



American Fireworks Standards Laboratory

AFSL General Membership Meeting

October 5, 2023

La Paloma Resort
Tucson, Arizona

Agenda

- Board of Director's Report – Mike Ingram, AFSL Board President
- Call for Ballots - Election of AFSL Directors
- Financial Report – Jason Trout, Treasurer
- AFSL Consumer Fireworks Testing Program (QIP) Report
- Database Integration Project and CPSC's E-Filing Program
- AFSL Activities Update and Domestic Injury Surveillance Program
- AFSL Consumer Fireworks Standards Committee Activity
- Election Results
- Questions
- Closing Remarks – Mike Ingram, AFSL Board President

Board of Directors' Report

Mike Ingram – President, AFSL Board of Directors

Election of Directors

2023 Candidates for AFSL Board of Directors

- Consumer Fireworks Importer, Distributor, Retailer Category
 - Jason Trout – American Promotional Events, Inc.
 - Alan Zoldan – Phantom Importing & Distributing, LLC
- Consumer Fireworks Shipper Category
 - Joe Wan – Shogun Pyrotechnics

Financial Report

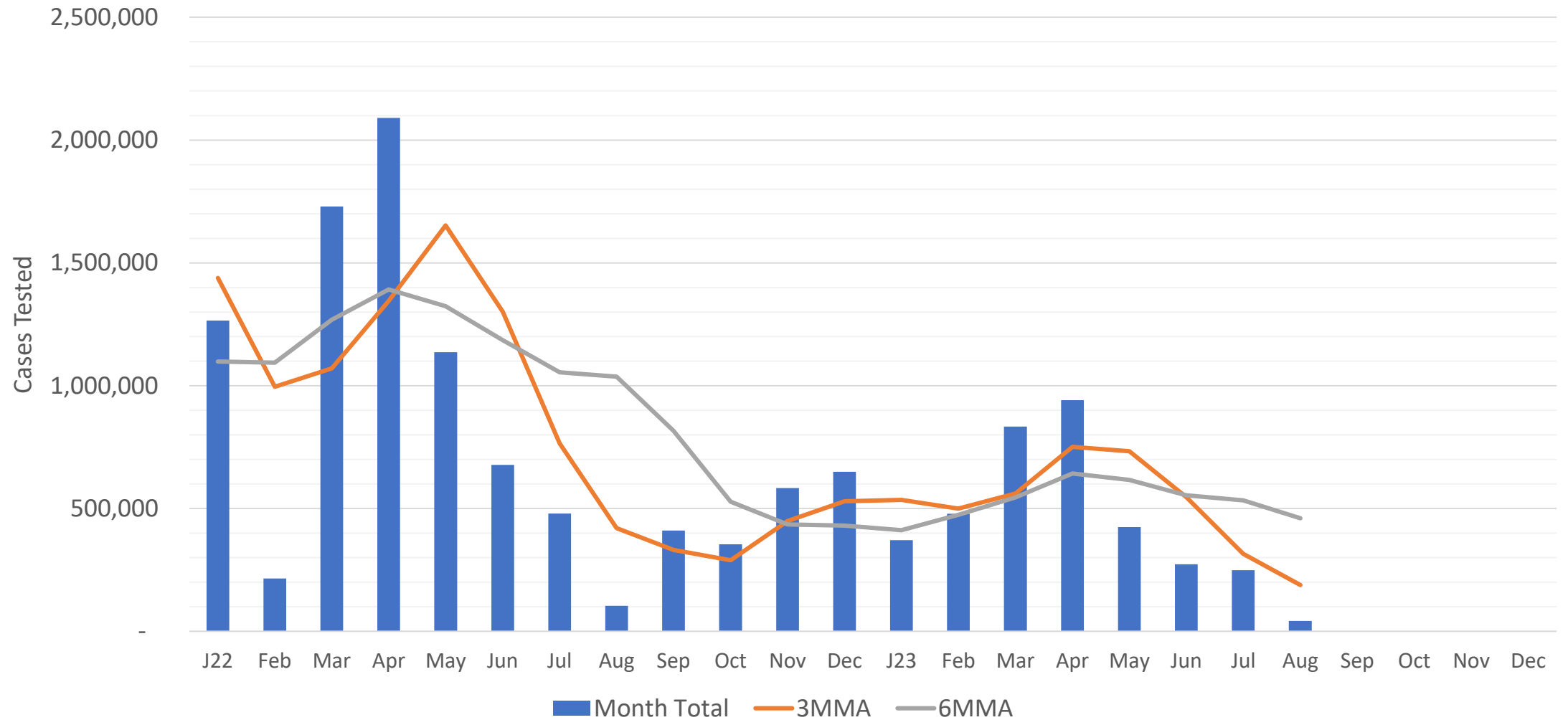
Jason Trout - Treasurer

China Fireworks QIP Review and China Report

William Zhou – China Operations Manager

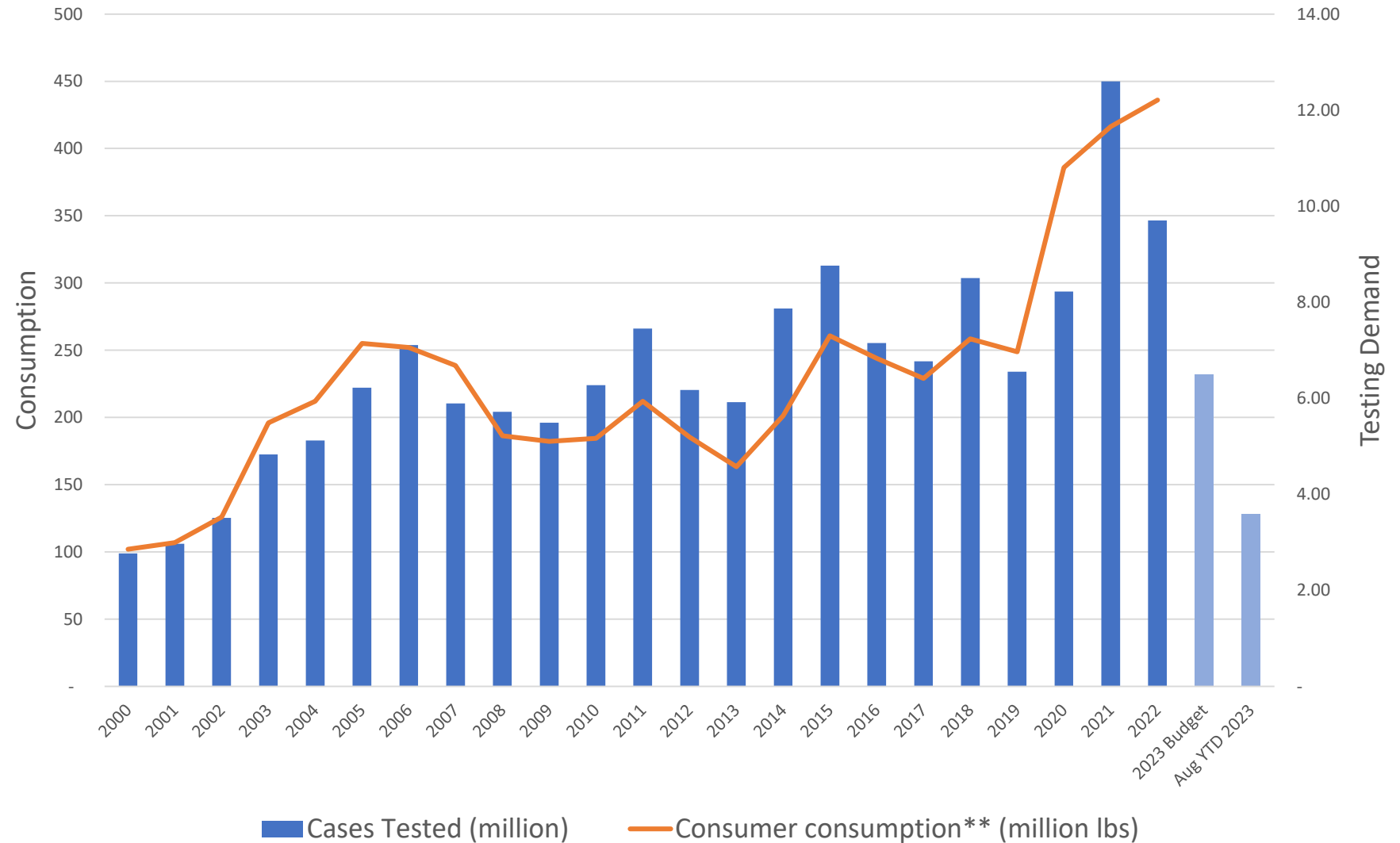
Jay Howell – Executive Director

Consumer Fireworks Testing QIP

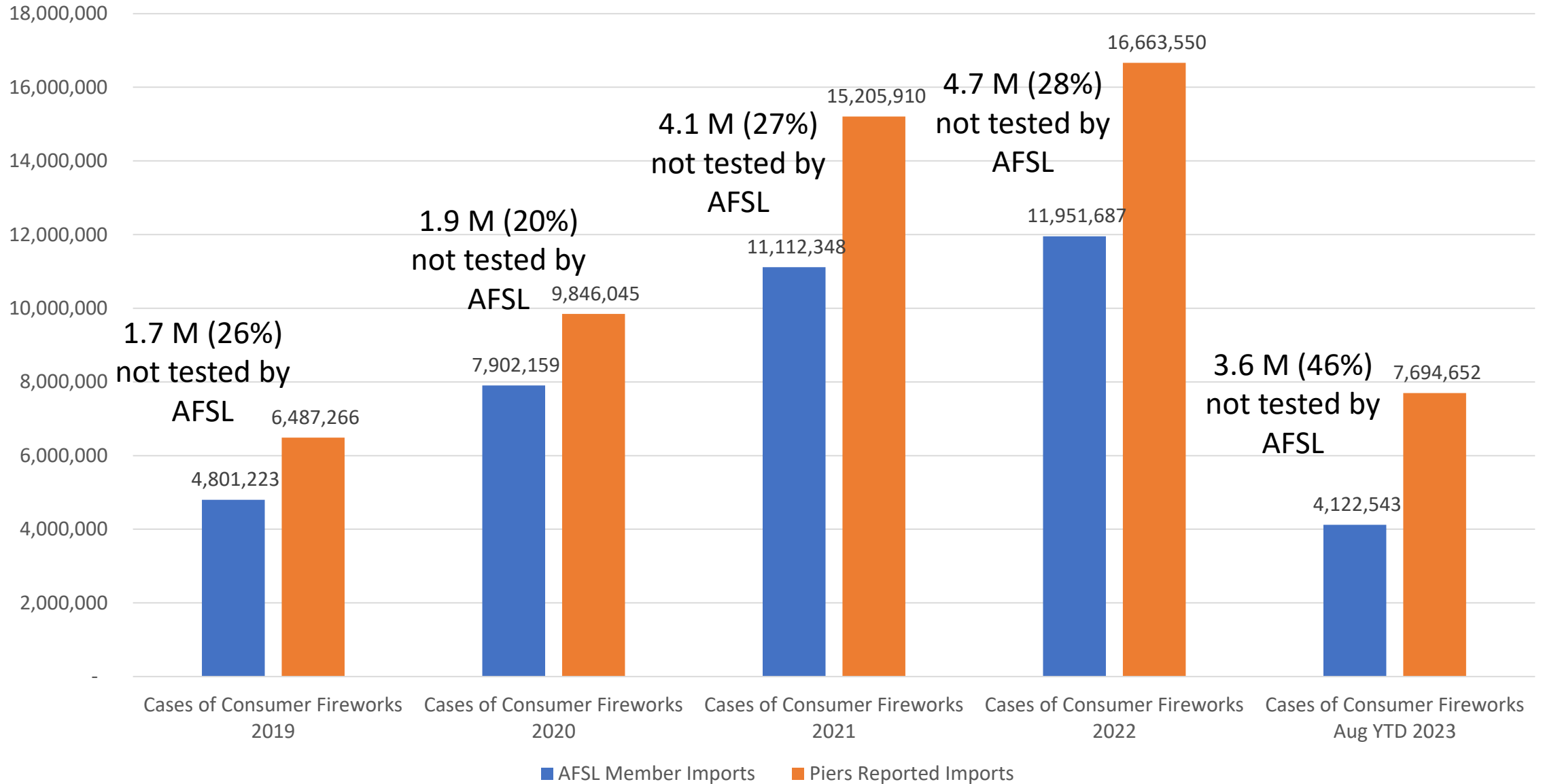


U.S. Consumer Fireworks Consumption and AFSL Testing Demand

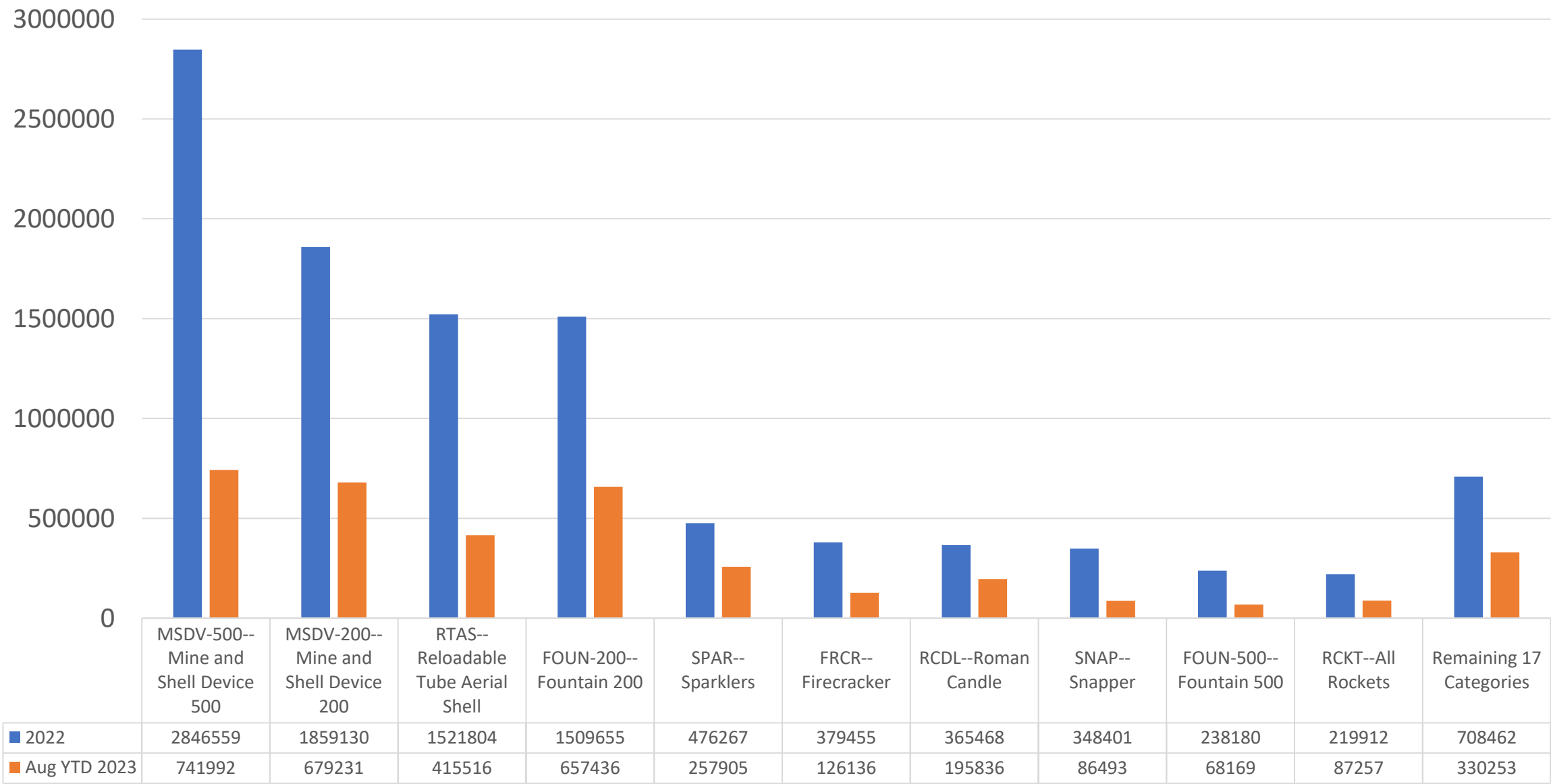
- After experiencing a 23% drop in testing volume from 2021 to 2022, the 2023 testing volume was forecasted to drop another 33%.
- The 2023 testing volume was budgeted at budgeted at 6.5 million cases.
- August YTD volume is 3.6 million.



Market Participation in AFSL Program

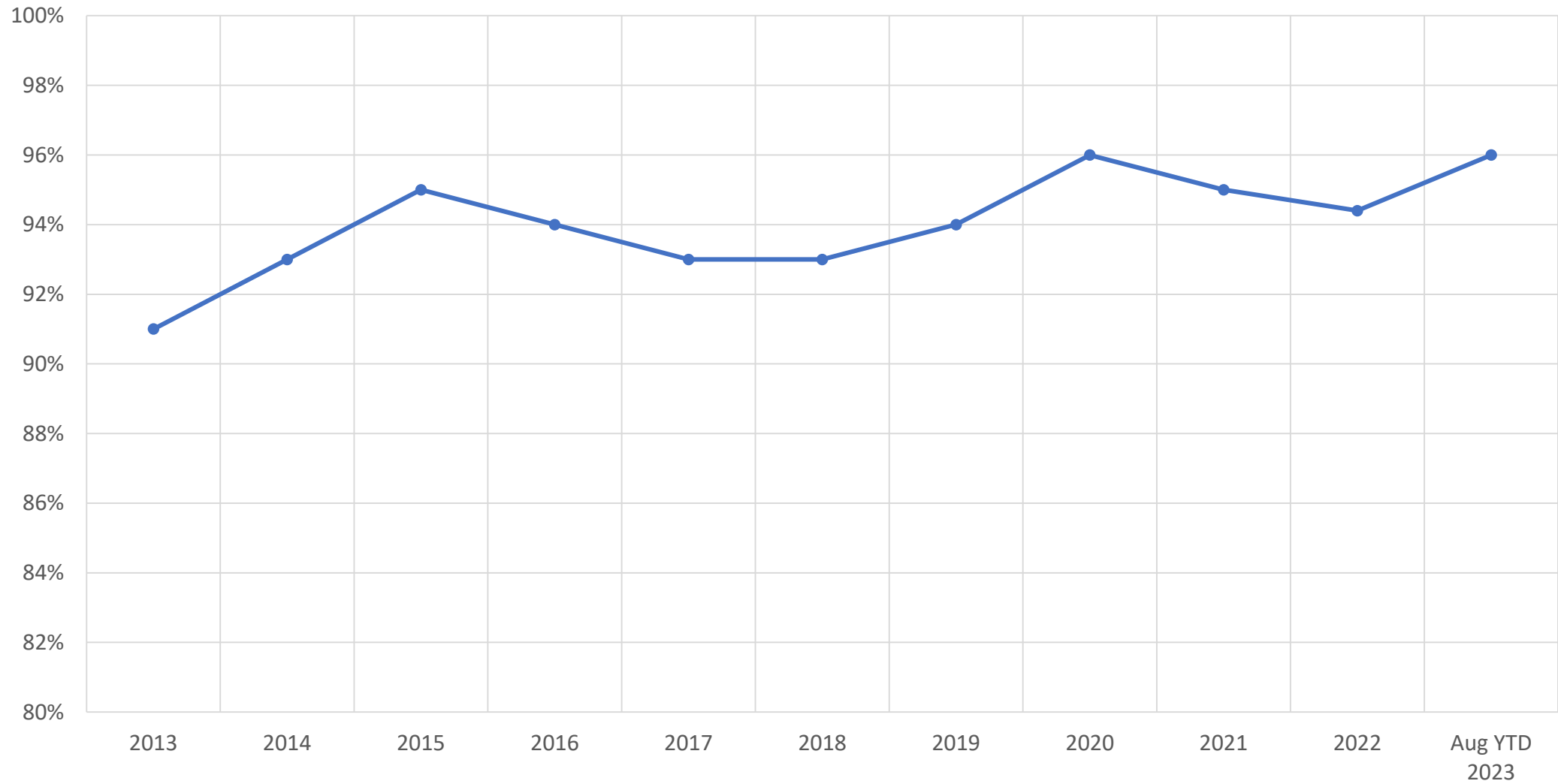


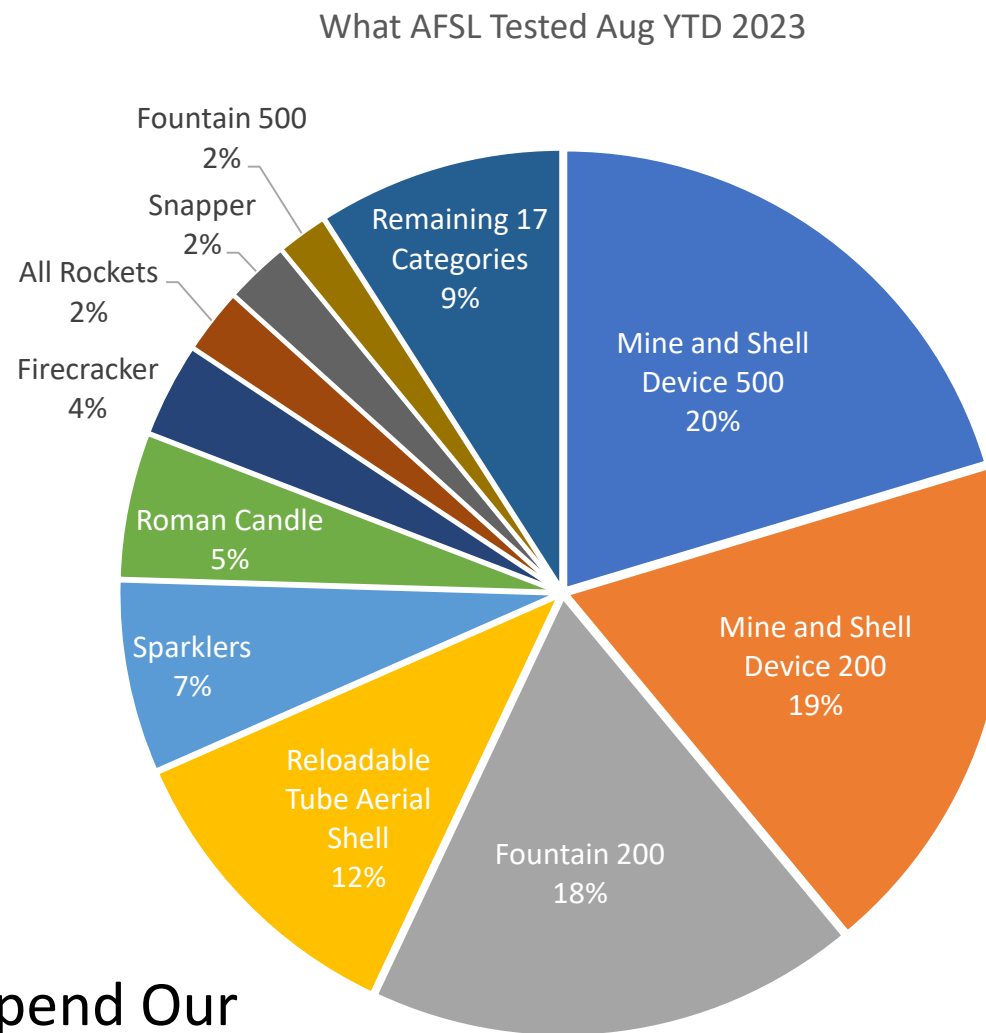
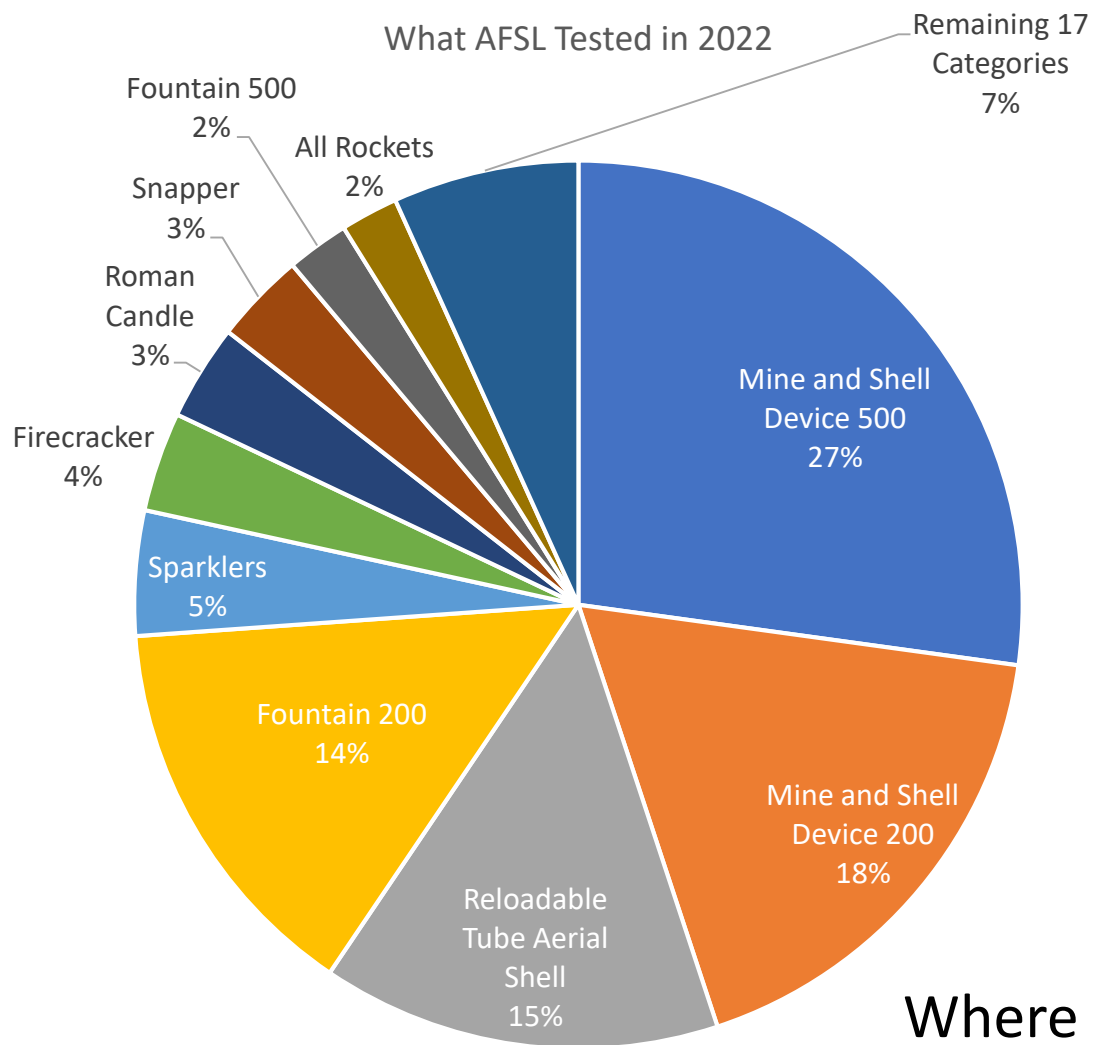
Cases Tested by Category



