

Office of the State Fire Marshal



2021 Annual Report

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STAY CONNECTED



AGENCY MISSION

The Office of the State Fire Marshal (OSFM) is dedicated to protecting the lives and property of the citizens of Kansas from the hazards of fire, explosion, and natural and man-made disasters. The agency's mission is to reduce the deaths, injuries, and property losses of Kansans through inspection, enforcement, regulation, investigation, education, hazardous material and search & rescue incident responses.

AGENCY PHILOSOPHY

The personnel of OSFM act in accordance with the highest professional standards of ethics, accountability, dedication, and efficiency. We assure the public and the regulated community a balanced and sensible approach to fire and life safety initiatives.

AGENCY FUNDING

The Office of the State Fire Marshal is 100 percent fee funded.

AGENCY STAFF

- Total Positions: 70.3;
- Positions headquartered in the Topeka Office 29.3; in Calendar Year 2021 majority have been working remotely due to COVID-19;
- Four staff working in office;
- Returned to office January 3, 2022;
- Investigator and inspector positions covering the various territories across the state, working from a home base: 41.

Message from the Fire Marshal...

While 2021 still had our agency adjusting and adapting to the COVID pandemic, we were able to accomplish and maintain the core principles of our agency mission and philosophy, as you will see in this Annual Report. I am proud of the hard work and dedication shown by our staff in Topeka and across the state. We wouldn't have this type of progress without them.

We met our goals in 2021, and I would like to see our progress grow and continue in 2022 and beyond.

Here are a few of our future goals:

- Improve and strengthen our zero-based agency budget, maintaining services and programs that were dropped due to lack of funding or cut back due to COVID pandemic.
- Increase fire department participation in the National Fire Incident Reporting System (NFIRS). Our state fire statistics are only as accurate as the reporting. Many grants and funding sources require fire departments to be NFIRS compliant.
- Continue the Kansas Firefighter Recruitment & Safety Grant.
- See continued growth of the statewide smoke alarm installation program, now including options for the deaf and hard of hearing.
- Significant on-going progress in development and implementation in the strength and training of task force members of the state search and rescue strategic program.
- Continue collaboration with the Department of Homeland Security to detect and respond to nuclear and chemical attacks and incidents within the state.
- Continue to assist all long-term care facilities with the new Emergency Assisting in Preparedness plans required by the Centers for Medicaid Services (CMS) for facility accreditation.

I am pleased you are taking the time to view our agency's progress over the past year. Please let me know if I, or anyone in our agency, can be of assistance to you. I can be reached directly at doug.jorgensen@ks.gov.



Fire Marshal Doug Jorgensen

Agency Programs

Administration Division

- Support Services - Fiscal Management, Personnel, Educational Training, Legal
- Publication of Press Releases and Public Education Materials
- Maintaining Agency Website and Information Technology Services
- Agency Emergency Management Support Function to State Emergency Operations Center
- Fire Incident Reporting Systems
- Industrial Hemp Processing Program
- Kansas Firefighter Recruitment and Safety Grant
- Get Alarmed Kansas Free Smoke Alarm Program

Investigation Division

- Fire Origin, Cause and Determination
- Criminal Fire Investigations
- Explosive/Post Blast Investigations
- Explosives Permits (User/Blaster/Handler/Storage)
- Fireworks (Permits/Storage/Sales)
- State Certified Fire Investigator Program
- Fire Investigation, Explosive Training and Education
- Fire Safe Cigarette Program

Emergency Response Division

- Hazardous Materials Incident Response
- Hazardous Materials Education and Training
- Search & Rescue Incident Response
- Search and Rescue Education and Training

Prevention Division

- Fire and Life Safety Code Rules and Regulations
- Field Fire & Life Safety Inspection/Enforcement Program
- Educational, Health Care, Correctional, Childcare Centers, Home Daycares, Hotel/Motel, Restaurants, Flammable and Combustible Liquids/Fuels
- Fire and Life Safety Training and Education
- Facility Plans Review
- Facility Code Enforcement
- Technical Code Interpretation
- Licensing and Registration Programs
- Boiler Inspection & Certification Program



Investigation Division

OSFM investigators instructed 30 Kansas firefighters and law enforcement officers in the 80-hour Fire Investigation course for certified fire investigators at the Kansas Law Enforcement Center in Hutchinson with 100% pass rate. OSFM Investigators also taught this class in the City of Newton for 30 additional Kansas firefighters and law enforcement officers. Several of those students are now Certified Fire Investigators.

