Year in Review 2023

FEBRUARY 7, 2024

Kirkwood Fire Department Authored by: Fire Chief Jim Silvernail







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2023 Year in Review: Letter from the Fire Chief

The year 2023 was another productive year for the Kirkwood Fire Department. I am proud to say that this organization is strategically operated and planned, with all decisions being executed in accordance with mission specific objectives. A new Fire Department Strategic Plan was developed and implemented in 2023, replacing the plan that was effective for the previous five (5) years (2017-2022). The objectives, in addition to excelling and increasing current gains, will focus on the initiatives of: 1. Growing department morale and culture, 2. Committing toward improved of diversity/equity/inclusion (DEI), and 3. Assessing and improving department facilities.

As the Fire Chief, I have made a commitment toward providing an environment and culture that is equitable and ideal for our members, who are the greatest resource of the department. In 2023, the City and the Kirkwood Firefighters Local 2665 were able to negotiate a mutually satisfactory Collective Bargaining Agreement (CBA). This agreement is effective between August 17, 2023- December 31, 2025. In addition, the City was also able to provide all eligible members a yearly membership/coverage to the Missouri Firefighters Critical Illness Pool. This was a non-negotiated benefit that was not included in the current CBA.

In addition to these initiatives, the Fire Department completed numerous projects throughout the year. We were successful in the attainment of two grants: 1. A Missouri American Water Grant for \$1200 (fire service equipment) 2. A Missouri Department of Public Safety Grant for \$9500 (fire service training). The Fire Department was also able to make technological improvements. One project was the conversion to a new reporting software system, First Due. Secondly, the City was able to update our computer aided dispatch (CAD) to the more modern and robust Motorola Premiere 1.

A larger project that was completed during the year was the update to the City's fire code. The Fire Marshal was able to make great progress in providing increased safety measures for our citizens and visitors by updating the code to the 2021 International Fire Code.

The year also saw an innovation and change to our service delivery model at fire station #3. It was decided for a more efficient use of resources, a quick attack vehicle (1531) was to be utilized to assist with emergency medical calls and miscellaneous fire calls (excluding structure fires). This initiative was implemented to reduce the usage of the Tower Ladder 1535, which is purposed for structural firefighting. This action has saved approximately 1073.05 gallons of diesel/year and has relieved approximately \$17,226.23/year in maintenance expenses for Tower Ladder 1535.

The Fire Department continued to provide exceptional service delivery and met the demands of the community. This was effectively achieved through the professional efforts of the dedicated men and women of the Kirkwood Fire Department. Call volume for 2023 totaled 5269 alarms, a very insignificant decrease of six calls from 2022. Fire Department personnel completed 7,324 hours of training. In addition, crews also completed all assigned activities and projects, including: hose testing, hydrant inspections and flow testing, commercial inspections, public relation activities, and daily maintenance of facilities and equipment.

In 2023, the City was once again evaluated by the Insurance Services Office, Inc. (ISO) and received our Public Protection Classification. Our classification remained unchanged and remained a "3." I would like to point out the Fire Department subcategory received a 45.45 out of a possible 50. This is a true testament to the professionalism of the entire department.

2023 was also a year of major capital purchases, predominantly fleet. These purchases included a rescue/pumper, two (2) ambulances, and a new command vehicle. Much of this was made possible through the certificate of participation bonds.

Finally, I would like to report on the progress of our newly implemented Battalion Chief program. After over a year of validation, this program has proven to have improved department communications, improved operational safety, and created increased consistency by bridging the gap between administration and operations. The proof can be illustrated through numerous high-hazard experiences and general streamlined communications that were made uniformly throughout the department due to the new

command structure. At the end of the year, one of our first Battalion Chiefs, B/C Dennis Fischer, retired. Captain Michael Bazzoni was promoted to fill this vacancy and assume command of "C" Shift.

As the Fire Chief, I can validate the dedication of all the members of this organization. They are proud, proficient professionals of the first responder industry who have answered all the trials of 2023, meeting all demands and expectations of the Kirkwood community.

Respectfully Submitted,

James L. Silvernail

Fire Chief

2023 Highlights

- Development and implementation of a new Five Year Strategic Plan
- Ratification of a new Collective Bargaining Agreement
- Received two grants (Mssiouri American Water and Missouri Department of Public Safety)
- Numerous capital purchases/replacements
- Adoption of new fire code (IFC 2021)
- New computer aided dispatch (Motorola Premiere 1) and reporting software (First Due)
- Public Protection Classification update (ISO)
- Total Property Saved: \$26, 564,765 (Total Property at risk: \$27, 267, 100)

 Total percentage saved: 97%



2023 Year in Review: Highlights from Operations/Suppression/Training

The Division of Operations is headed by Assistant Chief Brian Zaitz. A/C Zaitz's areas of responsibility include: all functions of fire department operations, training, equipment, and facilities. He also directly supervises the Fire Marshal.

5269 Calls for Service

EMS: 3468

FIRE: 1801

Total Property Saved 2023

\$26,564,765 (97%)

Training

7324 HOURS 133 HOURS/ MEMBER (AVG)

Projects

(Refer to attached Annual Operations Report)

- IMPLEMENTATION OF NEW CAD/STATION ALERTING
- FIRE ATTACK PACKAGE COMPLETED
- SOFTWARE UPGRADES (FIRST DUE)
- COMPLIANCE TESTING- PUMP TESTING, LADDER TESTING, SCBA FLOW AND FIT TESTING
- NUMEROUS CAPITAL IMPROVEMENT PROJECTS



2023 Year in Review: Highlights from Emergency Medical Services

The Division of Emergency Medical Services is headed by Chief Medical Officer, Deputy Chief David Smith. Deputy Chief Smith leads and manages all functions associated with an advanced life support (ALS) transport system for the department.