Source: Full Test Reports_rev1

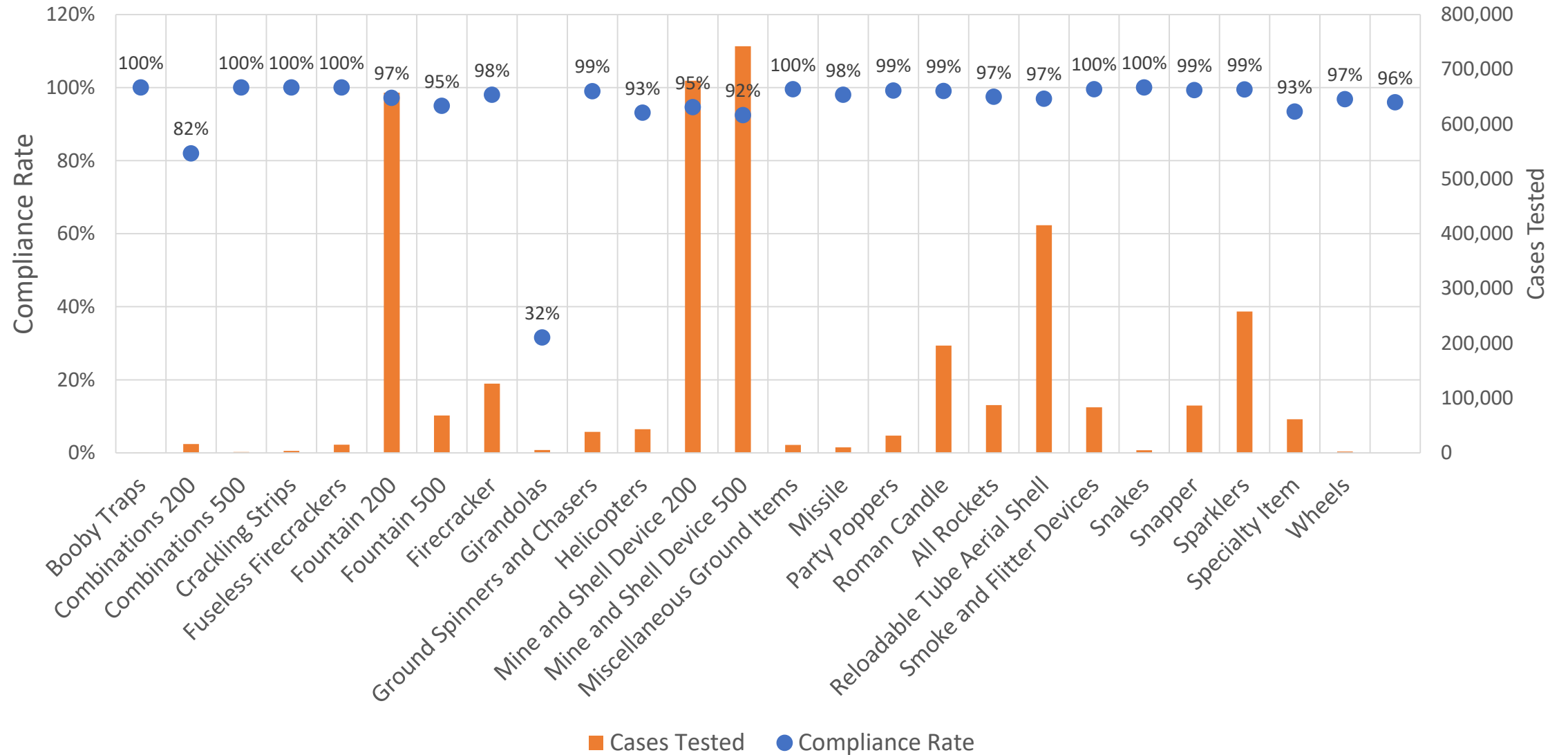
AFSL QIP Compliance Rate



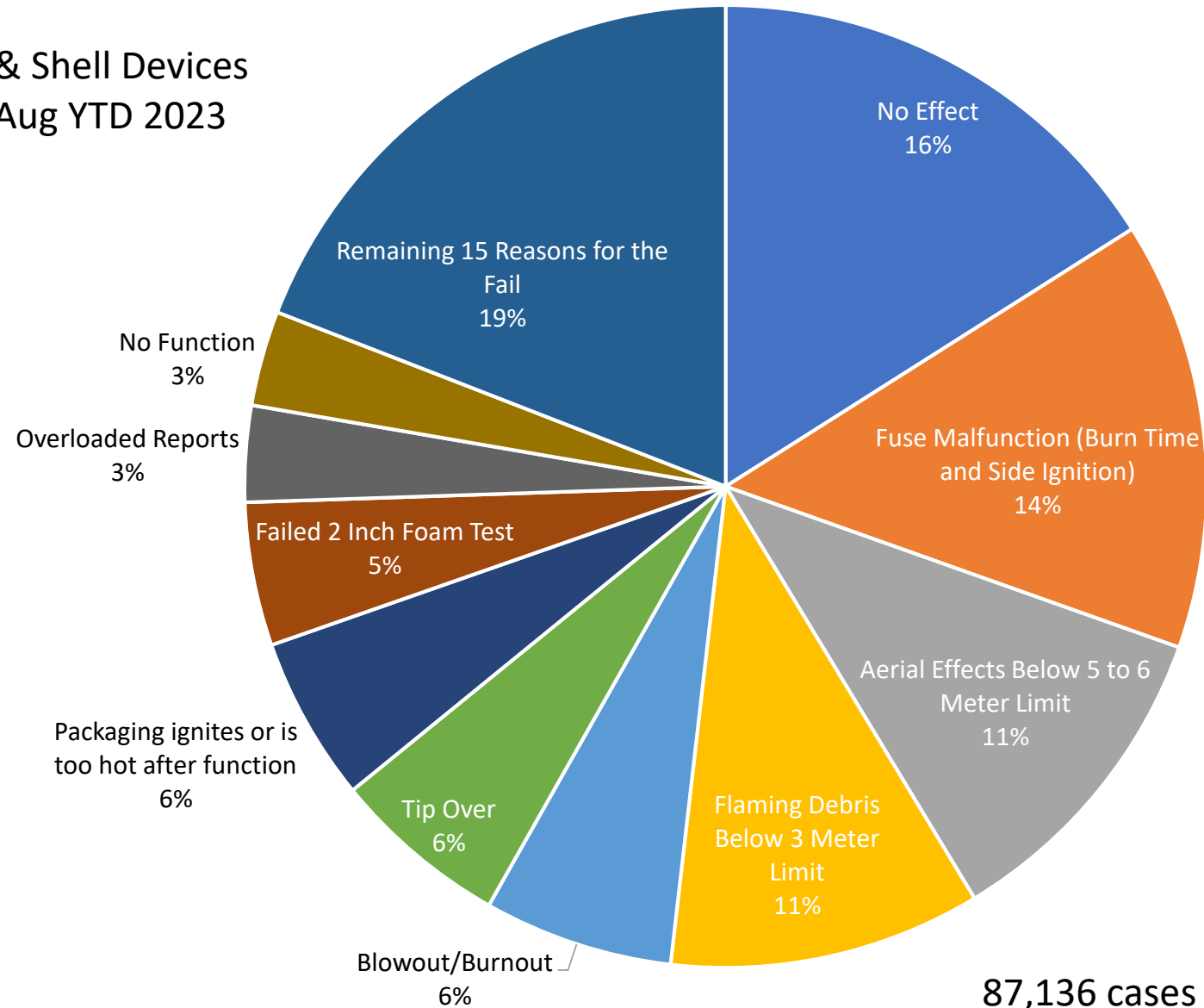


Where We Spend Our
Testing Time
(Cases Tested)

Number of Cases Tested and Compliance Rate by Category
Aug YTD 2023

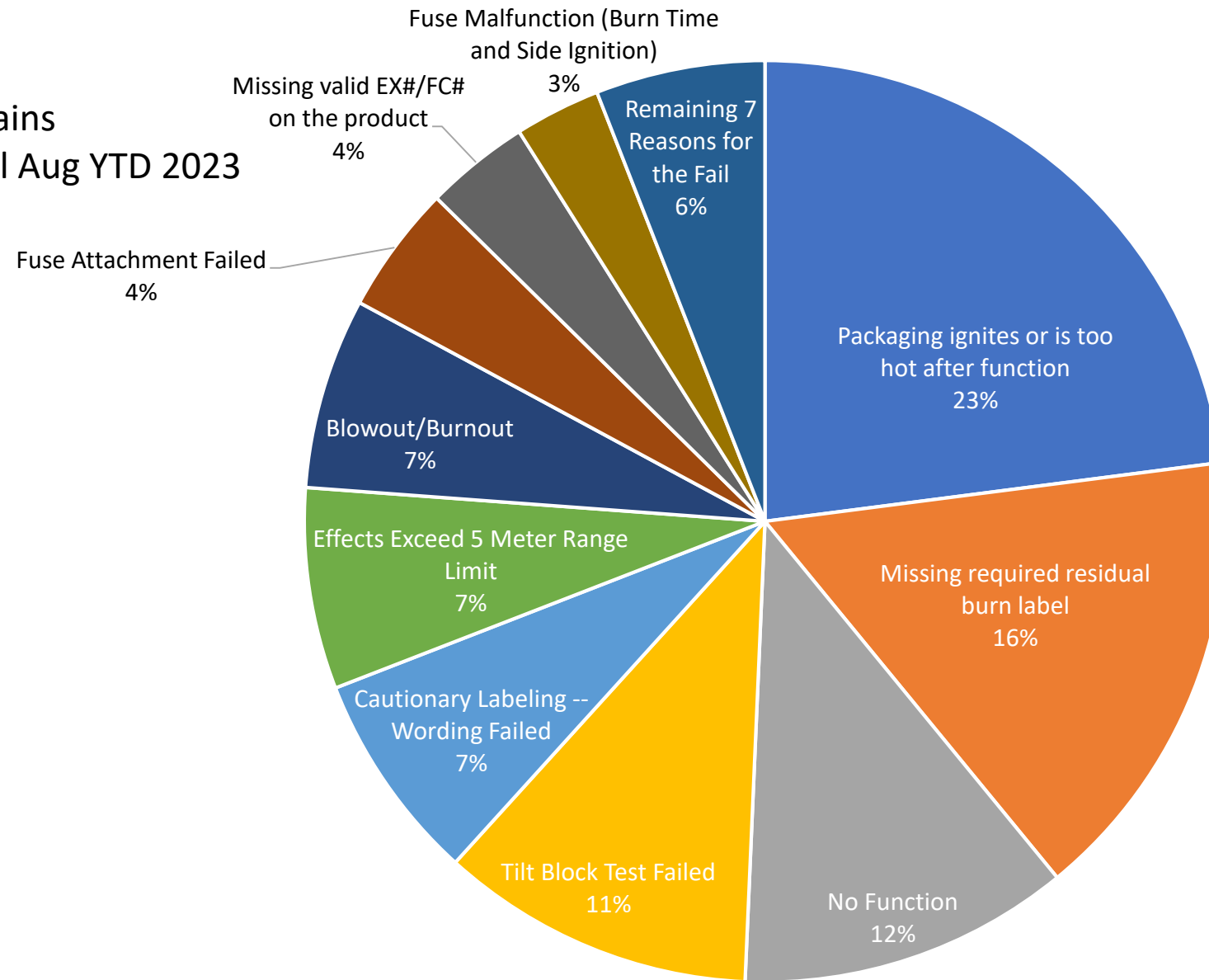


200-gram and 500-gram Mine & Shell Devices Top Reasons for Cases to Fail Aug YTD 2023



