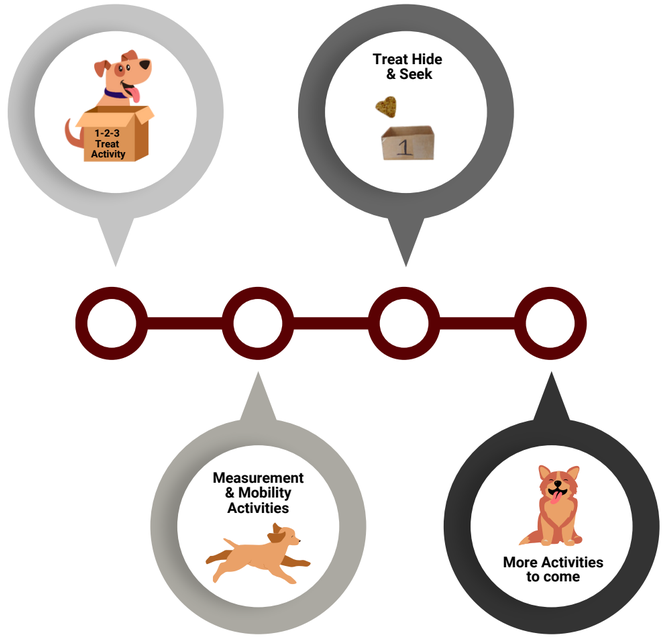
Owners are required to complete yearly surveys about their dogs' health, diet, activity, etc



- **Health & Life Experiences Surveys (HLES)**
- **Annual Follow Up Survey (AFUS)**

Bonus Activities

Some extra fun activities owners have the option to do each year if they are interested and able



Observational study from the comfort of your own home!

BUILDING A SCIENCE COMMUNITY

Community science springs from the premise that anyone and everyone can think like a scientist.

After all, at its most basic, scientific discovery is the result of a fundamental curiosity about the world and how it works.

SCIENCE INFLUENCERS

Dog Aging Project

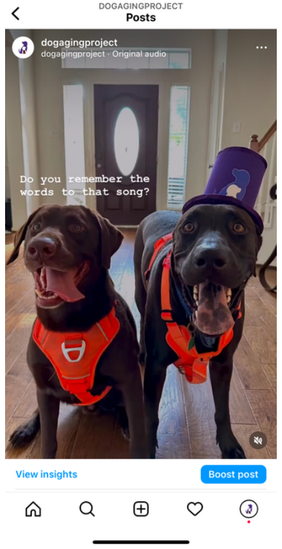
Social Media

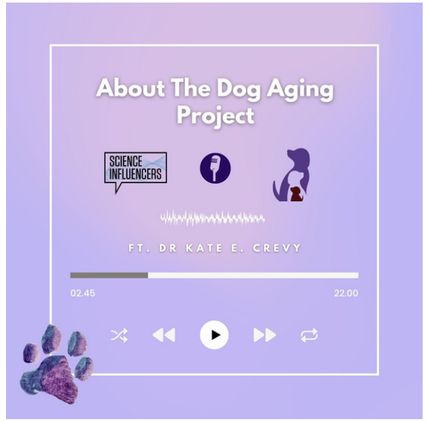
FOLLOW US!

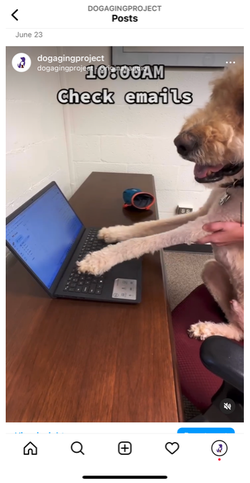
INTERNSHIP OVERVIEW

SOCIAL MEDIA & CONTENT CREATION

Supervisor: Jocelin Villarreal - External Communication & Digital Media Mager







INTERNSHIP OVERVIEW

RESEARCH

Toxin Ingestion Events in Companion Dogs: Identifying Common Substances, Evaluating Hospitalization Rates, and Assessing the Engagement of an Informative Social Media Campaign.

Maria F. Arcos; Rachel Melvin; Jocelin Villarreal; Cryss Arkenberg; Kate E. Creevy; Audrey Ruple; DAP Consortium.