EMS Call Volume

TOTAL RESPONSES: 3,468

TOTAL PATIENT CONTACTS: 3,446

AVERAGE RESPONSE TIME: Kirkwood Fire - 5:26 / NFPA Benchmark

8:00

GEMT Revenue

NET REVENUE 2023: \$146,811.79

Glendale EMS Expansion

ARRIVAL ON SCENE 90% OF THE TIME @ 08:03(CONTRACT STIPULATES 75% @09:00)

AVERAGE ROLLING RESPONSE TIME: 6:09

ANTICIPATED REVENUE: \$165,000

EMS Completed Projects

- INVENTORY ANALYSIS FOR USAGE AND EXPIRATION OF DISPOSABLE MEDICAL SUPPLIES COMPLETED AND YIELDED A SAVINGS OF \$7,088.00 IN THE FIRST YEAR.
- MEDICARE AUDIT CONTINUES AND WILL BE COMPLETE IN 2024, THIS IS AN 18 MONTH PROJECT
- MEDICAL CONTROL CONTRACT RENEWED
- SPECIAL NEEDS TRACKING & AWARENESS RESPONSE SYSTEM CONTRACT UPDATED AND SIGNED
- DEA AUDIT COMPLETED



2023 Year in Review: Community Risk Reduction and Fire Prevention

The Division of Community Risk Reduction and Fire Prevention is led by Fire Marshal Robert Sumpter, overseen by the Assistant Chief of Operations. This division delivers safety and equity to the community through life and safety permitting, inspections, and plan review. In addition, this office develops and implements risk reduction initiatives.

2023 Totals

TOTAL PERMITS ISSUED: 105

TOTAL INSPECTIONS CONDUCTED: 89

PLANS REVIEWED: 118

Revenue Generated

REVENUE FEES: \$17,416.00

Projects

- CURRENTLY WORKING WITH SCHOOLS TO IMPLEMENT
 PREMISE ID FOR ACTIVE KILLER SITUATIONS
- BUSINESS CONTINUITY PROGRAM AND PRESENTATIONS
- CONTINUED PUBLIC RELATIONS/CRR: TOURS, SAFETY TALKS, TOYS FOR TOTS

2023 Staffing



Administration

Fire Chief- James Silvernail
Assistant Fire Chief (Operations and Training)- Brian Zaitz
Deputy Fire Chief (Chief Medical Officer)- David Smith
Fire Marshal (Fire Prevention and Risk Reduction)- Robert Sumpter
Administrative Associate- Bonnie Hoylman

A Shift (17)

- 1 Battalion Chief-Battalion Chief Hayes
- 3 Fire Captains
- 3 Fire Engineers
- 10 Firefighter/Paramedics

B Shift (17)

- 1 Battalion Chief-Battalion Chief Janes
- **3 Fire Captains**
- 3 Fire Engineers
- 10 Firefighter/Paramedics

C Shift (17)

- 1 Battalion Chief- Battalion Chief Fischer
- **3 Fire Captains**
- 3 Fire Engineers
- 9 Firefighter/Paramedics
- 1 Firefighter EMT

2023 Apparatus



Station #1 (137 West Argonne Dr.)

1510 2018 Pierce Dash Pumper

1517 2018 Freightliner/Osage Ambulance

1590 (Reserve) 2007 Pierce Pumper

1597 (Reserve) 2009 Freightliner/Osage Ambulance

Station #2 (11804 Big Bend Rd.)

1524 2009 Pierce Quantum Rescue/Pumper

1527 2016 Freightliner/Osage Ambulance

15 UTV 2022 Polaris 4x4

15 USAR Heavy Rescue Trailer

1519 2011 Ford F250 Pickup

Station #3 (1321 West Essex Ave.)

1535 2010 100' Aerial Tower

1537 2015 Freightliner/Osage Ambulance

1531 2023 Pierce Quick Attack Vehicle

15 Haz Mat 2008 Hazardous Materials Truck

2023 Service Area



The Kirkwood Fire Department proudly serves the cities of Kirkwood and Oakland, also providing fire department management and advanced life support (ALS) transport services for the cities of Glendale and Warson Woods.









"Saving Life and Property"

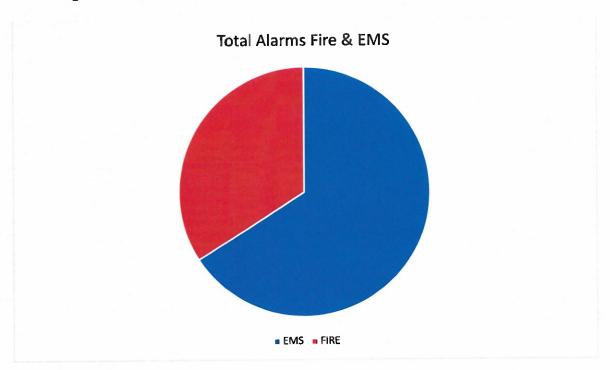


Kirkwood Fire Department 2023 Operations Report

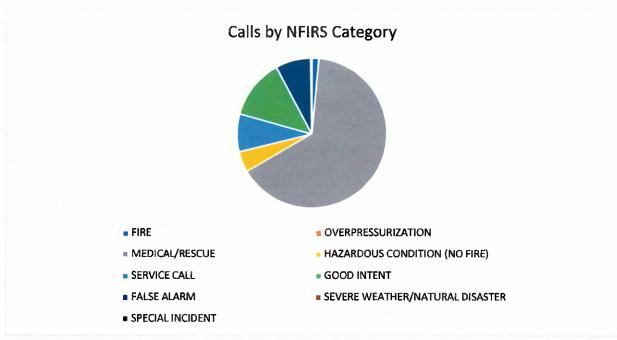
2023 was an exciting year for the Kirkwood Fire Department from large-scale emergencies, challenging trainings, numerous in-house continuing education opportunities, public relations and educational events. The A major accomplishment for 2023 was the Kirkwood Fire Department receiving a score of a 3 out of 10 from the Insurance Services Office. This is testament to the strong work of the fire department to not only maintain the highest level of operational efficiency but also the work related to community risk reduction, fire inspections, public education, apparatus maintenance and hydrant testing.