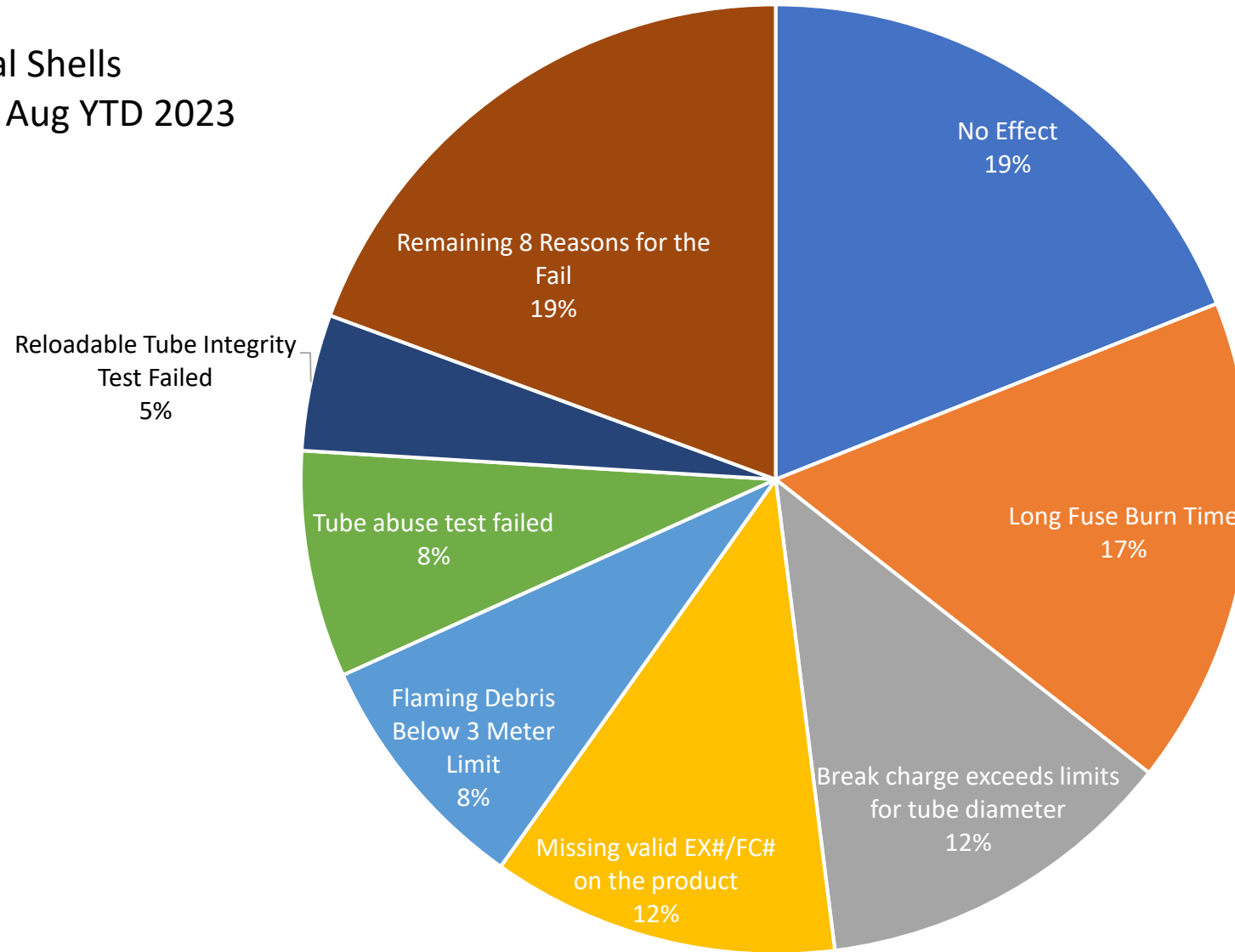
87,136 cases rejected YTD

200-gram Fountains Top Reasons for Cases to Fail Aug YTD 2023



17,702 cases rejected YTD

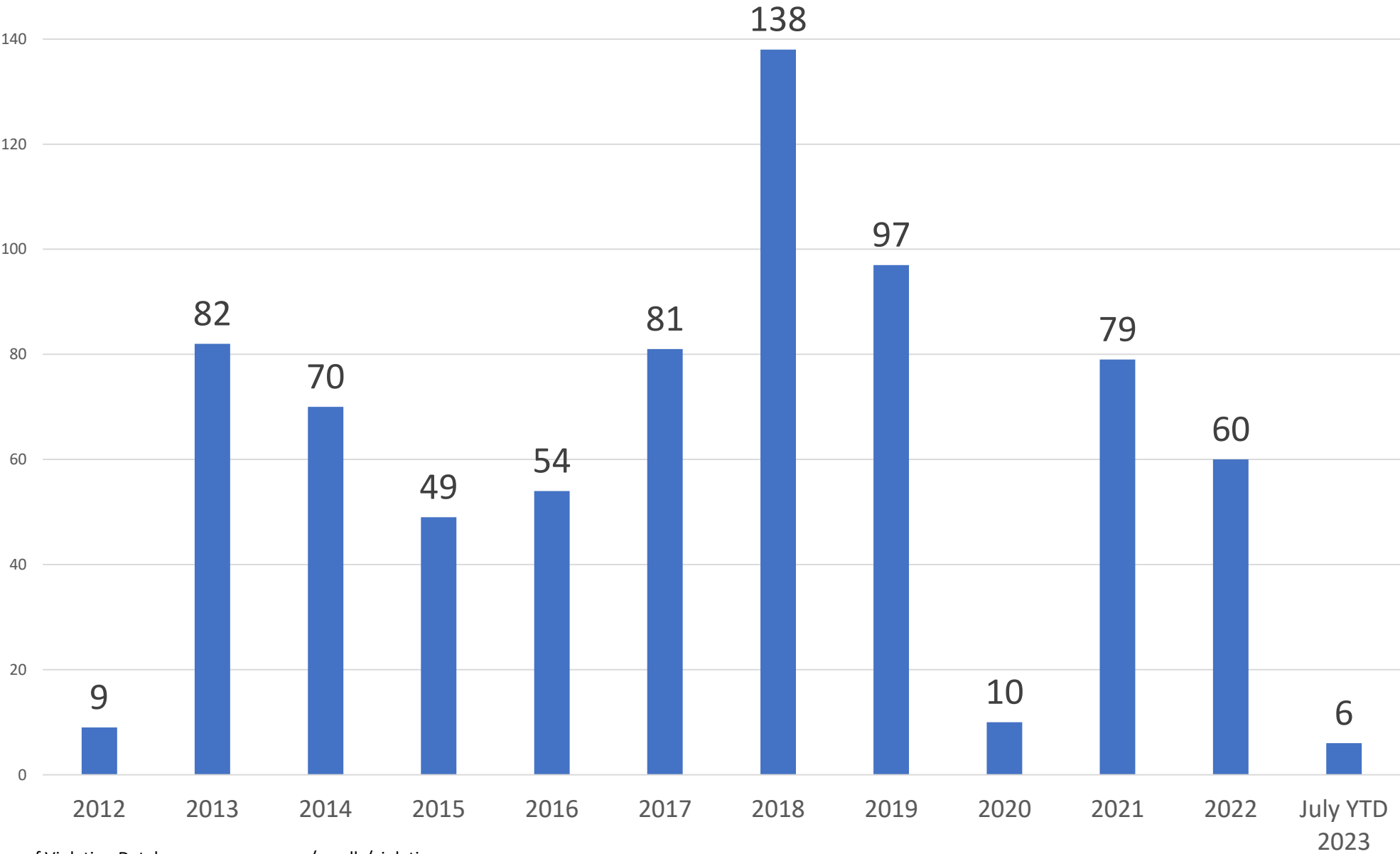
Reloadable Tube Aerial Shells Top Reasons for Cases to Fail Aug YTD 2023



11,842 cases rejected YTD

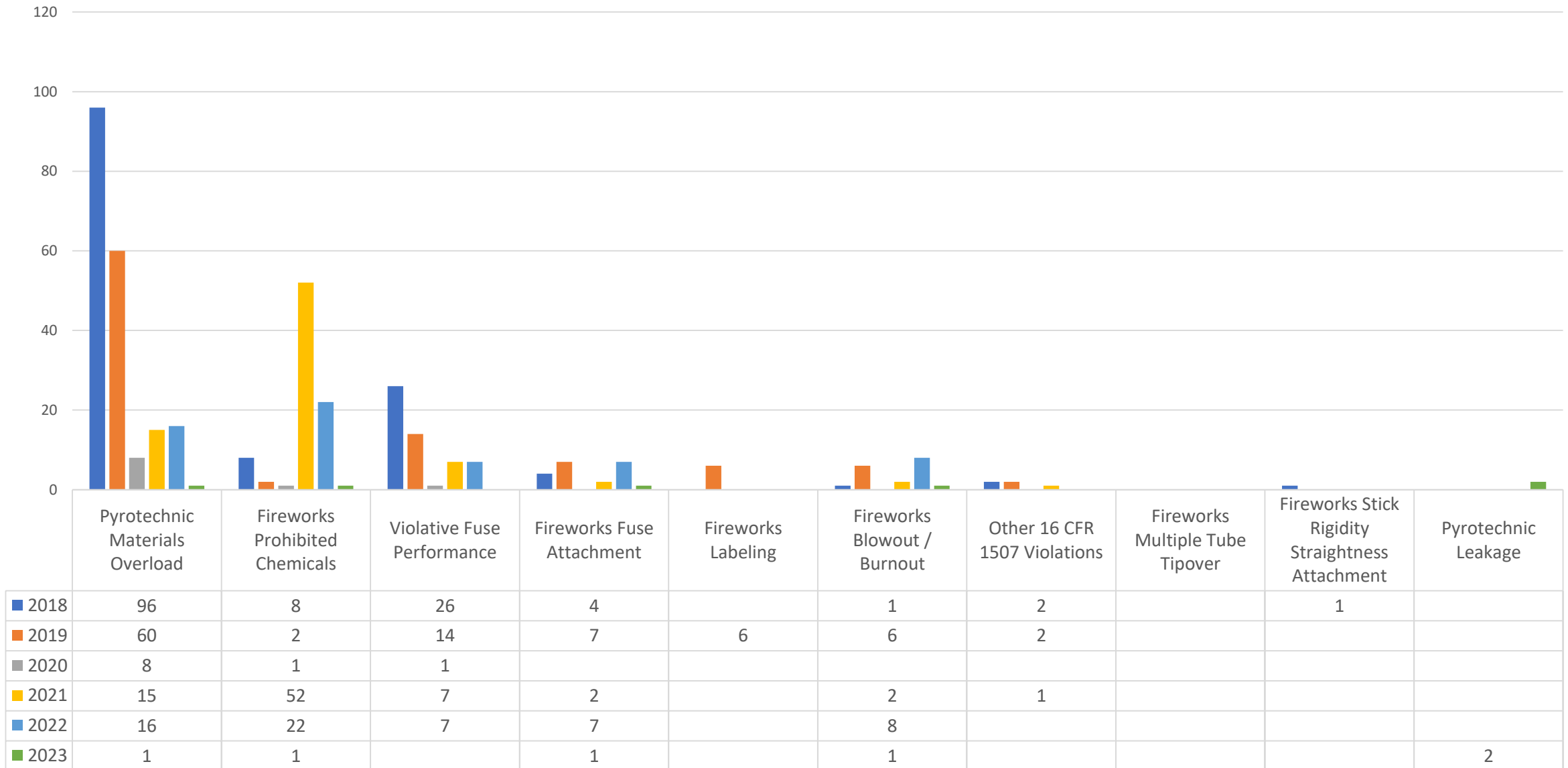
CPSC Import Surveillance and Office of Compliance Findings

Fireworks-Related Notices of Violations



Source: U.S. CPSC Notices of Violation Database; www.cpsc.gov/recalls/violations

CPSC Consumer Fireworks Violations



BV Database Transition

Jay Howell – Executive Director

System Implementation – Go Live

- Transferred data from AFSL's database
- User Acceptance Testing performed with AFSL staff and select shippers
- System went live on September 1

System Implementation – New System Benefits

- Improved User Interface
- Increased reliability and security
- Enhanced User Management
- Improved Reporting Capabilities

System Implementation – New System Benefits

- Improved User Interface

The screenshot displays the AFSL web application interface. On the left is a dark sidebar with the AFSL logo and a navigation menu. The main content area is titled 'Application Sample Forms' and contains a table with four rows of application types. Each row has a checkbox, a description, and a 'Download' button. At the bottom of the table, it indicates '0 Records Selected'. The top right of the interface shows user information and language settings.

AFSL Shaping a World of Trust

Applications Management

- Applications Management
- Lots Management

Test Result Management

- Test Result

COT Management

- COT Management
- COT Lots Query

Base Data

- Application Sample For...
- Category
- Data Dictionary
- eBooking Factories
- eBooking Shippers

> Application Sam...