Research Objectives

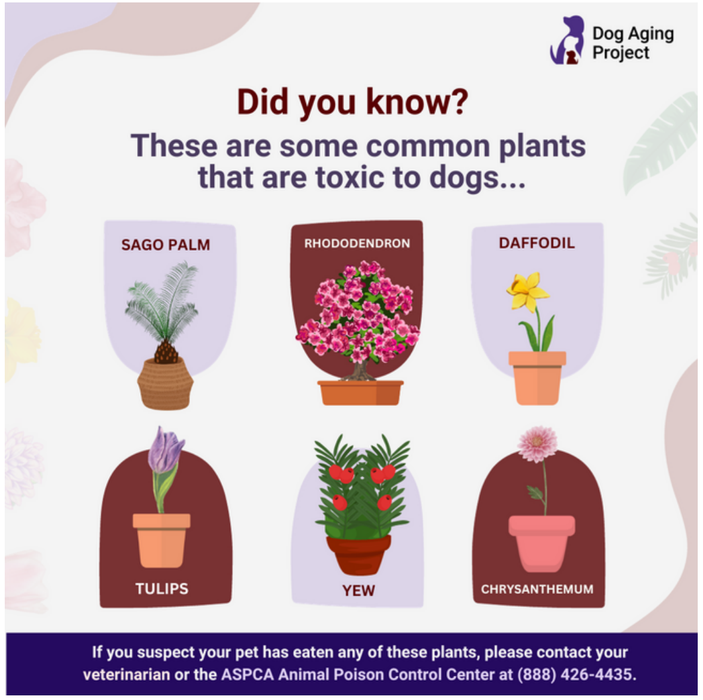
1. To identify and categorize the **most commonly reported toxin** ingestion events and to analyze the **frequency of veterinary intervention** for each toxin category while describing **demographics** of dogs whose owners reported toxin/overdose events.

2. To evaluate follower engagement statistics of **toxin-education graphics** tailored to owners on DAP's social media platforms and **compare these metrics to the average engagement** of all other posts.

TOXIN EDUCATION POSTS

“Carrousel” graphics posted on Instagram & Facebook

Food



Plants

House items

KEY FINDINGS

DAP-PACK = 43,517

***4,700 individual dogs reported at least one toxin ingestion**

= 10.8%

Commonly Reported Toxins		
Category	Intoxication Cases	
Chocolate	1966	**37.68%**
Grapes or raisins	732	**14.03%**
Human medication	626	**12.00%**
Rat bait	495	**9.49%**
Other toxin	491	**9.41%**
Recreational Drugs	449	**8.60%**
Veterinary Meds/Supplements	249	**4.77%**
Plants	100	**1.92%**
Xylitol	98	**1.88%**
Ethylene Glycol	12	**0.23%**
Grand Total	5,218 *	