OSFM investigators continue to assist local agencies with the investigation of several different serial arsonist cases involving structure fires as well as numerous grass and wildland fires. Several suspects have been arrested and are in the judicial processes or have taken plea agreements and sentenced for the crimes that they committed.

Arson is one of the hardest crimes to convict. The national conviction rate for arson is 3 percent. The OSFM has consistently averaged a conviction rate between 10 percent and 14 percent annually.

Alongside the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) as joint instructors, division staff will again facilitate teaching Kansas and out-of-state investigators in the utilization of the Bomb and Arson Tracking System (BATS).

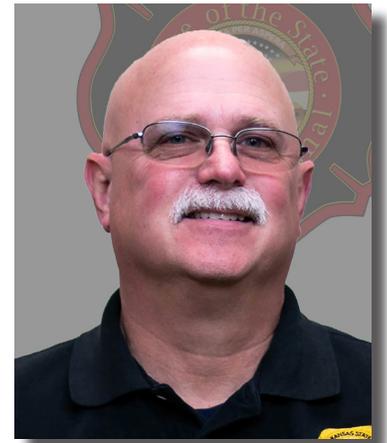
OSFM has a seat on the advisory group at ATF and we are involved in assisting ATF in making periodic improvements to BATS database system.

The OSFM has assisted many agencies with making 3D scans of various fire and/or crime scenes. Scans of crime scenes have been used in the court trials. It is often noted that 3D scans are very instrumental in showing the scene in real-world dimensions and environments in which case data was collected.

In 2021, OSFM investigators assisted local agencies in over 412 investigations that involved fire, explosives, or in which other technical assistance was needed.

There were 10 polygraph examinations that were scheduled or done by OSFM to assist local agencies.

OSFM's two canine teams responded to 58 requests to assist in OSFM or local agency investigations.



Chief Wally Roberts



Prevention Division



Chief Brenda McNorton

We will continue to provide Fire and Life Safety rules and regulations training to all facilities encompassed by the State and Federal rules and regulations. By sharing the needed information to complete inspections, it helps the facility owners understand our process. In 2021, OSFM conducted 18 presentations with 1,148 people attending throughout Kansas. These presentations gave valuable training and expectations on what OSFM requires and how they can better manage the requirements set forth by Centers for Medicare/Medicaid (CMS) and OSFM.

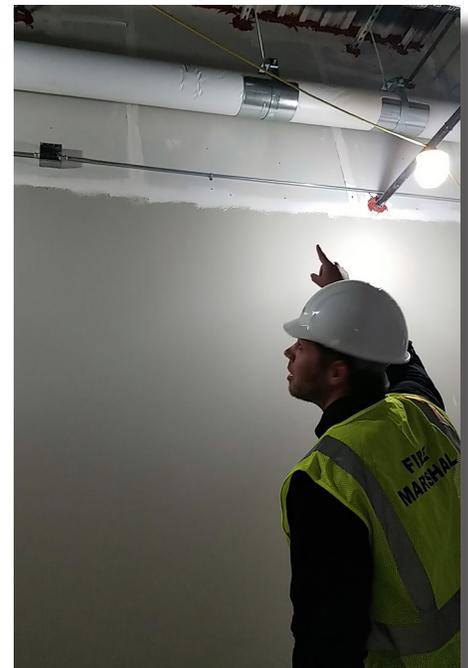
Our agency is responsible for assuring Fire and Life Safety Inspections where people work, live and congregate. We have 15 building inspectors in the field and five plan reviewers for new construction. Our staff was diligent as they worked around COVID isolations and requirements in all of the facilities that we inspected.

In 2021, the agency building inspectors inspected over 9,000 buildings for Life Safety compliance. OSFM is contracted for performing Life Safety Compliance for CMS. In 2021, we performed 260 inspections on certified facilities. We also have the responsibility to assure all USD schools have annual inspections. We inspected 2,500 school buildings in 2021. We issued 16 Cease & Desist orders during the calendar year on facilities that did not meet compliance.

Our agency is also responsible for boiler inspections. We have six boiler inspectors for the state. In 2021, we had 1,078 new boilers put into service, and we performed over 13,000 inspections.

In 2018, OSFM formed a code advisory group and determined that it would be beneficial for OSFM to move toward adoption of the current National Fire and Life Safety Codes. We approached the process in 2019, 2020 and 2021. We attempted to navigate Kansas' cumbersome code adoption process, which requires approval by multiple state agencies. The process has hampered our ability to stay current with the code adoptions and other state agencies and local municipalities. By having an old code, many facilities are hampered by the fact that we cannot provide them with cost saving measures the new codes allow.