Calls for Service

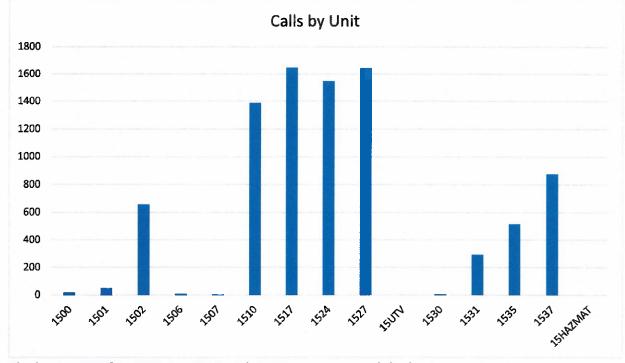
During 2023, the Kirkwood Fire Department responded to 5269 calls for service. These were divided into 3468 EMS calls and 2001 fire responses. Of these, the Kirkwood Fire Department responded to 31 working structure fires, these included a fourth alarm commercial structure fire within the City of Kirkwood. In addition, Kirkwood assisted on two natural disasters, a statewide mutual aid response to Bollinger County, MO for search and rescue efforts following an EF-2 tornado as well as a regional mutual aid response to Olivette, MO following a severe weather high wind event.



The calls can be further broken down into the 9 National Fire Incident Reporting Categories, below is a graphical depiction of the calls by category.



Below is a depiction of the overall responses by unit for year 2023:



The busiest LSV for 2023 was 1517 with 1653 responses and the busiest engine company was Rescue Engine 1524 with 1553 responses.

Significant Calls for 2023:

Alarm 23-0047 11376 Manchester Road

Residential Structure Fire with Fire Victim

Alarm 23-0455
 456 Lindemann Road

o Barn Fire with No Exposure

Alarm 23-0690 631 Leffingwell Avenue

Commercial Structure Fire – 4th Alarm

Alarm 23-1054 10132 Manchester Road

o Residential Structure Fire

Alarm 23-1185
 WB 270 & Hwy. 370

o Haz-Mat Team Response for Overturned Tractor Trailer

Alarm 23-1266 2350 Timberview Road

o Technical Rope Rescue for Victim 20' from Grade

Alarm 23-1424 Bollinger County MO

Strike Team 3 USAR Response for Tornado Impacted Area

Alarm 23-1694 Hwy 44 & Lindbergh

MVA Involving Numerous PD Vehicles

Alarm 23-1912
 413 Peeke Avenue

o Residential Structure Fire

Alarm 23-2445
 915 Des Peres Drive

o Residential Structure Fire with Two Exposures Assist to Des Peres

Alarm 23-2709
 1140 Diehlmann Road

o Strike Team Response to Olivette for Wind Event

Alarm 23-2773 Hwy 270 & Marshal Road

o MVA with Technical Rescue for Trapped Victim 120' Below Grade of Hwy 270

• Alarm 23-3138 141 Peeke Avenue

Detached Garage Fire

Alarm 23-3229 411 Lee Avenue

o Residential Structure Fire Involving Lithium Ion Battery

Alarm 23-3687
 1202 S. Kirkwood Road

MVA with Rescue (Multiple Patients)

Alarm 23-4156
 340 Popin Avenue

o Residential Structure Fire – 3rd Alarm Assist to Webster Groves

Alarm 23-4251 11287 Manchester Road

o Active Shooter Response

Alarm 23-4397 7351 Hoover Avenue

Central Metro Rescue Task Force for Confined Space Rescue

Alarm 23-4535
 325 Rose Lane

o Residential Structure Fire with Rescue of One Fire Victim

Alarm 23-4607 306 Aldridge

Patient with Facial and Extremity Injuries Due to IED

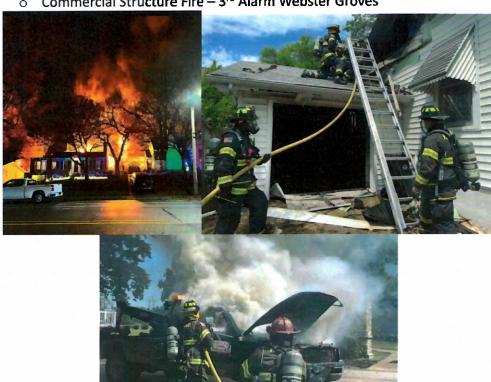
Alarm 23-4674

812 Kinyon Avenue

- Residential Structure Fire with Fire in the Basement
- Alarm 23-4828

705 S. Laclede Station Road

o Commercial Structure Fire – 3rd Alarm Webster Groves



Training

Training is a fundamental aspect of the fire service; crews must be prepared and ready to face whatever challenge is needed by the community, this includes responses to fires, technical rescues, hazardous materials and other calls for service. During 2023, the Kirkwood Fire Department completed 7324 hours of training. Kirkwood prides itself on having a robust training program that includes continuing education, certification and hands-on training programs.

- Crews conducted mutual aid training with Fenton Fire Protection District on Hazmat-15 and the operations of establishing a decontamination corridor for both haz-mat technicians as well as potential victims.
- Kirkwood crews conducted in-service training on 15UTV, a new full-use utility vehicle that provides both firefighting and transport capabilities for the City of Kirkwood.

- Kirkwood FD hosted Ameren UE to conduct their firefighter safety in responding to electrical emergencies, members from Kirkwood, Frontenac and Glendale participated in the training.
- Kirkwood hosted members from several agencies and conducted urban flood operations, a review of recent flood events in the area and mitigation/rescue strategies
- Kirkwood members attended a MODFS grant funded training on building construction, learning the hazards faced with today's modern construction.
- Kirkwood obtained grant funding to co-host the NFPA 1700 course, this course focused on critical fire ground operations, Kirkwood was able to have 5 members attend this two-day course.
- Kirkwood hosted training for Des Peres, Crestwood, Fenton and Valley Park conducting NFPA 1410 drills, these first due drills focused on initial line deployment and establishment of a water supply to the first arriving engine.
- Kirkwood hosted a MODFS funded Man-in-Machine training course which taught members how to safely extricate patients who become entrapped in various household and industrial appliances and equipment. Kirkwood had 6 members attend this 2-day course.
- Kirkwood in conjunction with the Pattonville Fire District, conducted large scale commercial fire operations in an abandoned grocery store. This training focused on crew continuity, line placement and fire ground communications.
- Kirkwood conducted rope rescue training at the battalion level, focusing on the basics of anchors, 3:1 haul systems and dual tension lowering systems.
- Kirkwood participated in the county wide MACTAC Active Killer training in cooperation
 with St. Louis County PD, each crew rotated through conducting a hands-on drill with PD
 on response to an active killer situation.
- Kirkwood conducted live burn evolutions in conjunction with Tri-County Training Consortium, this training provided a real-world fire scenario for every company to function both as the first arriving unit as well as conduct second-due operations.