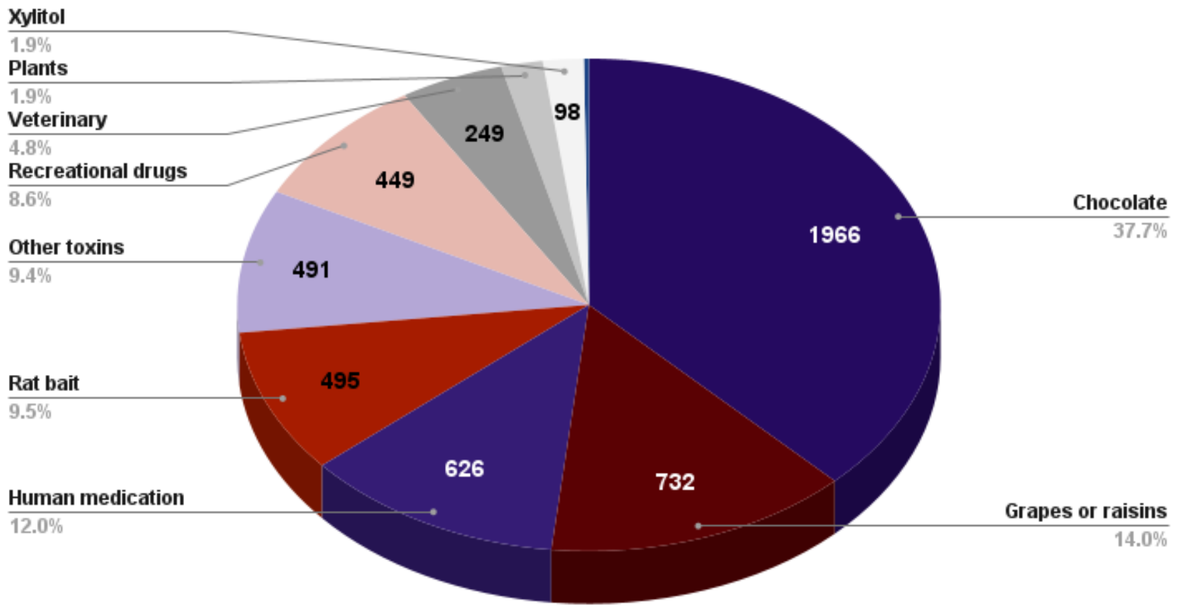


Figure 1. Illustrates the breakdown of all toxin ingestion cases by categories

KEY FINDINGS

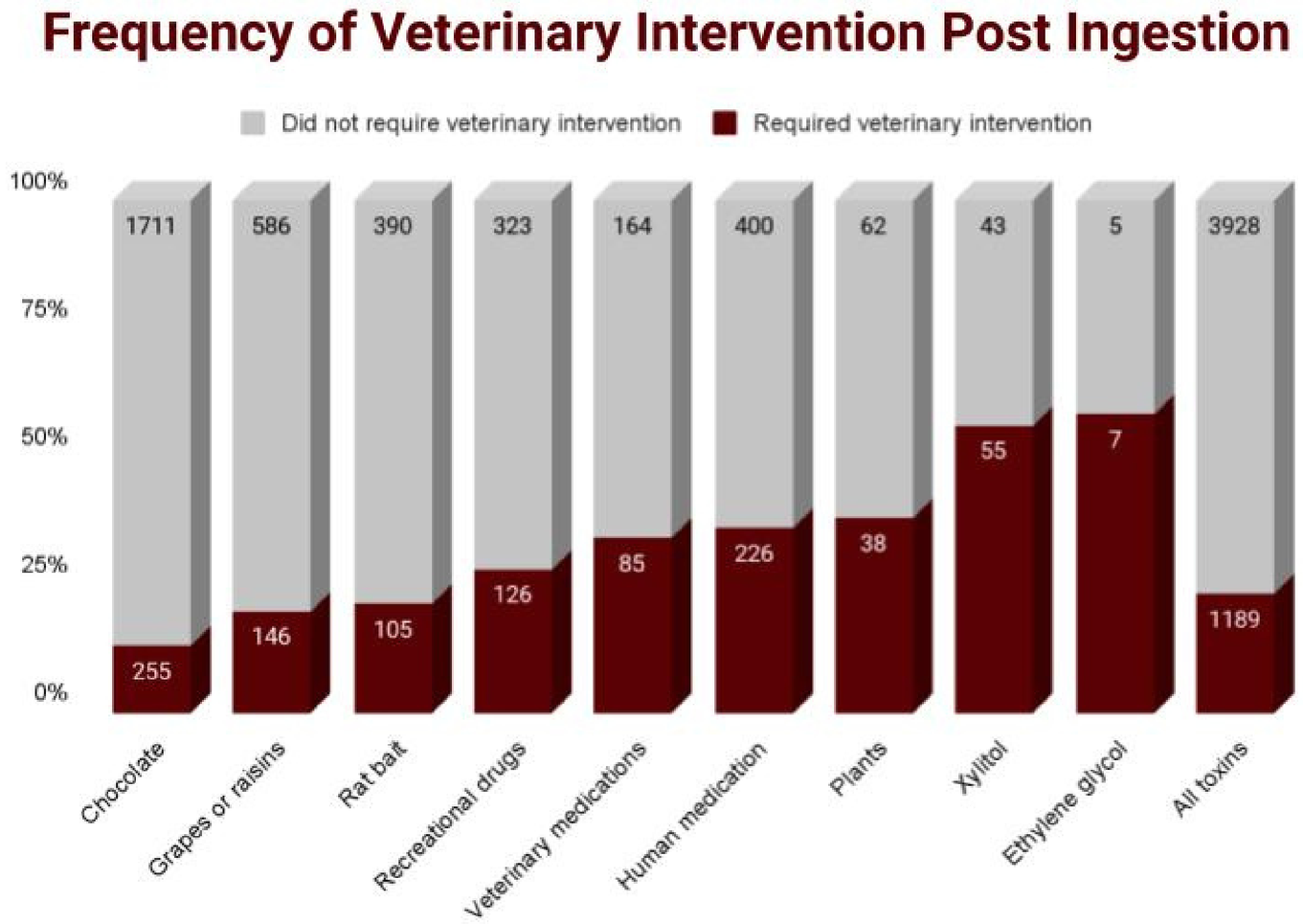


Figure 2. Illustrates the percent of cases requiring veterinary intervention post ingestion per toxin category.