In 2019, CMS implemented the Emergency Preparedness Plan for Long Term Care Facilities. We will continue to provide education and training to the facilities to help them have advanced planning in place in the event of a disaster. Some facilities are still struggling with their plans and following what has been set. However, we will continue to work with them for a better understanding.



Fire Prevention Specialist John Jeffery inspects a one-hour fire wall.



Emergency Response Division

Hazardous Materials (Haz-Mat) Program

- 9 Haz-Mat Teams
- 11 Participating Agencies
- 200 Personnel

In 2021, our Haz-Mat program conducted two, 80-hour Hazardous Materials Technician training courses for regional response teams that provided certification for 50 new Haz-Mat technicians. One of the courses was funded in part by the Hazardous Materials Emergency Preparedness (HMEP) grant from the United States Department of Transportation.

We hosted a 40-hour Advanced Chemical Detection and Monitoring training class to meet additional advanced monitoring and chemical detection requirements of National Fire Protection Association (NFPA) 472. This course was funded by a portion of the HMEP grant. Twenty Haz-Mat technicians attended this training course.

We received an additional HMEP grant for Hazardous Materials Tactical Chemistry, another 80-hour Haz-Mat Technician training class, and Regional Training, to provide additional specialized and advanced training to the nine regional Haz-Mat response teams in Fiscal Year 2022.

OSFM received a total of \$105,000 HMEP grant funds for Fiscal Year 2022.

Search and Rescue Program (SAR)

- 7 Task Forces
- K9 Teams (12 certified dogs with handlers)
- 42 Participating Agencies
- 6 Doctors
- 2 Engineers
- 440 Personnel

In 2021, we sustained all seven task forces at a high level of operational readiness, in spite of the inability to train collectively due to COVID-19 restrictions.

The program maintained training and deployment proficiency with all 12 Certified Live Find K9 teams through continued monthly training weekends at Crisis City in Salina, KS. We also certified two new Human Remains Detection (HRD) K9 teams and certified/re-certified six Type 1 and/or Type 2 Live Find K9 teams (K9 and Handler) during SUSAR National Certification Evaluation (CE) at Crisis City.

We conducted a Heavy Equipment Rigging Specialist (HERS) course to train all KS-TF1 SAR task force Rigging Specialists and Rescue Team Managers in El Dorado; and conducted a Medical Specialist refresher training for all SAR task force Medical Specialists and Medical Team Managers at Crisis City in Salina during Fall 2021.

Our team conducted one, 80-hour Structural Collapse Rescue Technician (SCT) course at Crisis City, near Salina, which trained and certified 32 new Structural Collapse Rescue Technicians for fire departments and Regional SAR Task Forces.

Our State Search and Rescue Coordinator served on the National US&R Operational Readiness Ad Hoc Committee in Fiscal Year 2021, which is a combination of FEMA US&R and SUSAR representatives, and the National SUSAR Board of Directors.



Chief Dirk Christian



National Fire Incident Reporting System



Will Hall
NFIRS State Program Manager

In 2021, Will Hall was hired as our National Fire Incident Reporting System (NFIRS) Research Analyst. He is the Kansas point-of-contact for NFIRS.

NFIRS is an All-Incident system designed to portray an accurate picture of what the Fire Service does for the citizens of Kansas, not just fighting fires. Locally, data can be used to implement public education programs, accurately explain equipment needs for departments, determine standards of cover information and watch/identify trends to include arsonists. After identifying problems, a prevention program can be developed and utilized. Many prevention programs rely on up-to-date reporting to aid public safety. This information is so valuable most grants require departments to be compliant with NFIRS before grant money will be awarded.

In 2021, 339 Kansas fire departments were NFIRS compliant out of the 622 departments across the state. That is roughly 55 percent.

Our fire service data is only as accurate as the reporting. Ideally, we would have 100 percent of departments reporting.

In fall 2020, NFIRS transitioned to their new incident reporting system called eNFIRS. With the new system, NFIRS started enforcing 2015 specifications, which required 3rd party vendors to upgrade their software to match the stricter requirements. This created problems for agencies that did not have current vendor contracts or were using outdated software. Currently, a small number of fire departments are still not using updated software to report incidents, and they are not in compliance with NFIRS reporting.