English T Test_AFSL_S... TS Test Shipper1

Application Sample Forms

<input type="checkbox"/> File Name	Description	Actions
<input type="checkbox"/> Assortment_Application	Assortment Application	Download
<input type="checkbox"/> Component_Application	Component Application	Download
<input type="checkbox"/> Regular_Application	Regular Application	Download
<input type="checkbox"/> COT	COT	Download

0 Records Selected

Total 4 items < 1 > 10 / page

Increased Reliability and Security

- From
 - Single Machine Deployment - AFSL Database
- To
 - Distributed Deployment – BV Cloud-Based System
 - Four Servers with Downtime and Restart Monitors
 - Enhanced Security Protocols and Regular System Updates

Enhanced User Management

- User manages their own passwords
- Shippers can self-register multiple users
- Users can have varying permissions depending on role

Enhanced User Management

Account Management

Select a Company: INO-Inter-Oriental Fireworks (HK) Ltd.

User Email:

Phone NO.:

User Status:

Users | Requests to join my company | No match company requests

[Invite User](#) [Deactivate User](#) [Copy User Profile](#) [Resend Invitation](#) [Export List](#) [Reactivate](#)

<input type="checkbox"/>	User Email	Username	Company Name	User Status
<input type="checkbox"/>	jmpingli@163.com	DOCJM	INO-Inter-Oriental Fireworks (HK) Ltd.	Active
<input type="checkbox"/>	annie@shogun.com.hk	INO	INO-Inter-Oriental Fireworks (HK) Ltd.	Active
<input type="checkbox"/>	howard@shogun.com.hk	INO003	INO-Inter-Oriental Fireworks (HK) Ltd.	Active
<input type="checkbox"/>	rockluo@aliyun.com	INO001	INO-Inter-Oriental Fireworks (HK) Ltd.	Active
<input type="checkbox"/>	ardiszhang@163.com	INO000	INO-Inter-Oriental Fireworks (HK) Ltd.	Active
<input type="checkbox"/>	cindycheung@shogun.com.hk	INO002	INO-Inter-Oriental Fireworks (HK) Ltd.	Active

Improved Reporting

- Cases By Location/Program
- Failed Ratio By Factory
- Failed Ratio By Technician
- Full Test Reports
- Jobs By Year
- Lots By Shipper
- NC Rate By Location**
- New Violations Reports
- Office Area Sticker Stats
- Shipper Stickers
- Shipper Stickers Statistics
- Sticker Legacy Search

> NC Rate By Loca...

English BV BUREAU VER... SC Simon Chen

NC Rate By Location

Month/Year

08/2023 Search

Export Excel

Location	Month Cases CO	Month Cases NC	Month Cases NC Rate	Month Lots CO	Month Lots NC	Month Lots NC Rate	YTD Cases CO	YTD Cases NC	YTD Cases NC Rate	YTD Lots CO	YTD Lots NC	YTD Lots NC Rate
TH	4870	0	0%	16	0	0%	54226	0	0%	161	0	0%
LY	7424	546	6.85%	31	2	6.06%	1881803	84153	4.28%	6720	283	4.04%
LL	4614	0	0%	18	0	0%	540830	15225	2.74%	2221	67	2.93%
JX	6741	797	10.57%	17	1	5.56%	864549	35036	3.89%	2875	131	4.36%
BH	14968	2545	14.53%	19	2	9.52%	127877	10362	7.50%	231	18	7.23%

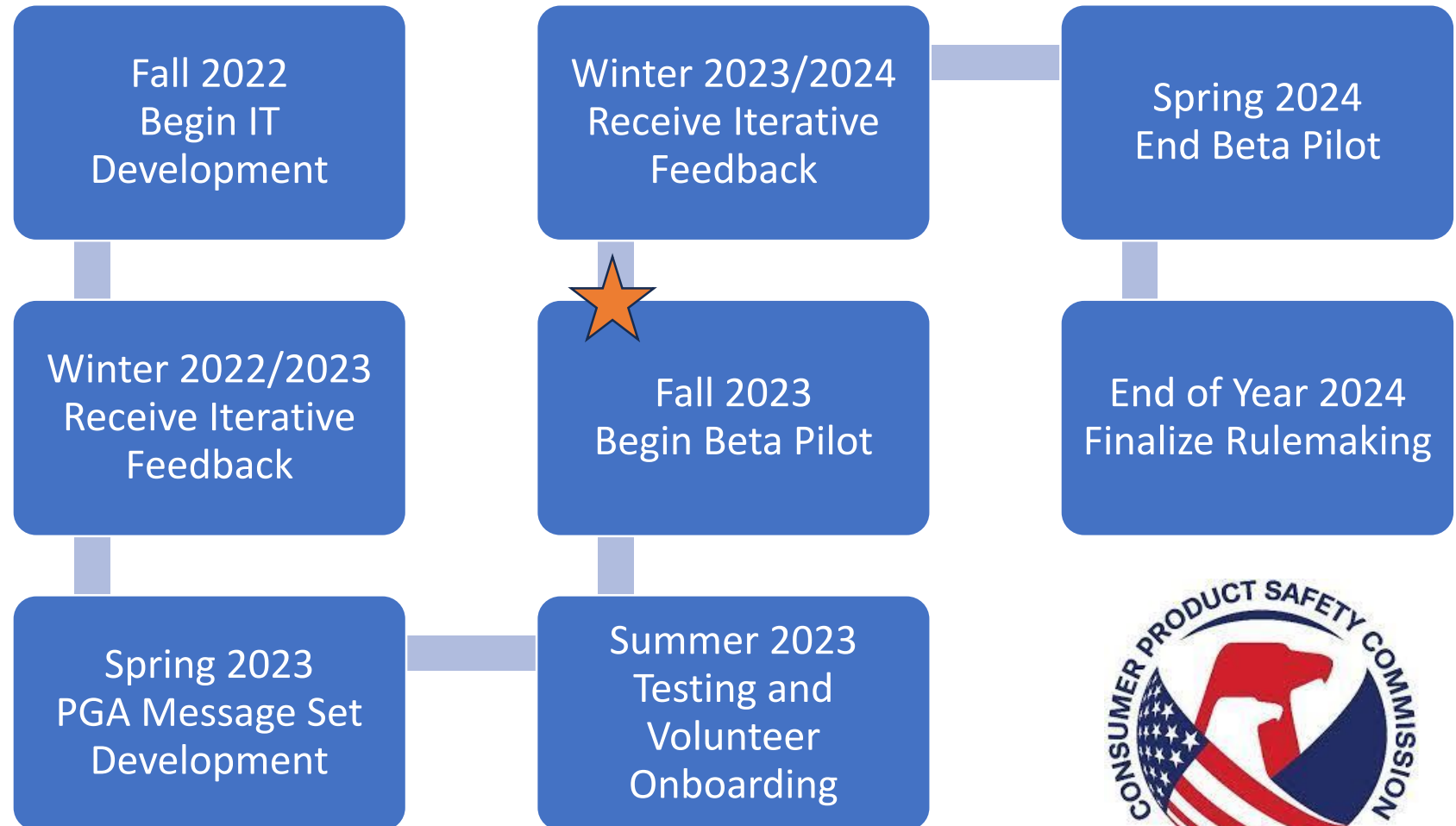
Total 5 items < 1 > 10 / page

Future Development Plans

- Chemical composition screening test planning and tracking module
- Re-packing of previously certified lots
- Factory Registration Program (e.g., snakes, snappers)
- Electronic Reporting from Field Testing Sites
- E-filing of Certificates of Compliance

CPSC E-Filing Program

- E-filing will require fireworks importers to file electronically with CBP, specified data elements from the certificate of compliance.
- CPSC's objective is to make e-filing mandatory by the end of 2024.



BREAK

THE MEETING WILL RESUME IN 15 MINUTES

Jieli is collecting ballots

AFSL Activities Update

Jerry Wingard – Director of Standards and Compliance









2023 AFSL Activities

Traveled to Brazil in April 2023 and tested the first shipment of AFSL-tested fireworks.



2023 AFSL Activities

- Worked with the Virginia Fire Marshal's Office, providing technical assistance for their annual fireworks and approvals.
- Working with several State Fire Marshals' Offices, local state officials, ATF, DOD, EOD, and the FBI, presenting a training program.
- AFSL Team traveled to China for the Technicians Training.
- Worked with several State Fire Marshals on items with reported issues in the US.
- Investigated fireworks injuries and fatalities in 2023.
- Presentation and Technical Staff at AFSL Booth (ICPHSO and NFA).