KEY FINDINGS

Age-related toxin preference?

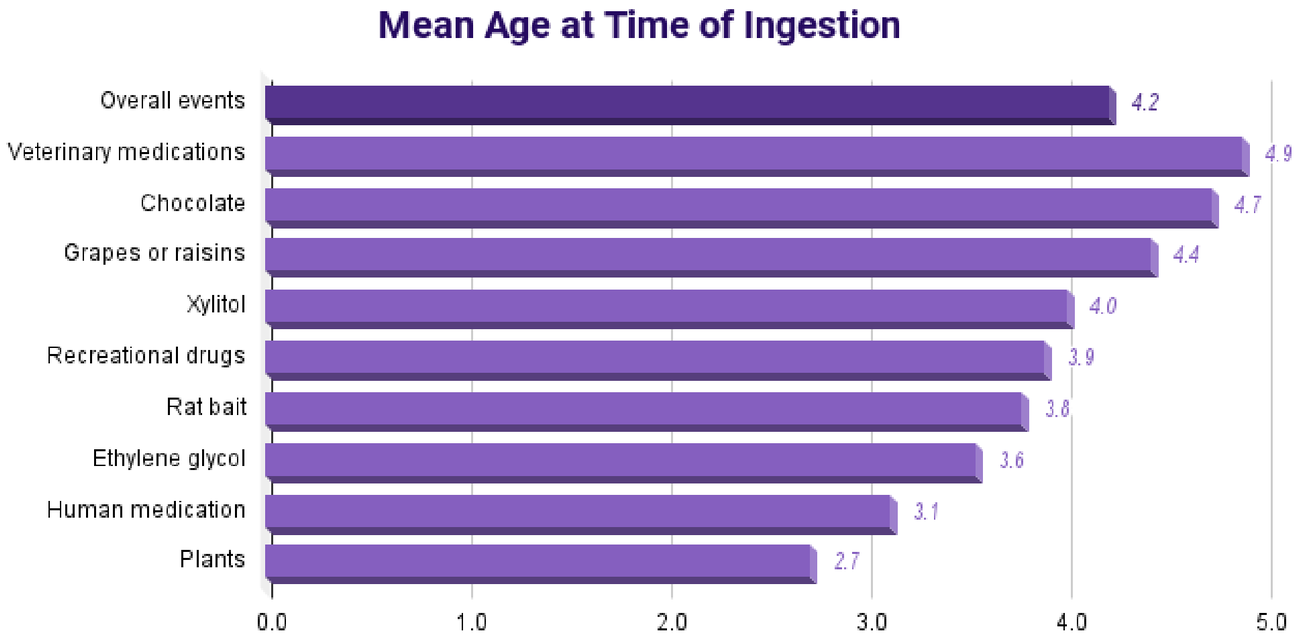


Figure 3. Shows the difference in mean age across the different toxin categories

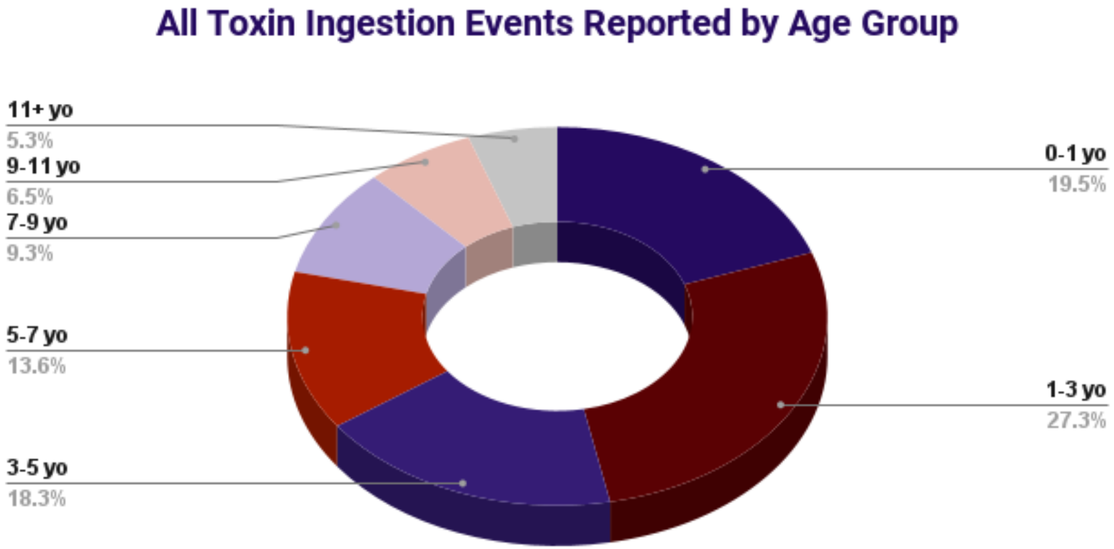
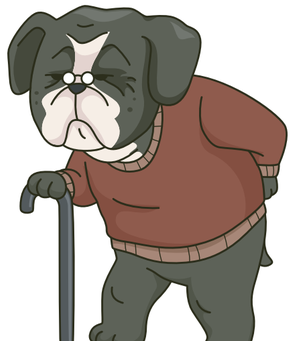