2021 NFIRS Compliance

Kansas Fire Departments

Compliant — 339

Non-Compliant — 283

Whether small or large, departments are encouraged to understand their needs, and then, choose a program that will help them meet these needs. The eNFIRS system is a great option for departments who have fewer incidents to report and have limited resources. It is basic, easy-to-use, has several reports available, users have individual accounts, and it is free. For agencies needing software that contains personnel tracking, reporting of non-NFIRS activities, or advanced analytical features, a third party vendor is a good option. The OSFM is not able to make a recommendation but can inform agencies what vendors are currently being used in the state. A full list of third party vendors is available on the USFA website. The OSFM will not be able to support agencies with funding but can research and educate departments on possible funding sources.

To confirm your department's compliance, or if you have questions concerning NFIRS, contact Will Hall at (785) 296-4294 or email at william.hall@ks.gov.



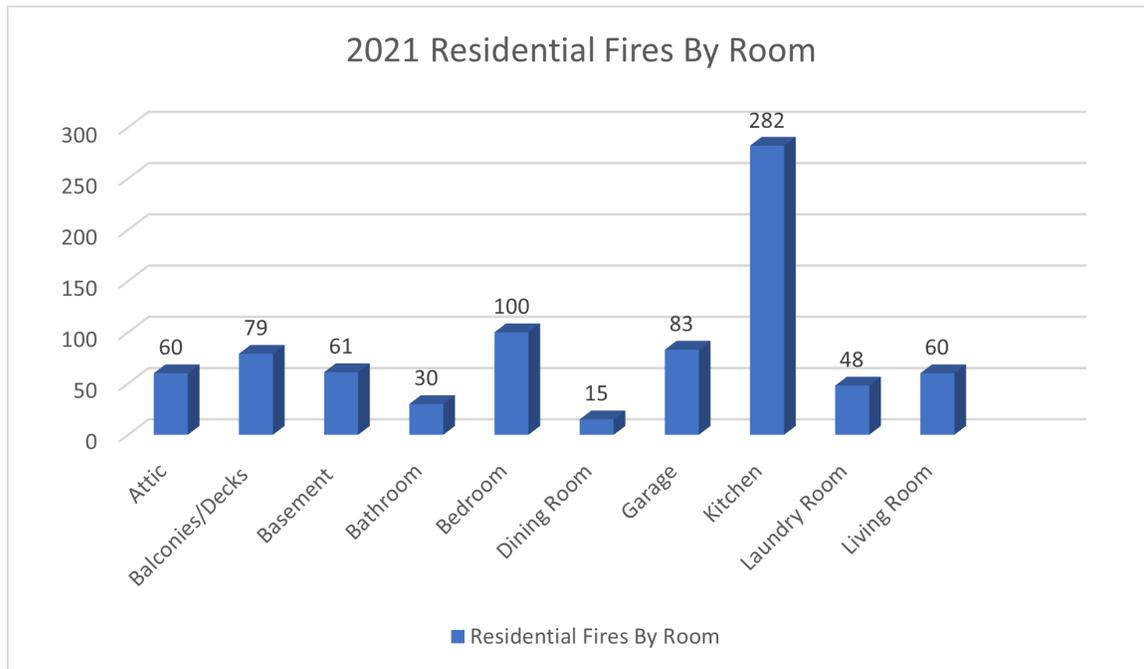
Reported Residential Fires in Kansas

2021

Residential Fires – 3,159 Total
\$34,692,398 of Property Loss
\$11,670,762 of Contents Loss

2020

Residential Fires – 2,099 Total
\$23,537,135 of Property Loss
\$9,441,599 of Contents Loss



In 2021

- ~ 83 Residential fires were caused by smoking
- ~ 327 Residential fires were intentional
- ~ 442 Residential fires were caused by cooking
- ~ 232 Residential fires were caused by appliance or electrical malfunctions