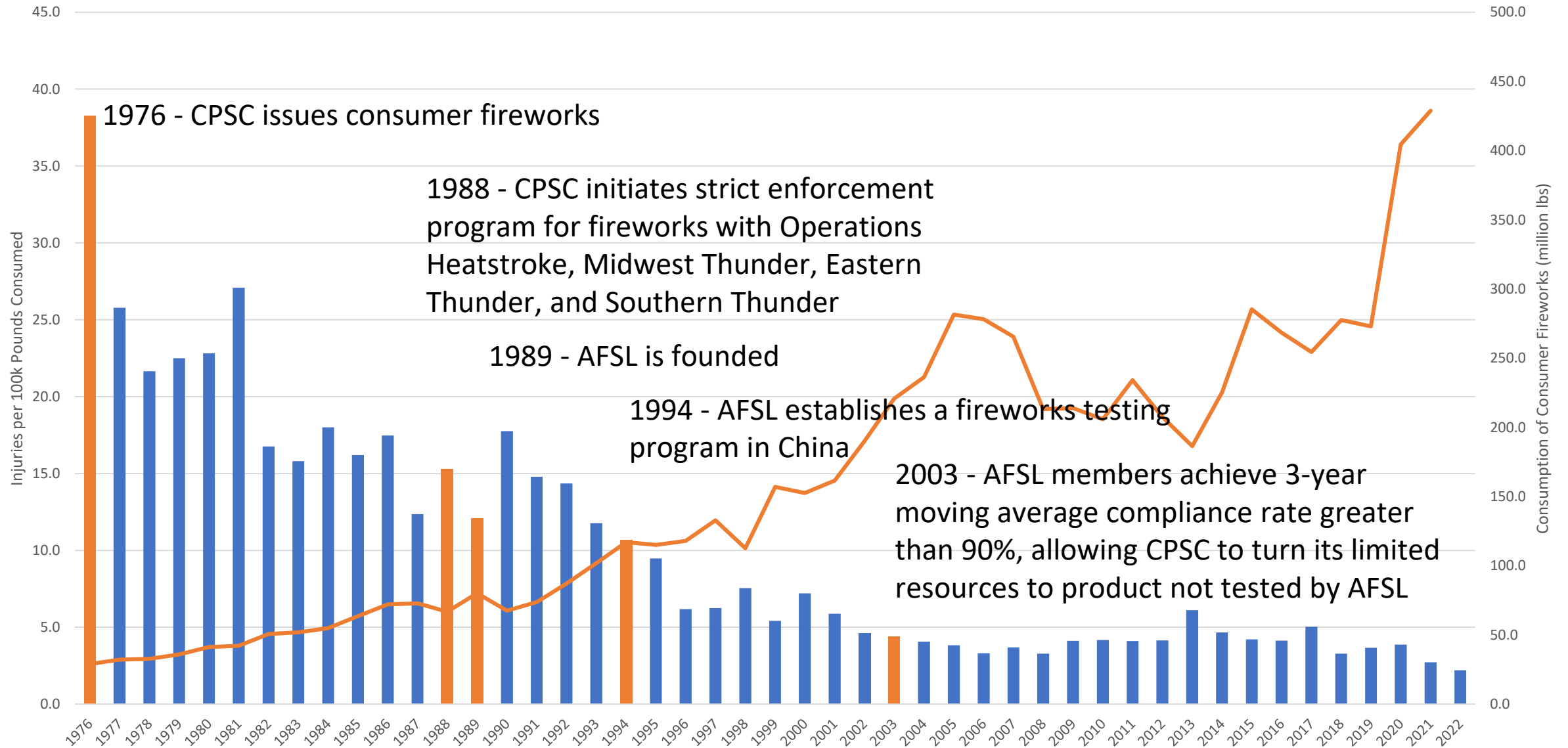




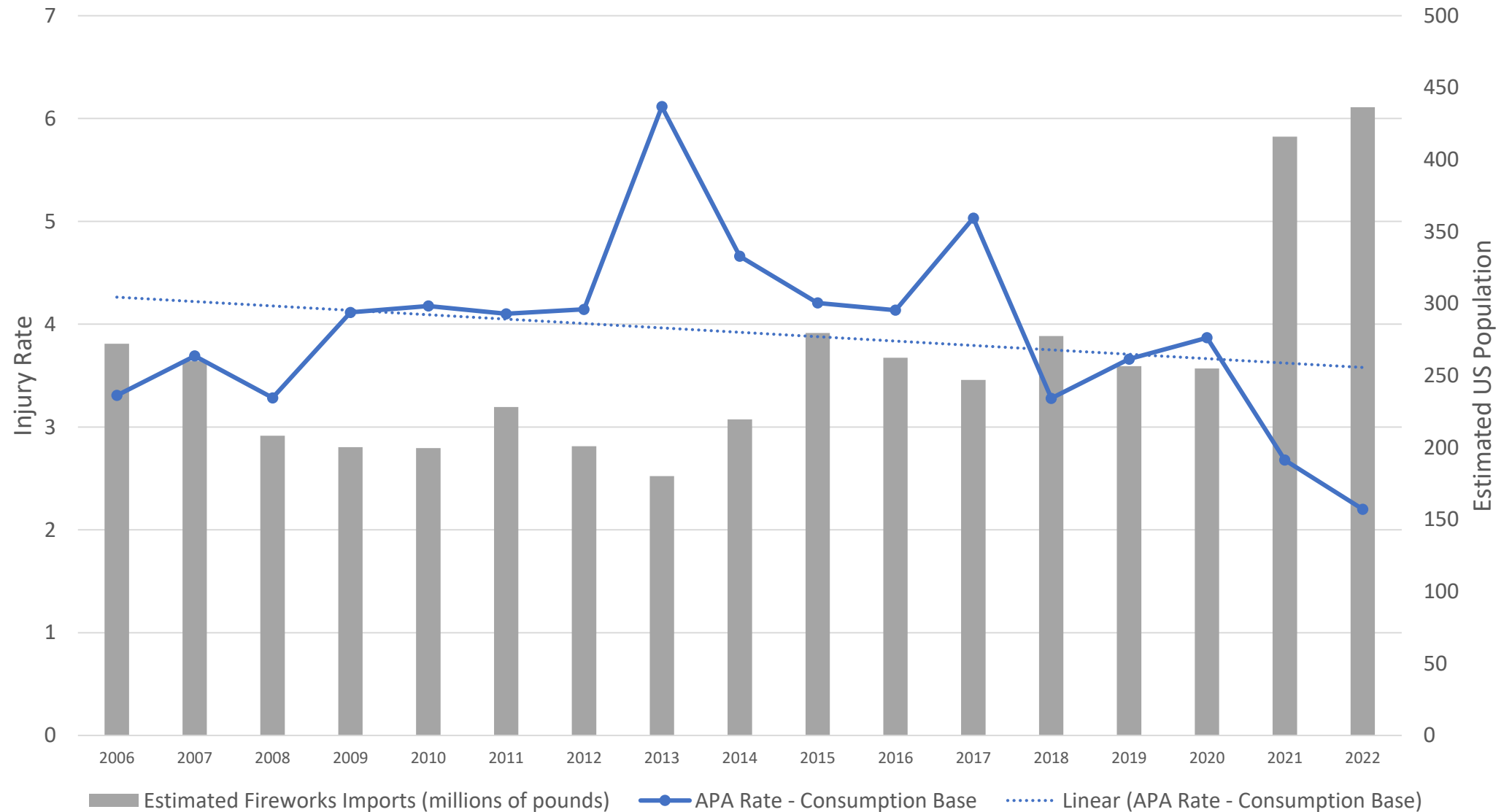
Injury Surveillance Investigations

Jerry Wingard – Director of Standards and Compliance

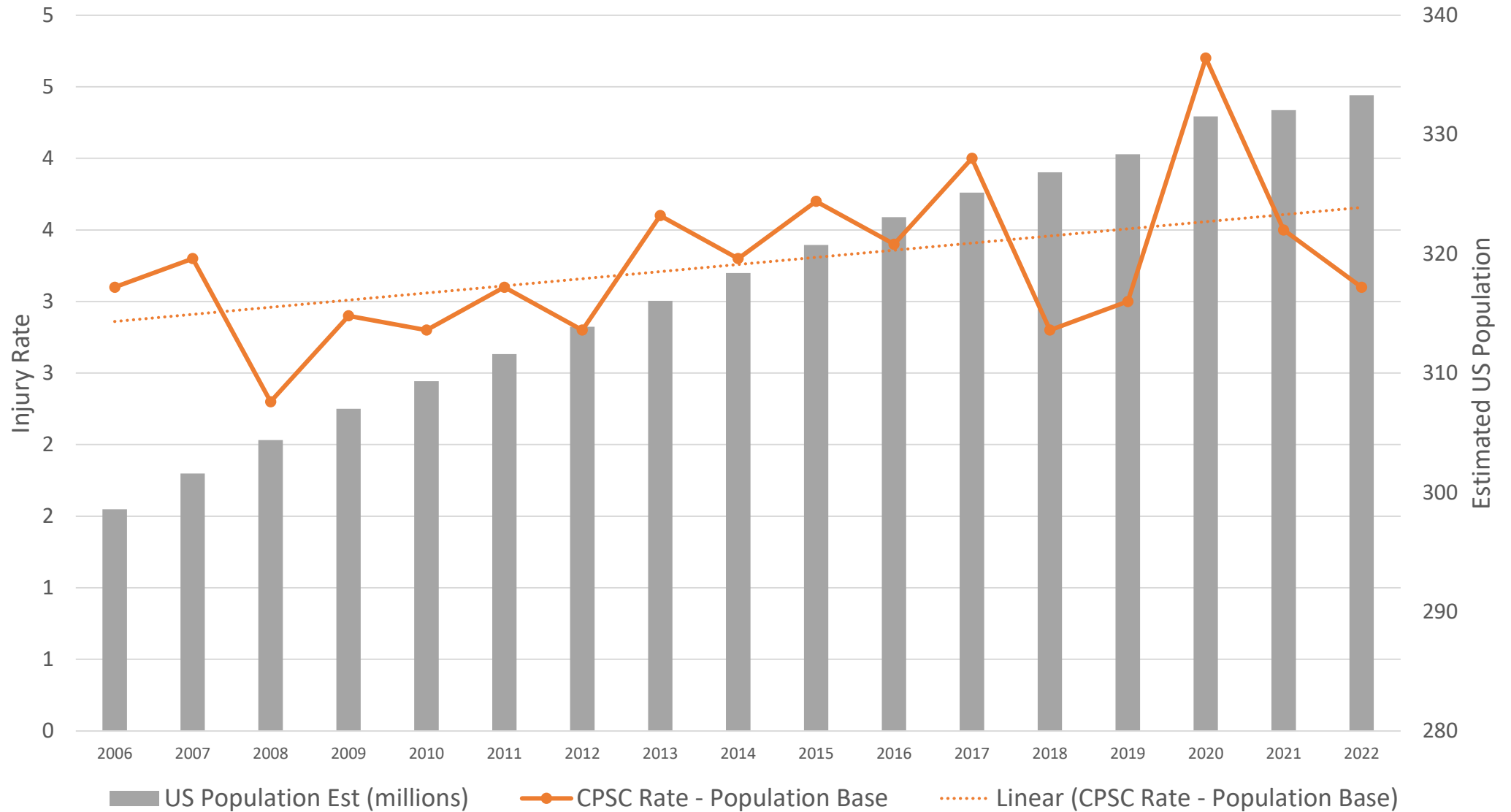
Fireworks-Related Injury Rates Drop as U.S. Consumption Grows



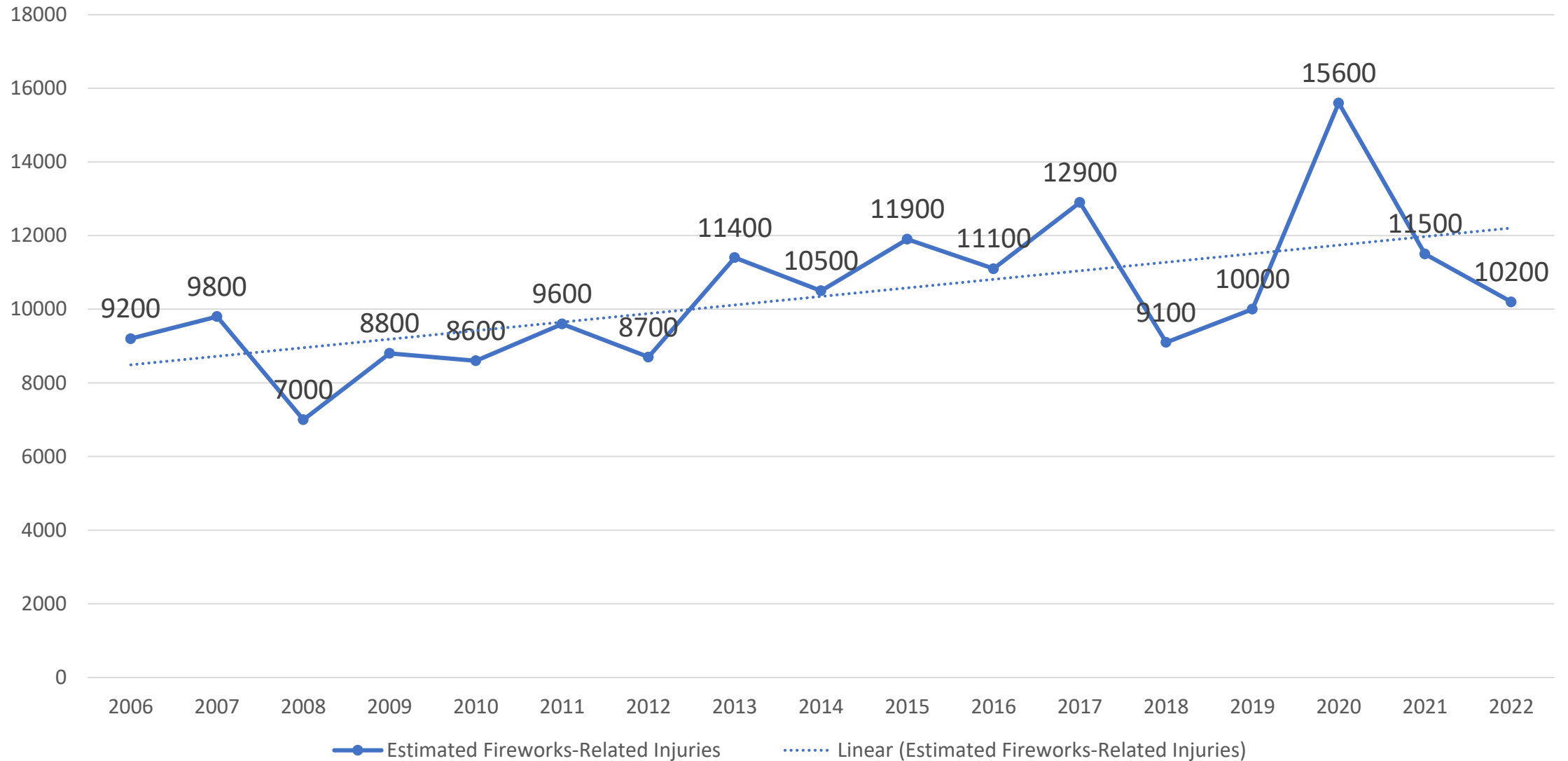
Consumption-Based Fireworks-Related Injury Rate



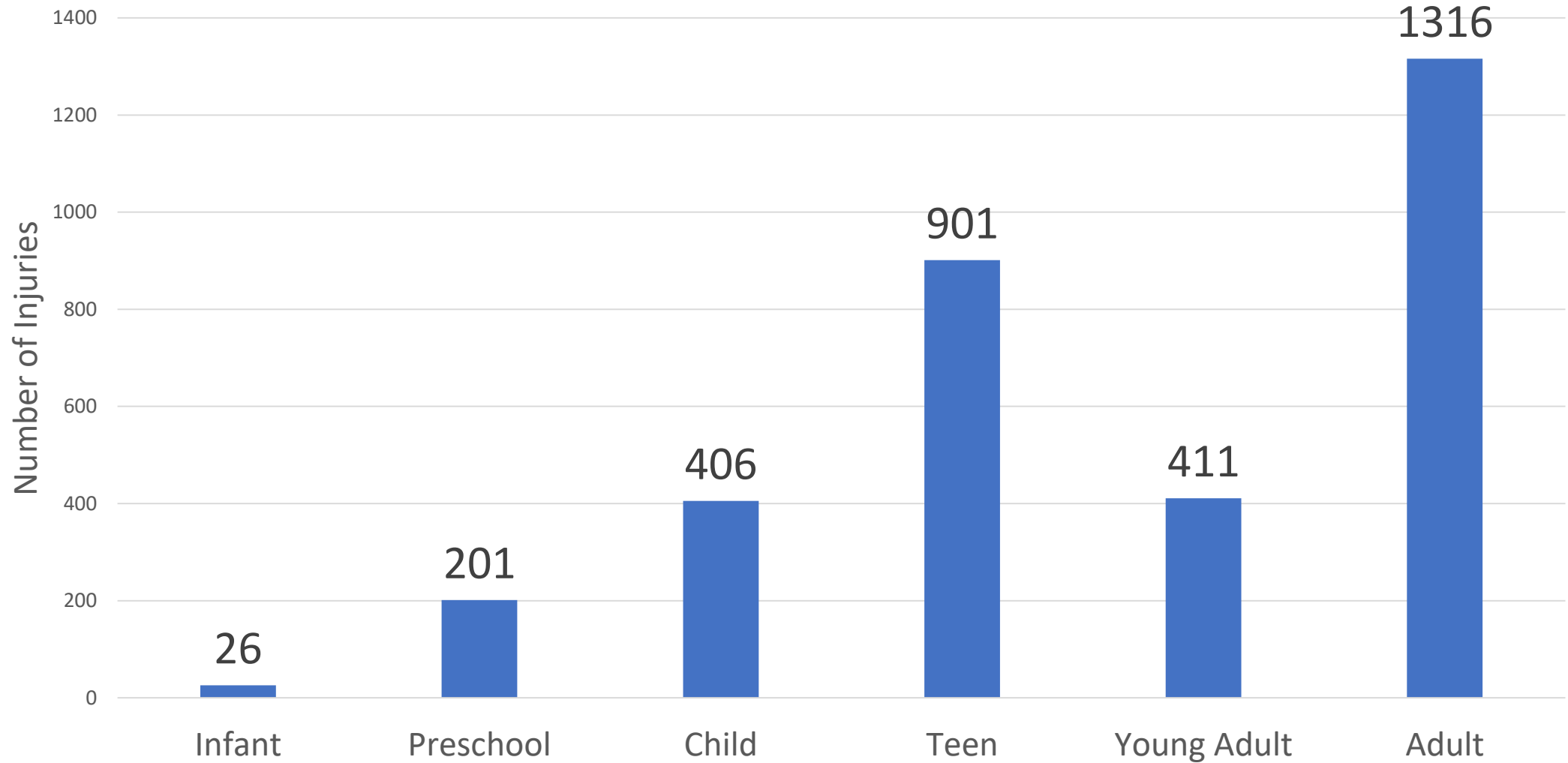
Population-Based Fireworks-Related Injury Rate