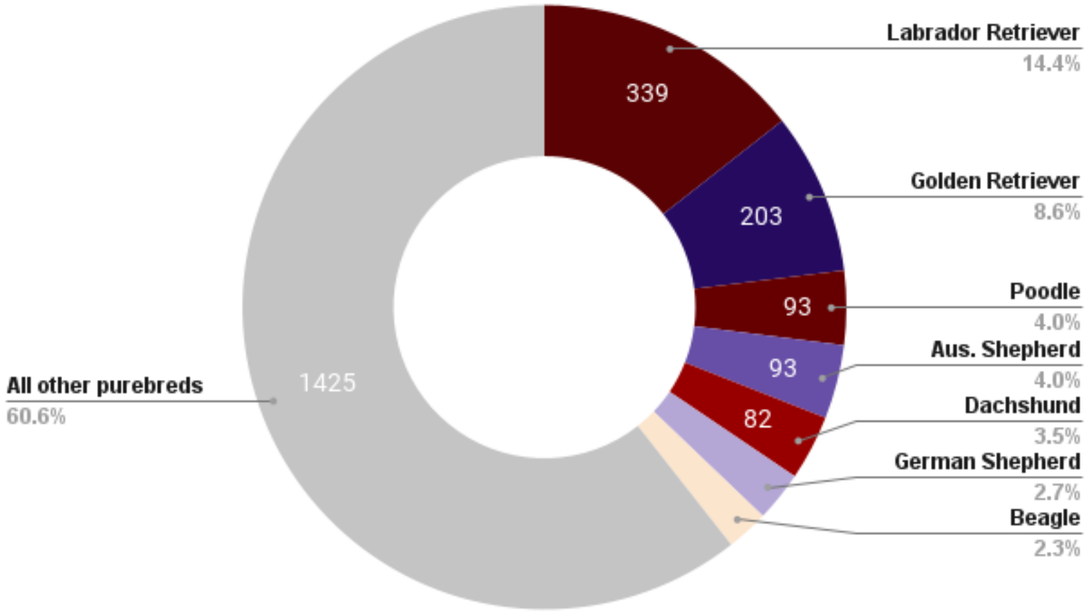
Figure 4. Illustrates the breakdown of case incidence per age group



KEY FINDINGS

Are certain breeds more prone to get into stuff they shouldn't?

Purebreds Reporting Toxin Ingestions



All DAP-Pack Purebred dogs		
Breed	Make-up of the Pack	
Labrador Retriever	2,531	**11.55%**
Golden Retriever	2,204	**10.06%**
German Shepherd Dog	1,051	**4.80%**
Australian Shepherd	755	**3.45%**
Poodle	745	**3.40%**
Dachshund	541	**2.47%**
Border Collie	504	**2.30%**

Figure 5. Shows of the breakdown of top purebred dogs that reported the most ingestions