**All data from 2021 is preliminary as reporting is not yet complete.*

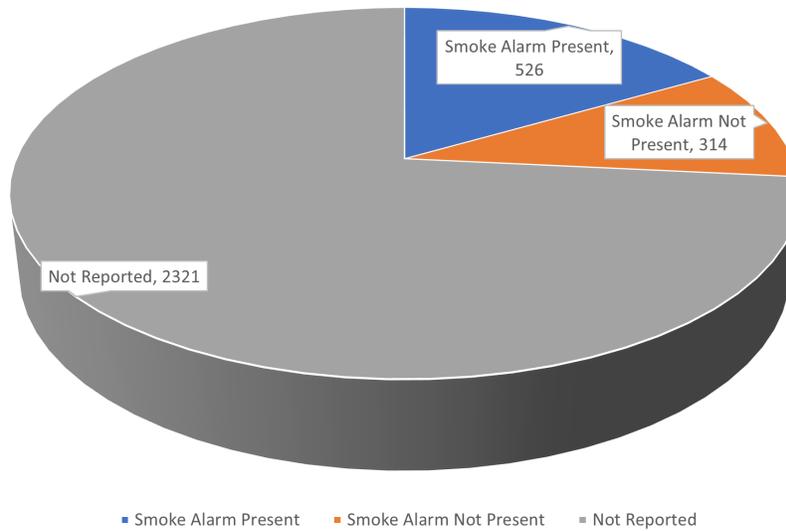


Get Alarmed Kansas

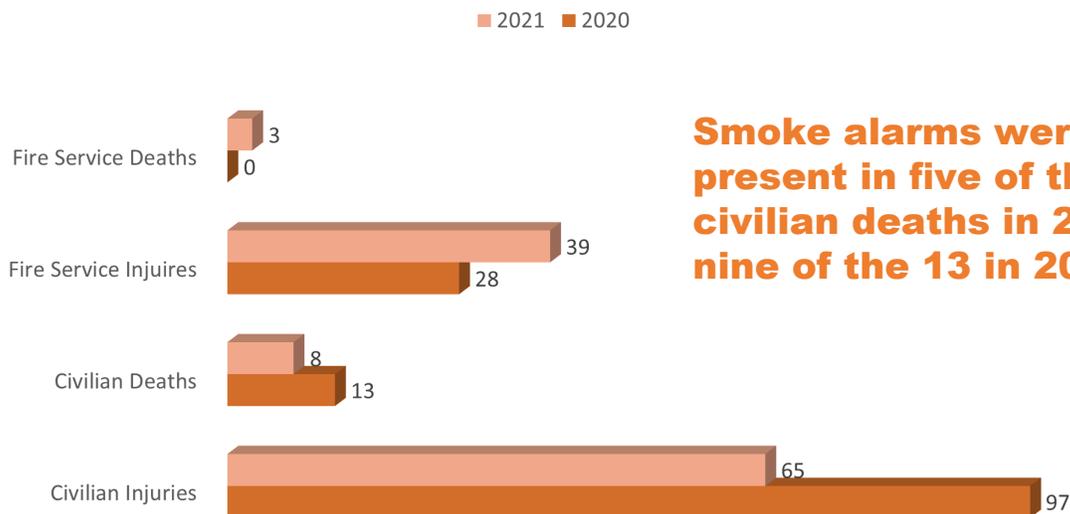
OSFM Smoke Alarm Installation Program

- Our statewide smoke alarm installation program, Get Alarmed Kansas, began in 2014.
- OSFM has expanded that program from initially only offering a basic, 10-year, sealed smoke alarm to now offering a combination smoke/carbon monoxide (CO) alarm, and two different types of smoke alarms for individuals who are deaf or hard of hearing.
- We rely on the local fire departments to help us promote the program and install the smoke alarms. We have also begun reaching out to local civic groups that can do the alarm installs as a public service outreach. We do this to make sure the alarms are properly installed.
- Over the last couple of years, we have strongly promoted the program with the State Fire Chiefs Association, the Kansas State Firefighters Association, the American Red Cross, Safe Kids Kansas and the Fire Marshals Association of Kansas.
- Since the implementation of Get Alarmed Kansas, 8,400 alarms have been distributed.

Smoke Alarms Present at 2021 Residential Fires



Fire Injuries/Deaths



Smoke alarms were not present in five of the eight civilian deaths in 2021, and nine of the 13 in 2020.