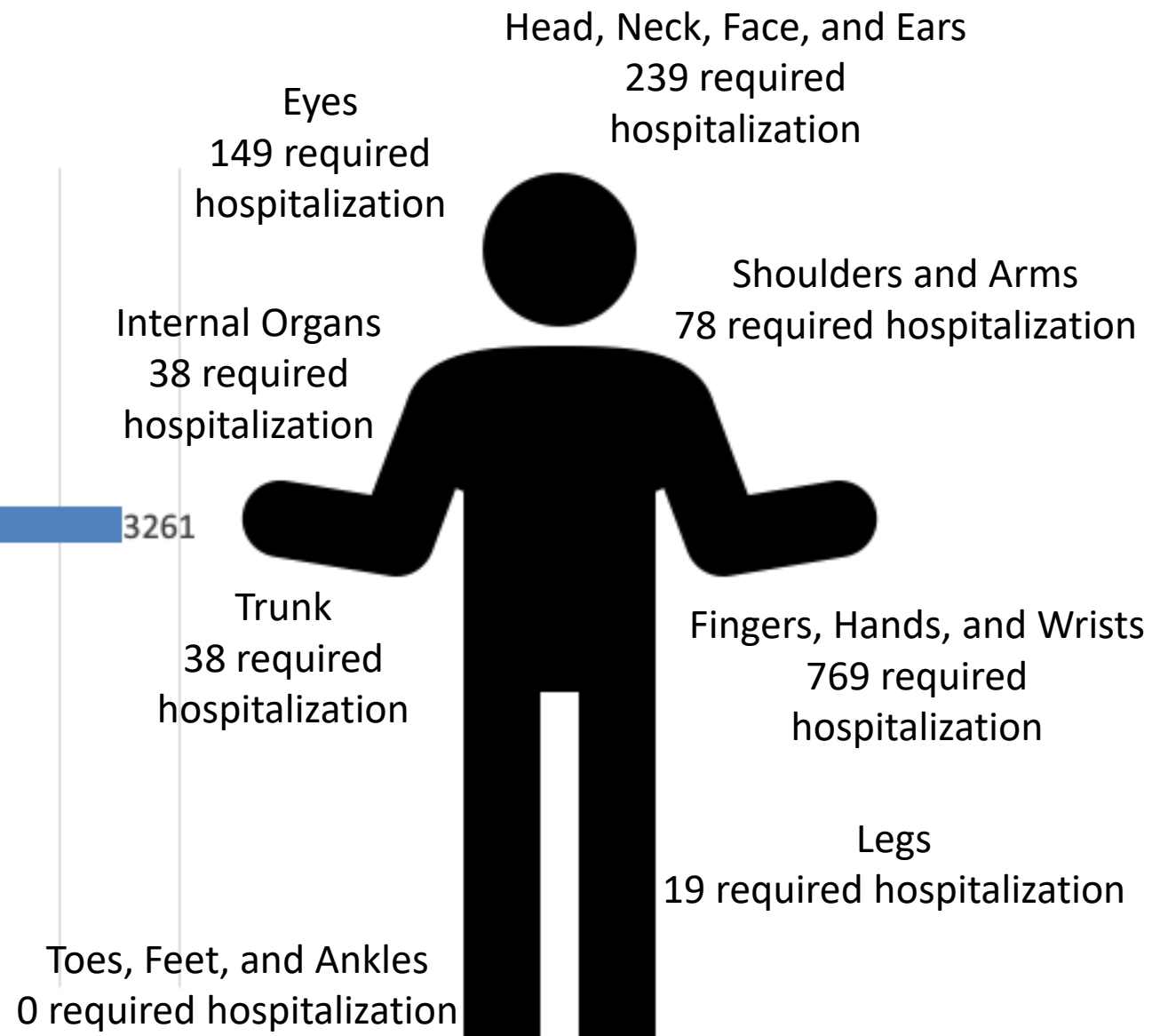
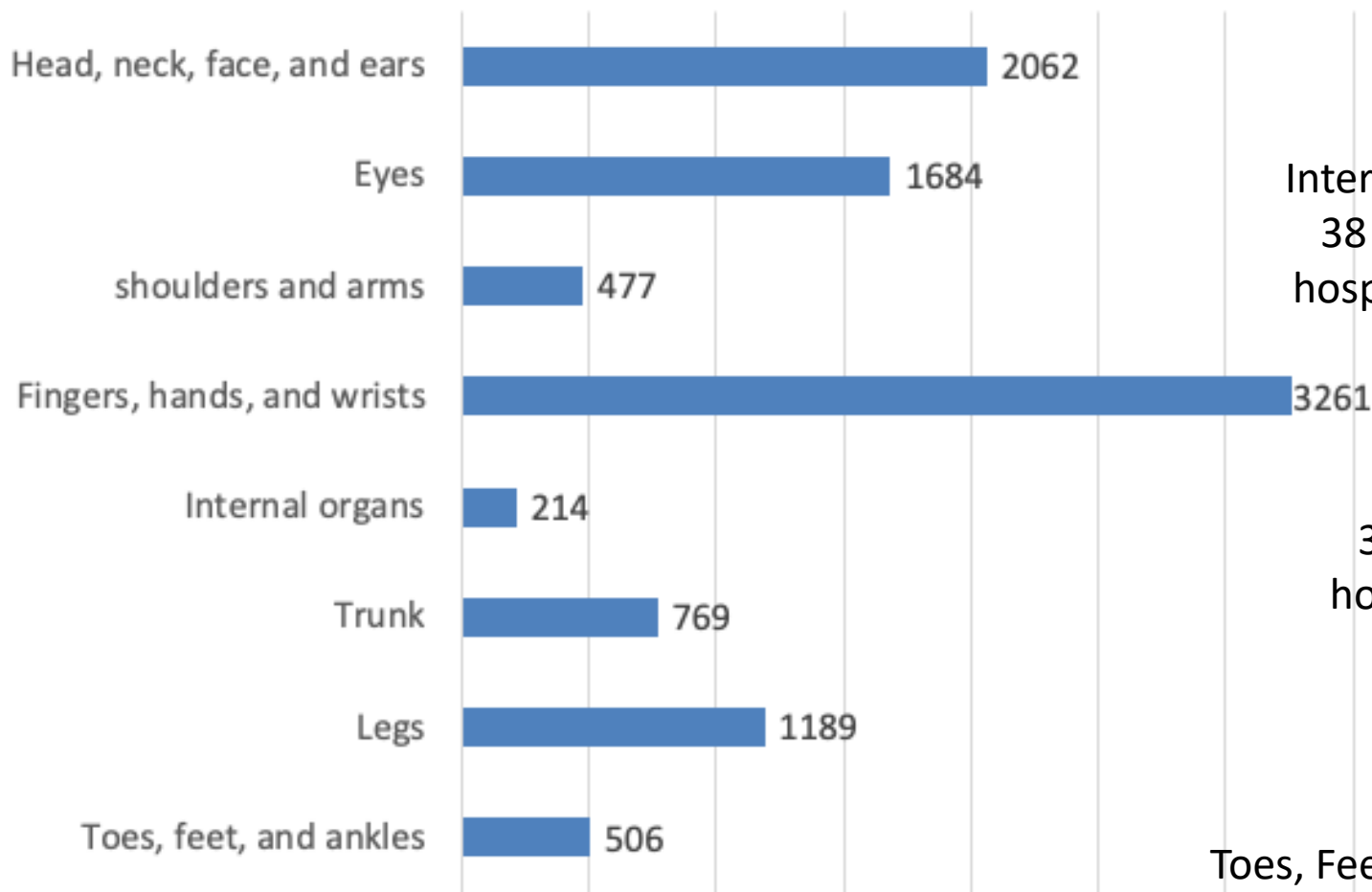
Estimated Fireworks-Related Injuries



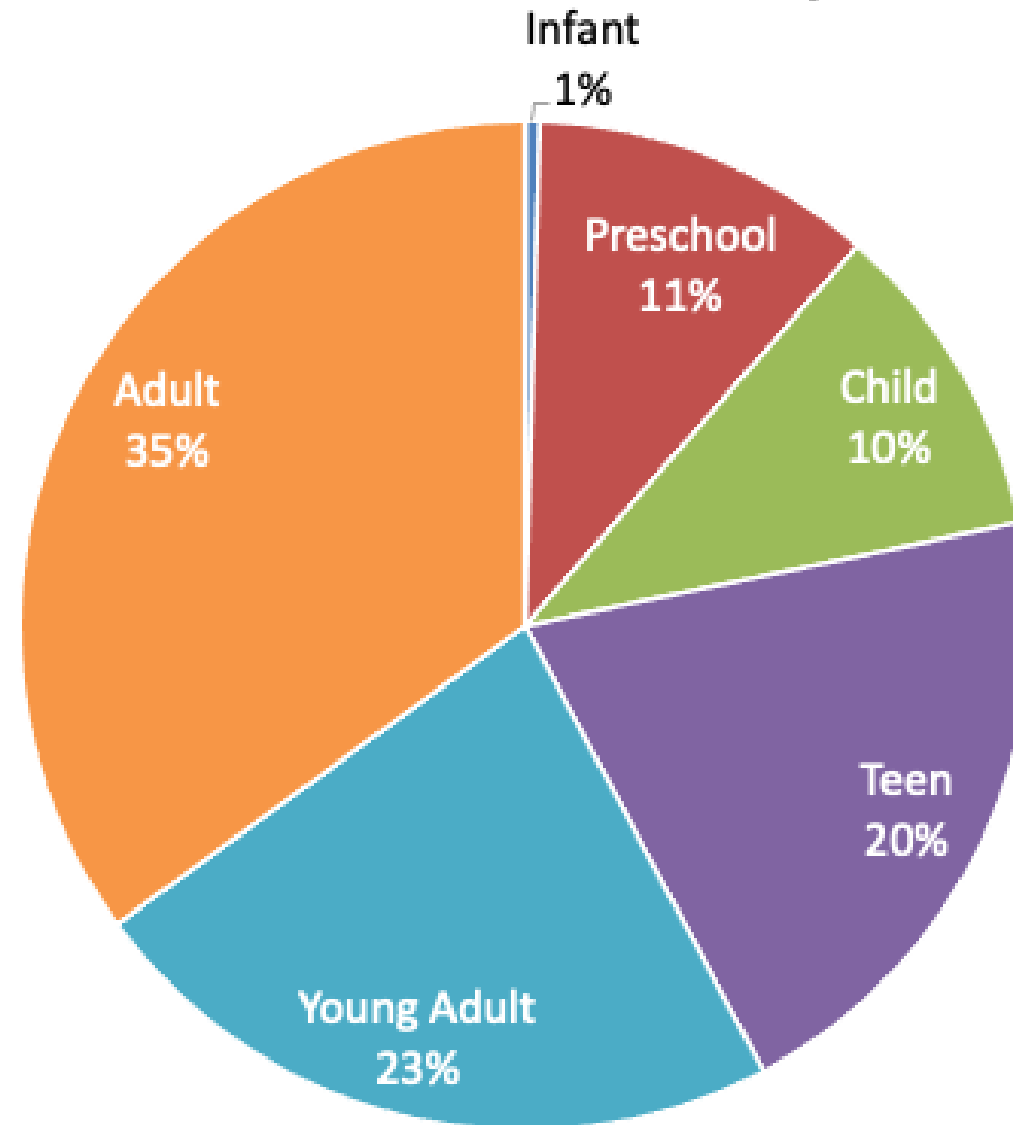
NEISS Estimated Wrist, Hand, and Finger Injuries by Age Group 2022



Body Parts Affected by Fireworks-Related Incidents NEISS 2022 Estimates



2022 Estimated Fireworks-Related Injuries - U.S.A.



AFSL 2023 Fireworks Investigations

- In 2023, AFSL investigated 12 fatalities and 30 injuries and fires reportedly related to fireworks.
- Following is a summary of the fatalities, injuries and fires that were investigated.