KEY FINDINGS

SOCIAL MEDIA RESPONSE

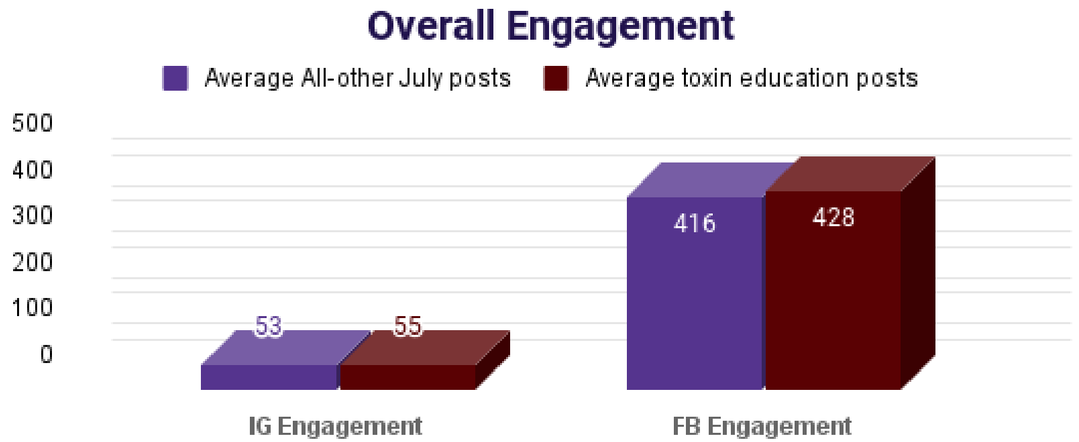


Figure 6. Compares the average engagement for toxin education posts v.s. all other July posts

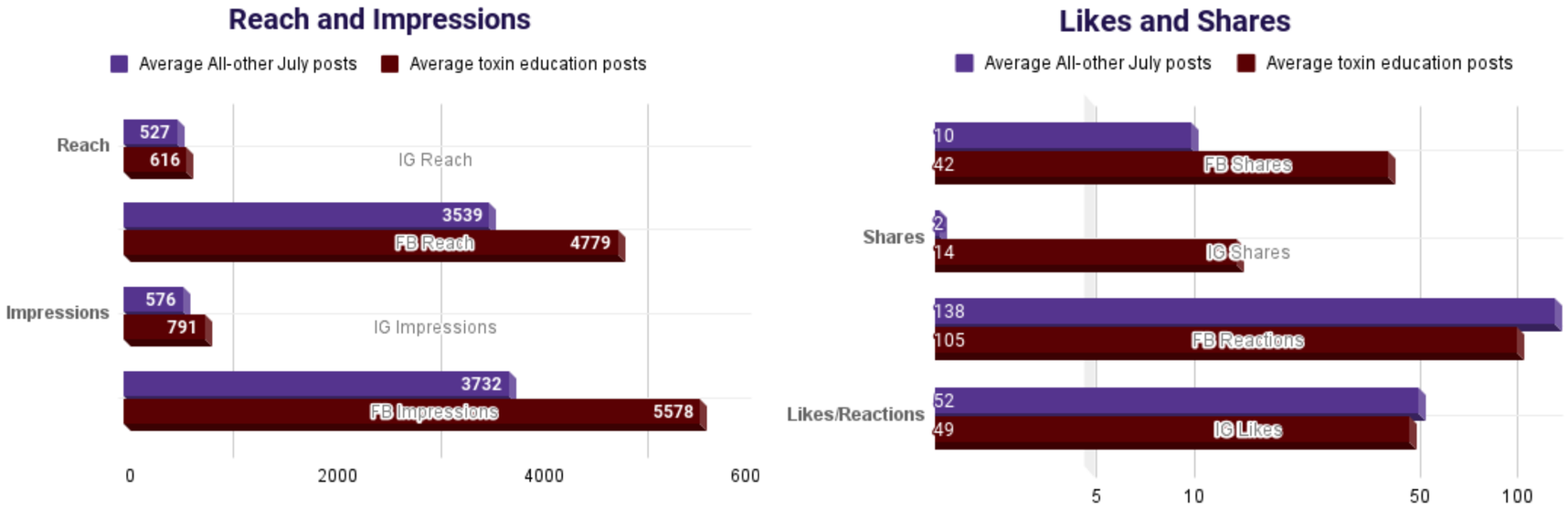


Figure 7a and b. Compare the average in social media metrics between toxin education posts v.s. all other July posts

CONCLUSIONS
SOCIAL MEDIA RESPONSE

> Followers engage in a similar manner with educational content, but on average are more likely to share posts designed to be educational.

> Owner-tailored educational social media campaigns reach a higher audience because of how much more willing they are to share content that can help others, or they may find informative.

Thank you!!
Questions?