**All data from 2021 is preliminary as reporting is not yet complete.*



Wildfires in Kansas

2021

Vegetation/Wildfires – 4,934

Wildfires - 974

Total Acres Burned – 185,467

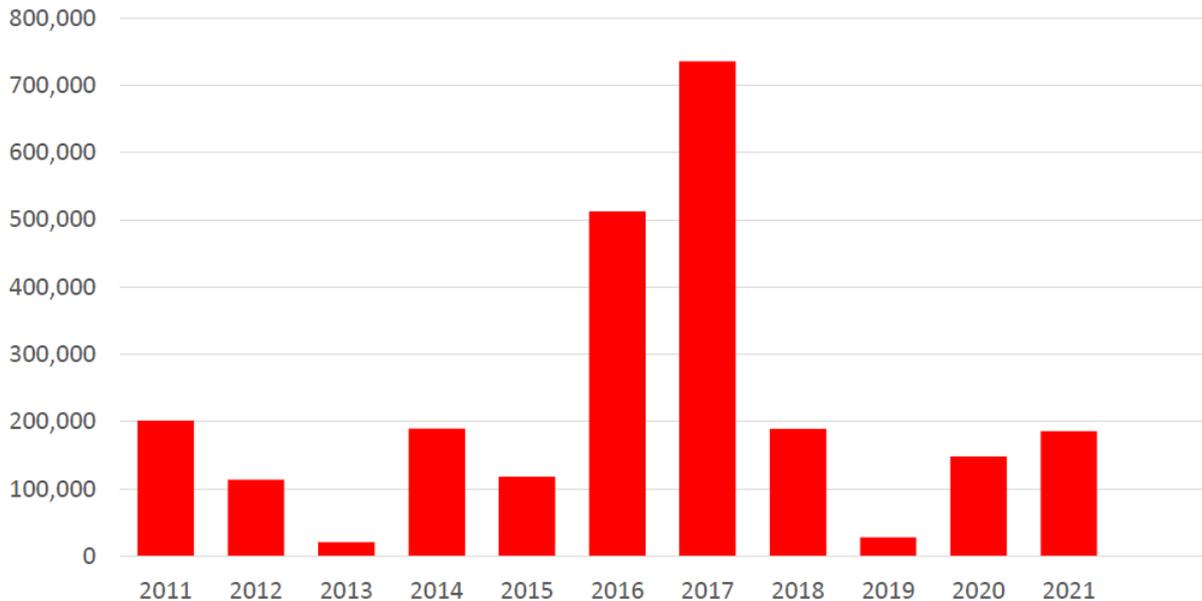
2020

Vegetation/Wildfires – 3,570

Wildfires - 963

Total Acres Burned – 147,613

Total Acres Burned by Wildfire



Recognize in calendar years 2019—2021 there was a change in the national reporting system which has created skewed statistics as departments struggled to report or the reporting system was not available to departments due to system requirements with the new software. System upgrades also delayed by local jurisdictions due to pandemic.