In addition, the following certifications were achieved in 2023:

- 3 members obtained Fire Officer II
- 2 members obtained Fire Officer III
- 5 members attended NFPA 1700
- 5 members obtained Rope Rescue I & II
- 1 member obtained ICS 300
- 6 members obtained Driver Core/Pumper
- 2 members obtained Confined Space Rescue Technician

Fire Department Projects

- CAD/Fire Station Alerting 2023 was an exciting year for the way we receive calls, the
 Kirkwood Fire Department saw a major upgrade to both the computer assisted dispatch
 as well as the fire station alerting. The automation of both of these systems enhances
 operations and saves time in ensuring that the correct apparatus is dispatched to the
 alarms.
- Fire Attack Package The Kirkwood Fire Department standardized the fire attack hose and nozzles on all fire apparatus. The hoses and nozzles match in terms of flow and friction loss to provide the optimal water on the fire while reducing needed pump pressure to provide for more efficient fire operations.
- Ladder Testing All Kirkwood portable and aerial device ladders were tested by a thirdparty company. This annual testing ensures that the ladders are safe and functional when needed for a rescue or other fire ground operation.
- Pump Testing All Kirkwood Fire apparatus had their fire flow water pumps tested, again this annual third-party test ensures that the pumps meet not only NFPA standards but also the needs of the community to provide optimal flows for any fire event.

- SCBA Flow/Fit Testing All members of the Kirkwood Fire Department conducted their annual SCBA mask fit test, this quantitative test ensures that the SCBA mask fits each member properly and provides the necessary seal for safe breathing inside an IDLH environment. In addition, all SCBA were flow tested to ensure they are functional and operating properly.
- 2021 Building Code The Kirkwood Fire Department implemented the new 2021
 Building Code which provides for improved safety enhancements and meets the needs of the growing Kirkwood community.

Capital Improvement Projects

- Station Appliances The Kirkwood Fire Department is staffed 24/7, 365 days a year, as such the stations require all facets of life to include kitchens. In 2023 the Kirkwood Fire Department was able to upgrade the refrigerator/freezers and ranges at all the stations. These new appliances provide greater efficiency as well as space for the crews.
- CAD Computers The City of Kirkwood implemented a new computer assisted dispatch system in 2023, as such the Kirkwood Fire Department replaced all the mobile data terminals and connection devices on all apparatus to fully function with the new Kirkwood Communications Center CAD. These new computers have higher memory and respond more rapidly meeting the needs of the firefighters.
- Command Vehicle With the implementation of the battalion chief position in 2022, the Kirkwood Fire Department needed to provide a fully functional command vehicle to meet the response needs of this position. This new SUV will meet the on scene needs of improved accountability, safety and operational efficiency for the Kirkwood Battalion Chief.
- Slide-In Brush Unit Moving from 1539 to 1531, a fully functional quick attack vehicle.
 The Kirkwood Fire Department recognized a lapse in coverage to remote areas, the
 purchase of a slide-in brush unit for a current FD pick-up, allows for the Kirkwood Fire
 Department to remain response ready to all areas of the community including remote
 regions and parks. This new brush unit 1528 will marry well with 15UTV and provide a
 response package that will provide full access for the firefighters.



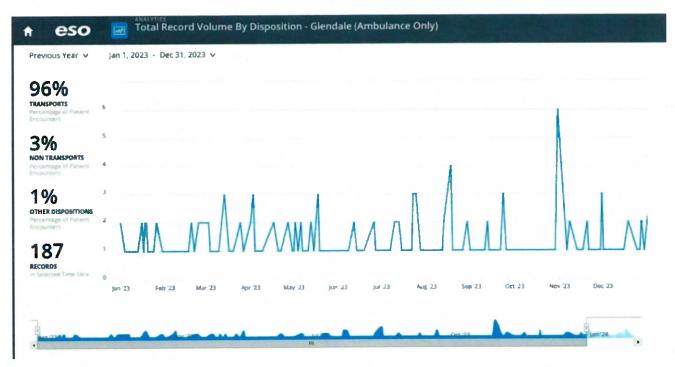
Kirkwood Fire Department 2023 Annual EMS Report

2023 EMS Call Volume Breakdown



This chart reflects the total number of total EMS Responses by Kirkwood for 2023

This is an increase of 5.1% from 2022



This chart reflects the total number of Glendale "EMS Responses" by Kirkwood for 2023

This is a decrease of 36.17% from 2022

Primary Impression

This report aggregates all primary impressions documented for the selected time slice. This presents information about the patient for the selected impression. Having an idea of how often, medics assign a certain impression as a primary can help identify training topics. Identifying the frequency of entities is also useful in determining the impact of clinical, protocol, or operational changes.

Abdominal Pain	94
Acute abdomen	2
Acute Bronchitis	1
Acute Respiratory Distress (Dyspnea)	37
Alcohol dependence with withdrawal	3
Alcohol use	27
Allergic Reaction	16
Altered Mental Status	93
Anaphylaxis	1
Angina pectoris	1
Anxiety reaction/Emotional upset	65
Asthma	8
Back Pain	76
Behavioral/psychiatric episode	123
Burn	4
Cancer	7
Cannabis related disorder	1
Cardiac arrest	24
Cardiac arrhythmia/dysrhythmia	31
Cellulitis	25
Chest Pain / Discomfort	99
Chest pain on breathing	9
Chest Pain, Other (Non-Cardiac)	24
Chronic Obstructive Pulmonary Disease (COPD)	7
Common Cold	1
Concussion with loss of consciousness	3
Confusion/Delirium	13