2022 Fireworks-Related Fatalities

- 16 reported fatalities
 - 7 – Consumer fireworks
 - 5 – Homemade and illegal fireworks
 - 2 – Involved display shells
 - 2 – Unknown

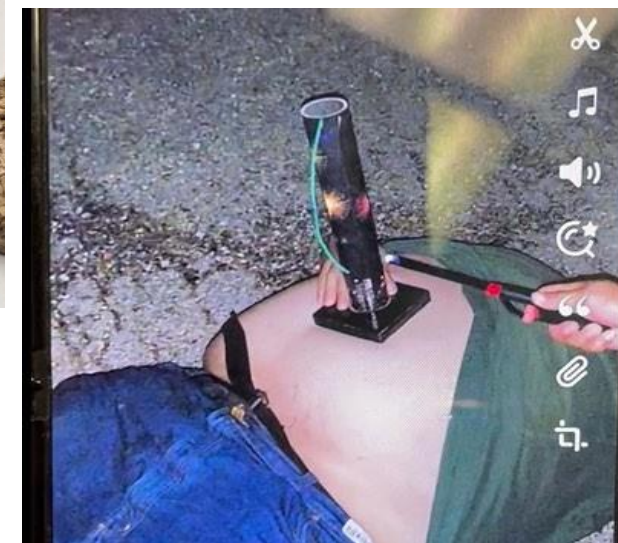
The 7 consumer fireworks fatalities reportedly involved reloadable tube aerial shells.

2023 Fireworks-Related Fatalities

- 12 reported fatalities
 - 7 – Consumer fireworks
 - 2 – Homemade and illegal fireworks
 - 2 – Involved display shells
 - 1 – Unknown

5 of the consumer fireworks fatalities reportedly involved reloadable tube aerial shells.
1 was a fire fatality reportedly involving consumer fireworks.

AFSL Fireworks Investigations



California Man Seriously Injured When Firework Explodes on His Head During Trick Gone Wrong

The force of the explosion put a large dent in the crown of the helmet that was worn by the man

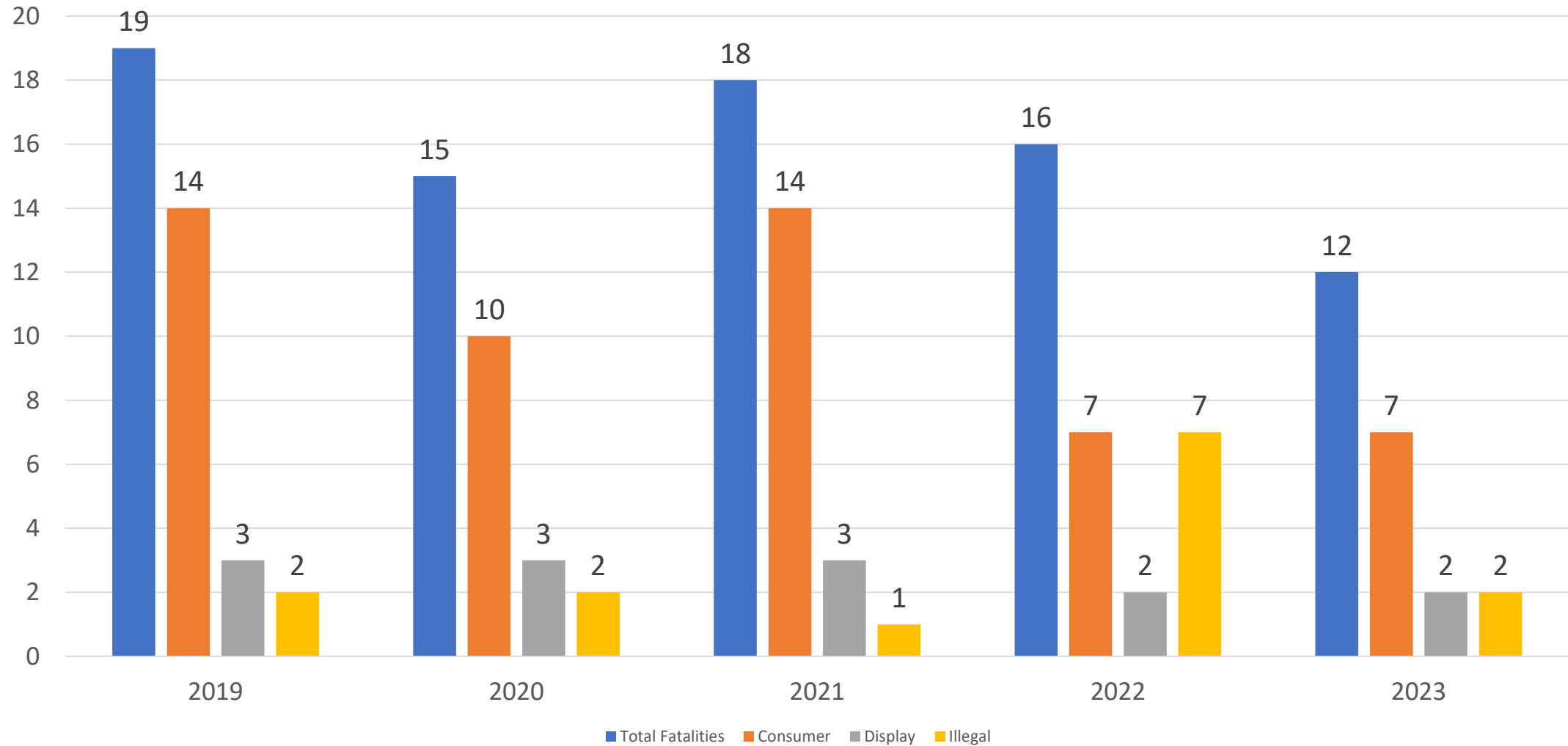
Published 09/14/23 09:24 PM ET | Updated 09/14/23 09:24 PM ET

Scott McDonald



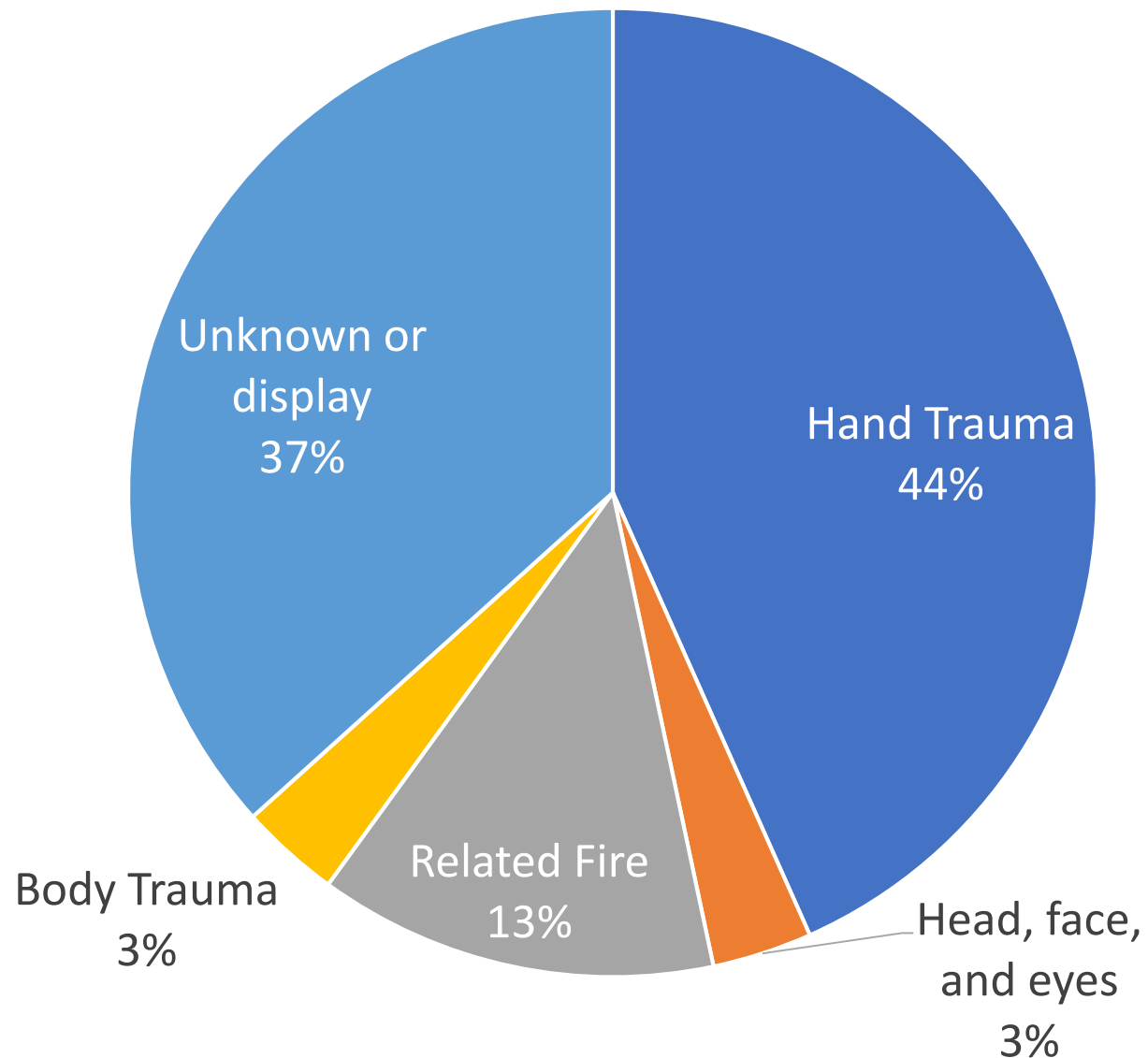
The badly damaged helmet worn by a California man who was severely injured in a fireworks accident. KTLA 5

Fireworks Fatalities for Five Years



30 Fireworks-Related Injuries Investigated

- 13 - Severe trauma to hands; loss of fingers and/or hand
- 1 - Trauma to head, face, and/or eyes
- 4 - Related Fires
- 1 - Body Trauma
- 11 - Unknown or display fireworks



Hand Injuries

The Hand Injury Task Group is still investigating the causes of fireworks-related injuries and developing realistic approaches to mitigate the risk of these types of injuries.

The Task Group has developed various concepts, and reviewed these ideas with the Standards Committee at the last Standards Committee meeting and will be revisiting the topic at the upcoming meeting. One concept, involving two fuses being woven together, was discussed with a fuse manufacturer during our last visit to China and it appears they manufacture fuse like this for other items, but it is not being used in reloadable shells.

Hand Injuries



Standards Committee Report

Jerry Wingard – Director of Standards and Compliance

AFSL Standards Development Activity

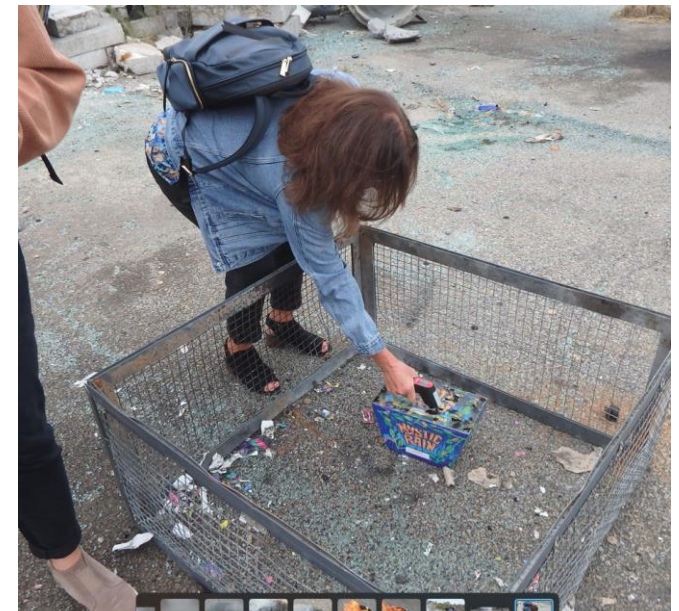
Standards Committee Upcoming Meeting

- Dealing with the increase in residual burn issues.
- Look at and discuss Snappers, Party Poppers, Novelty Fountains, Novelty Flitter Sparkler.
- AFSL Standards Reformat.
- Continue looking at fatalities and hand injuries and ways to help eliminate some of these injuries and deaths.
- Review labels on items associated with reported accidents.

Observation

- Residual burn continues to be an issue
 - We continue to see an increase in residual burn failures at state-level and other testing and observation by AFSL Staff.
 - We intend to review our residual burn / thermal failure requirements and testing procedures to better identify products subject to these types of failures.
 - We also tested the moisture content of items in China and then retested them when they arrived in the US. These tests showed little change with the moisture content.
 - During our trip to China the test method was reviewed, and the equipment was upgraded to better identify violative product. The team is now using a different test device, but the basic test procedure and pass/fail criteria is the same.

Residual Burn



AFSL Standards Development Activity Standards Committee



Election Results

Jay Howell – Executive Director

Questions

Closing Remarks

Mike Ingram – President, AFSL Board of Directors



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