**All data from 2021 is preliminary as reporting is not yet complete.*



Commercial Fires in Kansas

2021

Commercial Fires – 1,404 Total

18 Fire Service Injuries

2 Civilian Injuries

\$5,965,883 of Property Loss

\$5,165,359 of Contents Loss

8 Smoking Fires

57 Electrical Malfunction Fires

45 Intentional Fires

2020

Commercial Fires – 794 Total

4 Fire Service Injuries

12 Civilian Injuries

\$11,629,186 of Property Loss

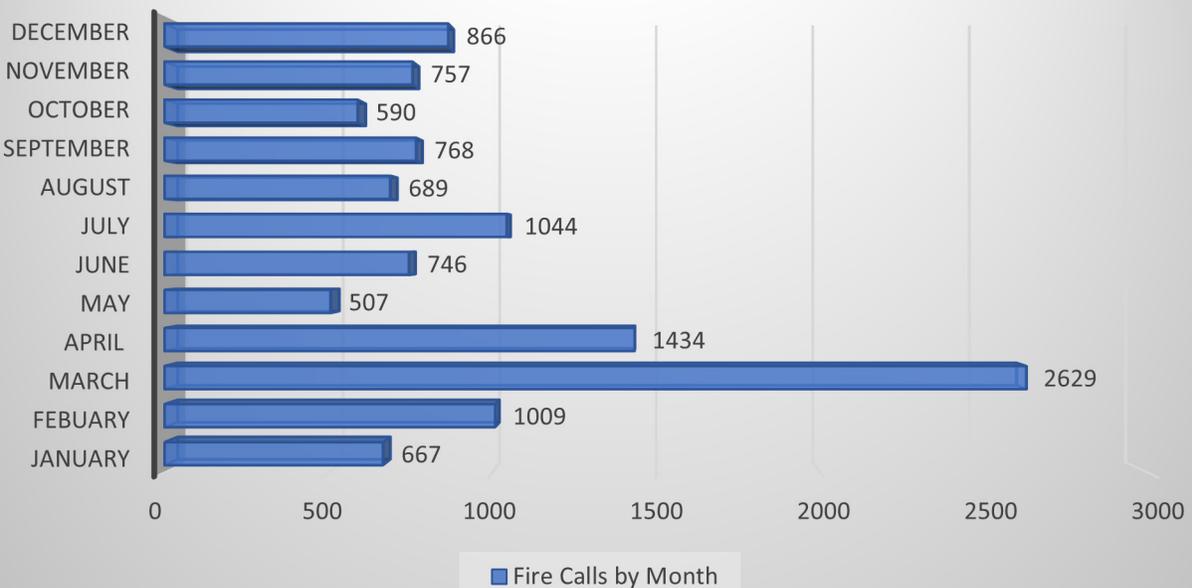
\$10,866,641 of Contents Loss

9 Smoking Fires

67 Electrical Malfunction Fires

68 Intentional Fires

2021 Total Fire Calls by Month

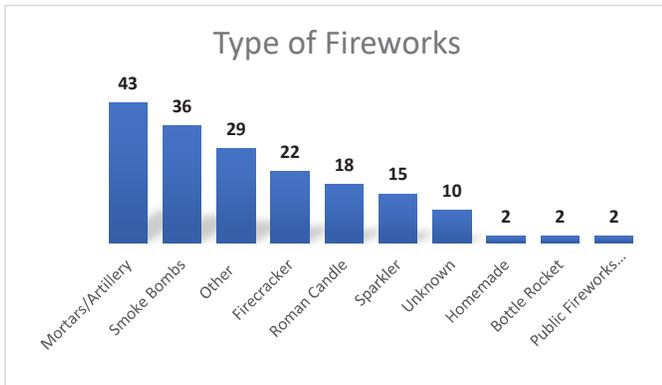
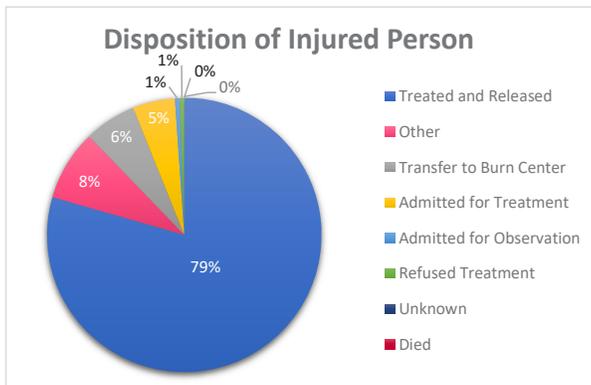
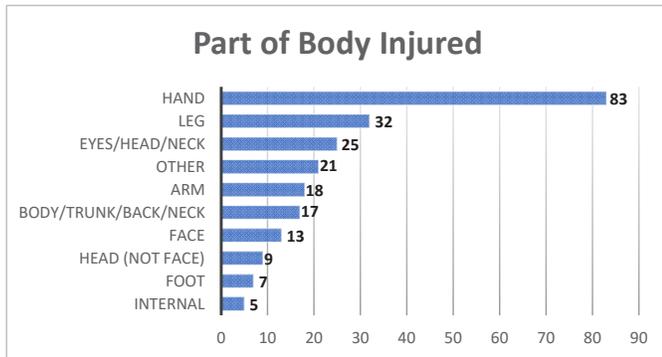
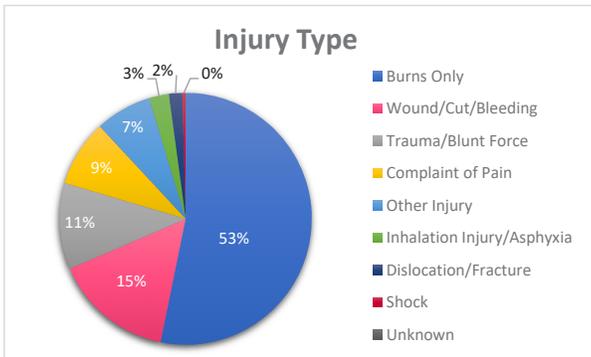
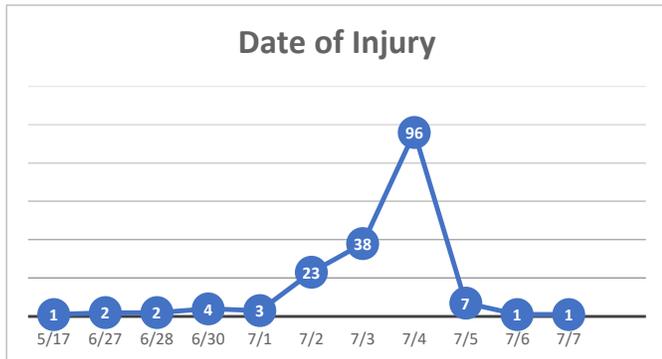
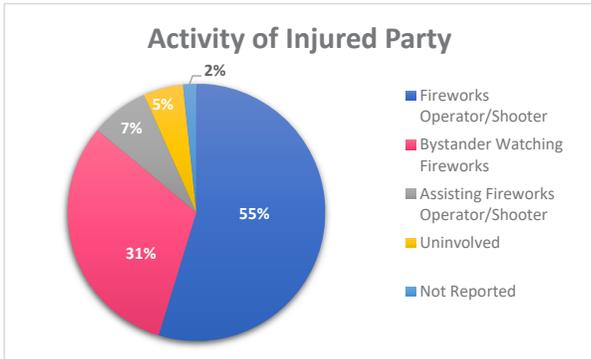
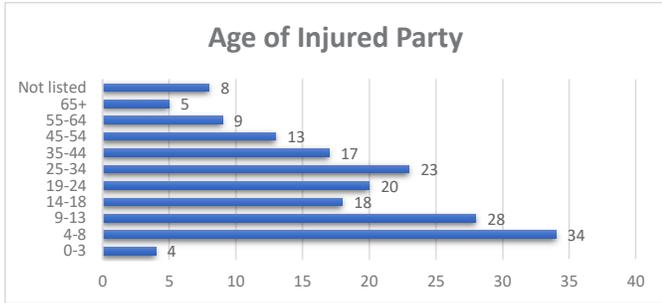
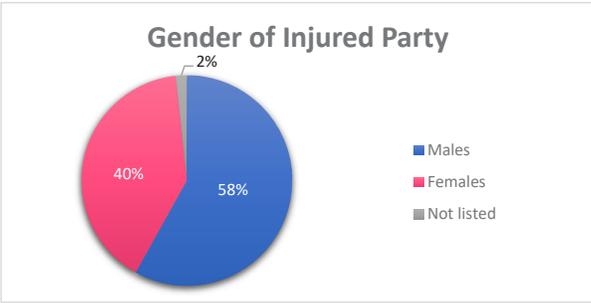