Congestive heart failure (CHF)	9
Constipation	5
Convulsions	31
COVID-19 - Confirmed by testing	16
COVID-19 - Exposure to confirmed patient	4
COVID-19 - Suspected - no known exposure	3
Dehydration	7
Diabetic Hyperglycemia	7
Diabetic Hypoglycemia	20
Diarrhea	12
Dizziness	49
Ear problem	1
Epistaxis	14
Eye Injury	2
Eye Pain	2
Failure to Thrive (Adult)	10
Fatigue	7
Febrile Seizures	5
Fever	16
Foreign Body in Larynx	2
Foreign Body in Pharynx	1
Foreign Body in Respiratory Tract	1
Foreign Body in Trachea	1
Foreign Body on External Eye	1
Gastro-esophogeal reflux disease (GERD)	3
Gastrointestinal hemorrhage	13
Generalized edema	2

Generalized Weakness	260
Headache	21
Health hazard contact /Suspected exposure	1
Heat Exhaustion	9
Hematemesis	2
Hematoma (Non-Traumatic)	1
Hemorrhage	21
Hyperkalemia	1
Hypertension	37
Hyperventilation	1
Hypoglycemia (Not Diabetic)	3
Hypotension	23
Hypothermia	2
Hypovolemia	1
Infectious Disease	3
Influenza	2
Injury	175
Injury of Abdomen	2
Injury of Ankle	14
Injury of Elbow	15
Injury of Face	34
Injury of Foot	6
Injury of Forearm	8
Injury of Head	112
Injury of Hip	57
Injury of Lower Back	10
Injury of Lower Leg	39
Injury of Neck	22
Injury of Nose	2
Injury of Pelvis	3
Injury of Shoulder or Upper Arm	41
Injury of Thigh (Upper Leg)	8
Injury of Thorax (Upper Chest)	15
Injury of Wrist, Hand, or Fingers	20
Intestinal obstruction	1

260 Kidney stones	1
21 Laceration/Abrasion/Hematoma	42
1 Laryngitis/Croup	3
9 Malaise	11
2 Medical device failure	6
1 Metabolic disorder	1
21 Nausea	34
Need for continuous medical superior line in the second superior line in the seco	ervision 10
Neurogenic Shock	1
No Complaints or Injury/Illness N	Noted 133
3 Obvious Death	11
23 Opioid related disorders	2
2 Orthostatic Hypotension	3
1 Overdose - Acetaminophen	1
3 Overdose - Alcohol	2
2 Overdose - Cannabis	1
175 Overdose - Hallucinogens	111
2 Overdose - Heroin	2
14 Overdose - Other opioids	5
15 Overdose - Unspecified	9
Pain (Non-Traumatic)	72
6 Palpitations	3
8 Patient assist only	200
Pelvic and Perineal Pain	4
57 Pitting Edema	2
10 Pneumonia	2
39 Poisoning / Drug Ingestion	5
22 Pregnancy related conditions	5
2 Pregnancy with contractions	1
3 Preterm labor without delivery	1
41 Psychogenic Shock	3
8 Pulmonary Embolism	2
15 Reduced Mobility	51
20 Renal Failure	1
1 Respiratory Condition due to Che	emicals 1

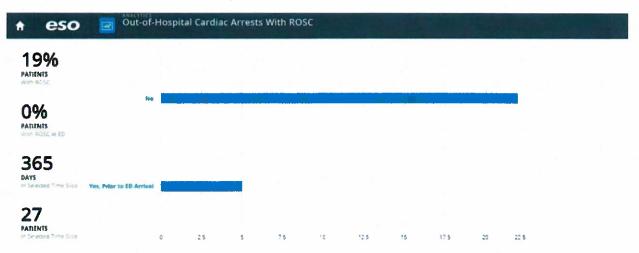
Respiratory disorder	8
Respiratory Failure	3
Respiratory Synctial Virus (RSV)	1
Seizures with status epilepticus	3
Seizures without status epilepticus	16
Sepsis/Septicemia	4
Septic Shock	2
Shortness of breath	140
Skin infection	7
ST elevation (STEMI) myocardial infarction of anterior	2
ST elevation (STEMI) myocardial infarction of inferior	5
Stroke	60

Substance abuse	5
Suicide attempt	3
Syncope / Fainting	123
Toothache	1
Transient Cerebral Ischemic Attack (TIA)	5
Urinary system disorder	7
Urinary Tract Infection (UTI)	10
Vaginal Hemorrhage	2
Visual Disturbance	2
Vomiting	31

2023 ROSC Evaluation

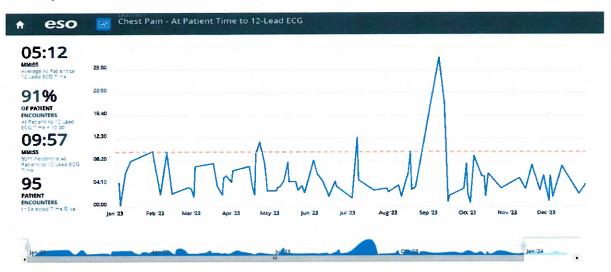
Cardiac arrest survival is a common system performance measure. The report below identifies and measures the return of spontaneous circulation from out of hospital cardiac arrest. The report shows the percentage of out of hospital cardiac arrest patients that achieve the return of spontaneous circulation at any point in the out of hospital resuscitation effort as well as the percentage of out of hospital cardiac arrest patients delivered to the hospital with a pulse.

There was a decline in this year's ROSC percentage directly attributed to the number of cardiac arrest where no care was initiated due to multiple patient variables (extended down times, hospice, DNR's, family wishes). The number of patients that this accounted for was 17, the previous year was 6. Overall cardiac arrest volume also decreased by 12.



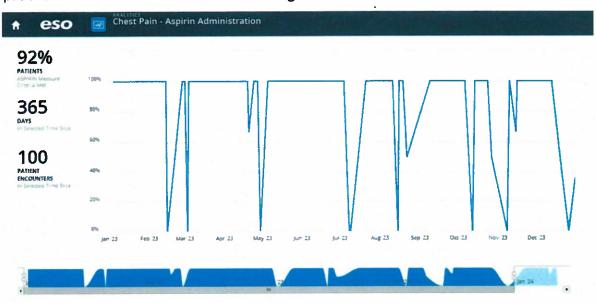
2023 At Patient Time to 12 Lead ECG

This report documents the time to acquire 12-Lead ECG for patients aged 35 years or older with Chest Pain. This report indicates the interval from "At Patient Time" to the documented time for the first 12-Lead ECG. Early identification of STEMI in the field by 12-Lead ECG can enable timely STEMI alerts, which can activate cath lab staff particularly on nights, weekends, and holidays thereby reducing time to treatment, enabling appropriate destination hospital selection, and significantly reduce mortality rates for every 15 minutes of reduced delay. Our goal on this metric is 5:00.



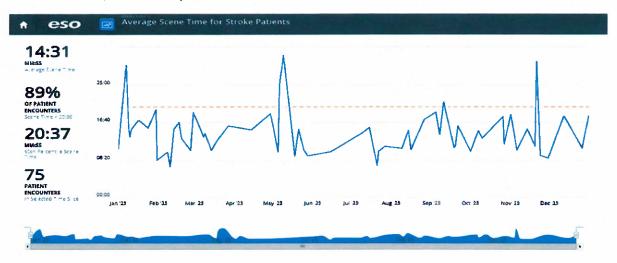
Aspirin Administration

This report calculates the percentage of chest pain patients (age 35 or older) that received Aspirin in the prehospital setting. Aspirin administration for ACS (Acute Coronary Syndrome) patients has shown to be beneficial in reducing the risks associated with MI.



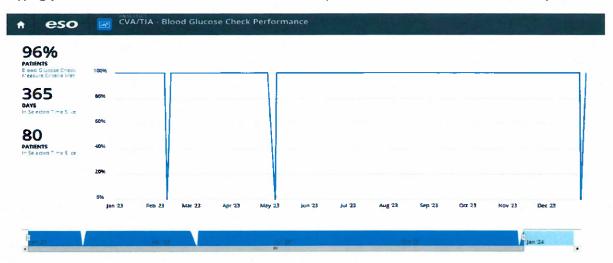
Average Scene Time for Stroke Patients

A Stroke is a time sensitive condition requiring rapid assessment and transport to definitive care. Time from first medical contact to reperfusion should be closely monitored to improve outcomes. EMS scene time is a critical component in the overall time to treatment. The metric established by Medical Control is 18 minutes; we well exceed this metric, nice work. Last years' time was 15:52, an 8.5% improvement.



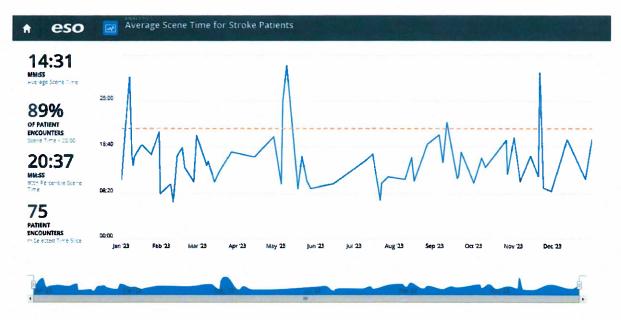
CVA/TIA Blood Glucose Check Performance

Identification of Stroke/CVA/TIA is critical for care and hospital advanced notification to enable preparation of appropriate teams and facilities. Further, missed hypoglycemia can be detrimental to the patient by leaving the brain without glucose for extended periods of time. Hypoglycemia should be identified and treated early in the evaluation of a stroke/CVA patient.



Average Scene Time for Trauma Patients

This report monitors scene times for trauma patients. Trauma is a time sensitive condition requiring rapid assessment and intervention. Trauma systems should monitor EMS scene times as part of an ongoing quality improvement program. This report only takes into consideration Critical (Red) patients identified in the ePcr. Understandably, if a patient requires extrication, this will drive the time higher. The number of extricated patients in 2023 was 15 of the 75 encounters.



Transport Destinations

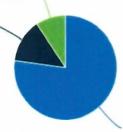
This report displays the number of patients transported in calendar year 2022. 2022 total transports were 2,306. 2023 has seen an increase of 5.37% to a total of 2430.

Mercy Hospital-St. Louis	1,083	St. Louis University Hospital	20
Missouri Baptist Medical Center	456	Barnes-Jewish Hospital West	19
Mercy Hospital-South	201	Cardinal Glennon Children's Hospital	6
St. Clare Hospital	197	Veteran's Affairs Medical Center	5
St. Luke's Hospital	185	DePaul Hospital	4
St. Luke's Hospital-Des Peres	130	Mercy South Urgent Care	1
St. Mary's Hospital	54	St. Marys	1
Barnes-Jewish Hospital South	36		
St. Louis Children's Hospital	32		

Narcotic Usage

Ketamine - IM 100 mg/ml (5 ml Vial) (9.45%)

Versed 5 mg/ml (1 ml Vial) (13.39%)



Fentanyl 50 mcg/ml (2 ml Vlal) (77.17%)

Fentanyl – 98 Versed – 17 Ketamine – 12

Narcotic Total Administered by Paramedic

(Total Administrations - 127)

Performed By	Total Administrations
Riley Haug	22
Alexander Listenberger	11
Nick Stiebel	10
Nicholas Triplett	9
Dustin LaPak	8
Nicholas Harre	7
Brendan Gorman	6
Brendan Riley	6
Casey Wood	6
Ryan Light	6
Zlatan Strbac	6
Nick Ulses	5

Christopher Kuester	4
Jordan Acre	3
Eldin Kandzetovic	3
Tyler Burns	3
Timothy House	2
Chaun Williams	2
Joseph Swain	2
Daniel Fischer	1
Phillip Drumm	1
Jeff Lofquist	1
Jeremy Palmer	1
Scott Sanders	1
Ryan Dempsey	1

Supply Usage and Cost Per Engine House

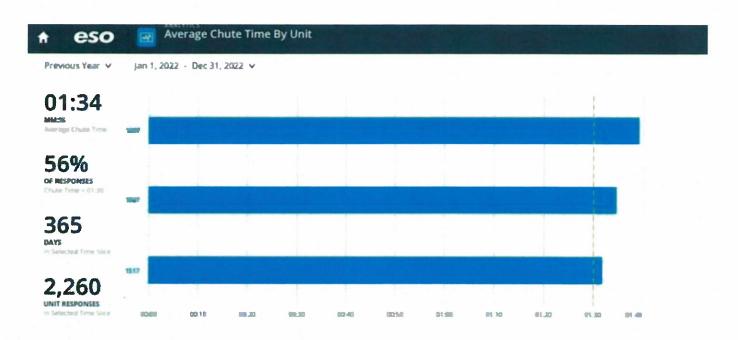
Engine House	Supplied Total
House 3 - EMS	\$12,669.25
House 2 - EMS	\$20,715,70
House 1 - EMS	\$16,075.80
	\$49,460.75