**All data from 2021 is preliminary as reporting is not yet complete.*



Firework Injury Statistics for 2021*

There was a total of 179 injuries caused by fireworks in 2021. The person shooting the firework was most likely to be injured and the hands were the most common body part to be injured. Over half of injuries occurred on the 4th of July and most persons received burns. There was a 78% increase in injuries from 2020, that occurred to those between the ages of 4 and 8. A significant increase in injuries was also noted in ages 9 through 13. The highest incidences of injuries were caused by mortars or artillery fireworks and smoke bombs.



*Statistics are current as of 08/20/2021 and are gathered from a voluntary report submitted by healthcare facilities in Kansas.



Kansas Firefighter Safety & Recruitment Grant

We awarded 30 Kansas Fire Departments the 2022 Kansas Firefighter Recruitment and Safety Grant (KFRSG). The award notifications were mailed out to departments on Nov. 30. We make this grant possible through our budget passed by the State Legislature and signed by the Governor. After the grant was suspended last year due to lack of funding, we reinstated it with a new budget of \$100,000, which was down from \$400,000.

We received grant requests from 42 departments, totaling over \$600,000. While the total amount was lower, we know the funds distributed made a significant difference for our smaller departments. It is imperative that they have the proper safety gear and recruitment tools to ensure their community's safety.

Departments that applied that were not compliant with the National Fire Incident Reporting System (NFIRS) were not eligible to receive grant funds. NFIRS is an all-incident system designed to portray an accurate picture of what the fire service does for the citizens of Kansas, not just fighting fires. This information is so valuable most grants, state-wide and nationally, require departments to be compliant with NFIRS before grant money will be awarded.

Grants issued through the KFRSG program cover the costs of safety gear for volunteer and part-time firefighters. We know that volunteer and part-time fire departments face recruitment and retention challenges, because they do not have the funding to provide safety equipment. Without new equipment provided by the recruiting fire department, potential volunteers are faced with not only donating their time but also providing their own safety gear, sharing gear with others, or doing without.

Due to a lack of funding in the OSFM budget, the KFRSG program is scheduled to be discontinued for next year. We would like to see this grant program reinstated at some point. However, it will require increased funding from the State Legislature. We have urged grant recipients and fire departments to contact their state legislators to let them know the importance of this funding for their departments and communities. The Governor is recommending \$100,000 in the agency budget for Fiscal Year 2023.

Commercial Industrial Hemp Processing Program

In 2021, the OSFM took over the registering of commercial hemp processors in Kansas from the Kansas Department of Agriculture. *K.A.R. 22-26 Commercial Industrial Hemp Processing Regulations* was permanently adopted on Oct. 10, 2021.

Our Industrial Hemp Processing Program has issued eight licenses and currently has three pending applications in the final plans review and inspection stage. Eighty-two background checks have been completed on employees of the 11 applicants. Of these 11 applicants, four are agricultural in nature and seven are chemical extractors.

Chemical Extractors Include:

- One cold press
- One CO2
- Five ethanol