Top 10 Expenses (Medical Supplies)

Part Description	Part Number	Part Price	Quantity Used	Supplied Amount
ECG ELECTRODES (4 Pack)	230004	\$142.50	23	\$3,277.50
IV START KIT	351200A	\$2.37 '	1343	\$3,182.91
ZOLL - RAINBOW DCI SENSOR (3 FT) PATIENT END	8000-000371	\$698.61	4	\$2,794.44
ETCO2 - NASAL CANNULA - ADULT	177268	\$8.78	308	\$2,704.24
GLOVES - XL	290328	\$10.07	263	\$2,649.20
GLOVES - L	290327	\$10.07	262	\$2,639.13
ZOLL CPR STAT-PADZ ELECTRODE - ADULT	8900-0400	\$56.78	41	\$2,327.93
EZ IO NEEDLE - LARGE ADULT (YELLOW)	9079-VC-005	\$110.00	20	\$2,200.00
ZOLL - RESQ-POD	RESQPOD ITD 10	\$116.59	14	\$1,632.26
SALINE LOCK - WITH EXTENSION SET	1714-31081	\$1.15	1293	\$1,486.95

Chute Times

This report displays the average chute by unit over a specified period to time. Chute time is the elapsed period from dispatch timestamp to the en-route timestamp. The X-axis displays time intervals in seconds. The Y-axis is the list of units. Each bar on the chart represents the average time for the identified unit. Any record with a chute time above 10 minutes is categorized as an exception and excluded.



1517 - 1:25 (2022 - 1:31) 6.5% Faster Chute Time

1527 - 1:28 (2022 - 1:34) 6.3% Faster Chute Time

1537 - 1:42 (2022 - 1:39) 3.0% Slower Chute Time

Glendale EMS Transport Service Metrics - 2022

Responses to Glendale (Ambulance only) – 187

Transports – 96% (When a Kirkwood ambulance arrives in the scene)

Kirkwood Ambulance on Scene 90% of the time @ 08:03 (Contract Requires - 75% @ 09:00)

Miscellaneous EMS System Statistics

Average Scene Time - 15:07 (2022 time 15:49) a decrease of 4.02%)

Average Transport Time - 13:35 - No change form 2022

Average Total Call Time – 51:25 (2022 time 51:49) a decrease of .71% (Goal of 1 Hour)

Transports with No Lights and Siren – 88% – No change form 2022

Patients Treated for Pain with a Pain Score of 7 ot Greater – 57% - (2022 - 48%) - **2024 goal of** 75% !!!!!!!!! We are increasing but still need improvement in this metric.

<u>Advanced</u> Airway – First Pass Success Rate– 85% (26 Attempts) – Same as 2022 with 1 less attempt.

Ambulance Patient Offload Time - 12:19 (2022 - 13:44) - A decrease of 7.5%



Highlights/Notable Alarms from 2023

The Kirkwood Fire Department "New Apparatus Arrival and Showcase" By

Chief Jim Silvernail

The Kirkwood Fire Department has taken delivery of unit 1531, a fast attack vehicle. 1531 has a 1500 gallon per minute pump, a 300 gallon booster tank capacity, and compliment of equipment, hose, and hand tools. It will be stationed at station #3, 1321 W. Essex, and will operate in conjunction with Tower Ladder 1535. Unit 1531 will be utilized to respond to all emergency life threats (assisting the ambulance) and miscellaneous fire calls (non-structure fires) within the station #3 response area. The main suppression apparatus for structure fires for station #3 will remain the responsibility of Tower Ladder 1535. The unit is scheduled to be in full service at the end of the month upon completion of equipment mounting and training.

1531 was on full display on February 3 at the Missouri Winter Fire School Equipment Expo in Columbia, Missouri. It was showcased by the Pierce Manufacturing regional distributor, Macqueen Emergency Fire Apparatus.







Kirkwood Fire Department 4th Alarm Commercial Structure Fire

By

Chief Jim Silvernail

At approximately 3:13am on 2/16/2023, the Kirkwood Fire Department responded for a report of a fire in a commercial structure at 631 Leffingwell Avenue. Initial crews arrived to find heavy smoke showing from the vents of the attached warehouse and immediately transmitted a working fire notification. Due to the advanced fire conditions, the size of the structure, the heavy fire load, and unknown location of the fire within the warehouse, the alarm was quickly escalated to a multiple-alarm response (requesting additional companies). After crews were able to make access to the structure by cutting large access holes and forcing doors, a heavy and advanced fire was found in the rear corner of the warehouse. The attached office building was not currently involved in fire; however, considered an exposure.

All crews who responded to this fire operated at an extremely high and outstanding level, going above and beyond the normal call of duty. This was absolutely one of the most challenging and stubborn fire attacks that we have conducted in at least ten years. The condition consisted of a very progressed fire in a large commercial building (warehouse), with numerous access issues. Forcible entry and access to the interior of the warehouse proved to be a challenge. There was an abundance of saw work, cutting overhead roll downs and breaching metal walls. The building was also tucked into the side of a hill, next to the railroad, with minimal to zero access to the rear. The roof was made of metal decking, making access to the roof and ventilation a challenge. The interior of the warehouse held an enormous amount of fire load, including paper, cardboard, plastics, and machinery.

Initial crews were very aggressive, forcing entry and deploying two x 2.5 inch attack lines. The fire was held in check initially; however, ran the back wall and ceiling. Periodically, racks and pallets of inventory would ignite. This caused changing conditions for a period of 2-3 hours as crews struggled to gain a foot hold. The smoke conditions changed numerous times and was relentless.

Tactics were changed multiple times throughout the event. Crews were eventually able to pinch the fire and contain it to the back corner of the warehouse. Tower Ladder 1535 was simultaneously able to make it onto the roof with their ladder to effectively cut a vertical ventilation hole. Crews finally gained control and fire was extinguished.

The warehouse was gutted; however, still standing. The attached exposure (office building) had no fire damage to the interior. One firefighter was transported to the hospital and released with minor muscle strain injuries. The investigation is still undetermined; however, not considered suspicious at this time.

There were over 30 fire units who responded to this fire with numerous assisting agencies. These agencies included:

- Crestwood Fire Department
- Glendale Fire Department
- Webster Groves Fire Department
- Valley Park Fire District
- Shrewsbury Fire Department
- Brentwood Fire Department
- Rock Hill Fire Department
- Des Peres Public Safety
- Frontenac Fire Department
- Ladue Fire Department
- Mehlville Fire District
- Affton Fire District
- Fenton Fire District
- Clayton Fire Department
- West County EMS & Fire
- Creve Coeur Fire District
- Maplewood Fire Department
- Richmond Heights Fire Department
- St. Louis Fire Responder Canteen





The Kirkwood Fire Department Residential Structure Fire in the 400 block of Peeke Ave By Chief Jim Silvernail

On 5/7/2023 at 1:44pm, the Kirkwood Fire Department was dispatched to a report of a house fire in the 400 block of Peeke Ave. Upon arrival, crews found heavy smoke and fire showing from the back of the structure. Crews immediately deployed a handline for fire attack while simultaneously conducting an aggressive search of the home. The initial bulk of the fire was found on the backside of the structure with heavy involvement to the attached garage. The fire extended into the attic and into the main living area of the home. The fire was quickly controlled and the search found no other occupants within the structure. One occupant was home; however, already outside at the time of the fire. The fire remains under investigation and no cause has been determined at the time of this brief. Kirkwood was assisted by Frontenac Fire Department, Glendale Fire Department, Crestwood Fire Department, Webster Groves Fire Department, and Des Peres Public Safety.





Kirkwood Fire Department Structure Fire with a Civilian Injury By Chief Jim Silvernail

At 2:19pm on November 7, 2023, the Kirkwood Fire Department was dispatched for the report of smoke in a residential structure in the 300 block of Rose Ln. A neighbor reported seeing smoke coming from the windows and the hearing the smoke detector activating. No one answered the door when she attempted to make contact with the resident.

The first arriving unit was the Battalion Chief, Craig Hayes, in command vehicle 1502. B/C Hayes initially reported nothing visible from the exterior. Upon exiting his vehicle and conducting a 360 degree situational size-up of the structure, he noticed smoke coming from the window and notified dispatch of a working fire condition. In completion of his full size-up, he found an unconscious female at the back door.

The first due engine company was ordered to make an offensive interior attack for fire control and further search. The first arriving ambulance was ordered to remove the patient from the structure and render advanced life support. An additional company assisted with the patient removal and the victim was successfully transported to the hospital with smoke inhalation and seizure activity. The fire was quickly placed under control and no further victims were found within the structure. Due to the quick action of the initial arriving Battalion Chief and first due companies, the fire was quickly extinguished and one civilian was removed, rapidly, and transported with a positive prognosis.

The Kirkwood Fire Department was assisted by the Crestwood and Glendale Fire Departments and the Fenton Fire Protection District on this first alarm assignment.



Kirkwood Fire Department Structure Fire on Jefferson Ave. By Chief Jim Silvernail

At 9:43 pm on December 8, 2023, the Kirkwood Fire Department was dispatched for the report of a structure fire in the 600 block of East Adams. There were several reports called into dispatch about a large fire in an unattached garage. Responding companies immediately reported a glow and smoke in the area.

The first arriving unit was the Battalion Chief, in command vehicle 1502. 1502 reported heavy fire showing from the street. The fire was located behind a residence in the 600 block of Jefferson Ave. and initial arriving companies were re-routed to that address for fire attack. The structure was a large, two-story detached garage what was fully involved in fire.

The first due engine company was ordered to make an defensive attack for fire control and fire containment. Crews began placing water on the fire, protecting the adjacent occupied structure. Attack lines were also deployed on the back of the structure from East Adams. 1502 was able to effectively coordinate the redeployment of apparatus and facilitate a two-sided attack.

After the deployment of three attack lines, the fire was contained and extinguished. The fire was placed under control and no injuries were reported. The adjacent house experienced siding damage from the intense heat; however, remained inhabitable and was saved from further fire damage.

The Kirkwood Fire Department was assisted by the Webster Groves, Crestwood and Glendale Fire Departments on this first alarm assignment.





Kirkwood Fire Department Transition: Retirement and Promotions By Chief Jim Silvernail

On December 30, 2023, Battalion Chief Dennis Fischer announced his retirement after 37 years of service to the City of Kirkwood. It was a bittersweet moment in the history of the Department, ending the long tenure of a valued member and leader. Dennis was and always will be a valued member of the Kirkwood Fire Department. An official retirement ceremony was held at Fire Station #1 on the morning of December 31, 2023 with a flag ceremony and a presentation by Mayor Griffin. Thank you for your service, Dennis!





May it be known that this certificate has been presented to Battalion Chief Dennis Fischer

on his retirement after 37 dedicated years of service to the City of Kirkwood as a loyal employee, leader and Chief Officer of the Kirkwood Fire Department. Battalion Chief Fischer was appointed as a Firefighter/Paramedic on 12/27/1986, promoted to Captain in April of 1996, appointed to Fire Marshal on 9/1/19, and promoted to Battalion Chief on 5/13/2022. The City of Kirkwood recognizes and congratulates Dennis on his accomplishments, thanks him, and wishes him well in retirement.

Battalion Chief Fischer's retirement also facilitated transition and promotion. Captain Michael Bazzoni was promoted to Battalion Chief on December 31, 2023 and will assume the command of "C" Shift. Battalion Chief Bazzoni began his career with the Kirkwood Fire Department as a Firefighter/Paramedic on 5/15/06 and was promoted to Captain on 8/29/19. Firefighter/Paramedic Phil Drumm was promoted to Captain on 1/1/2024. Captain Drumm was

assigned to Station 2C. Phil began his career with the Kirkwood Fire Department on 1/27/17.



