ImageTrend Collaborate™

QUICK FACTS

Lights and Sirens Usage Across the Nation

ImageTrend Collaborate™ Quick Facts are designed to provide rapid insights and awareness of key topics that relates to patient care, crew safety and operations management in the prehospital setting. These reports are supplemental information to inspire departments and others in the industry to evaluate their own data and how they compare against national data trends.

Authored by ImageTrend's Clinical & Research Services Team
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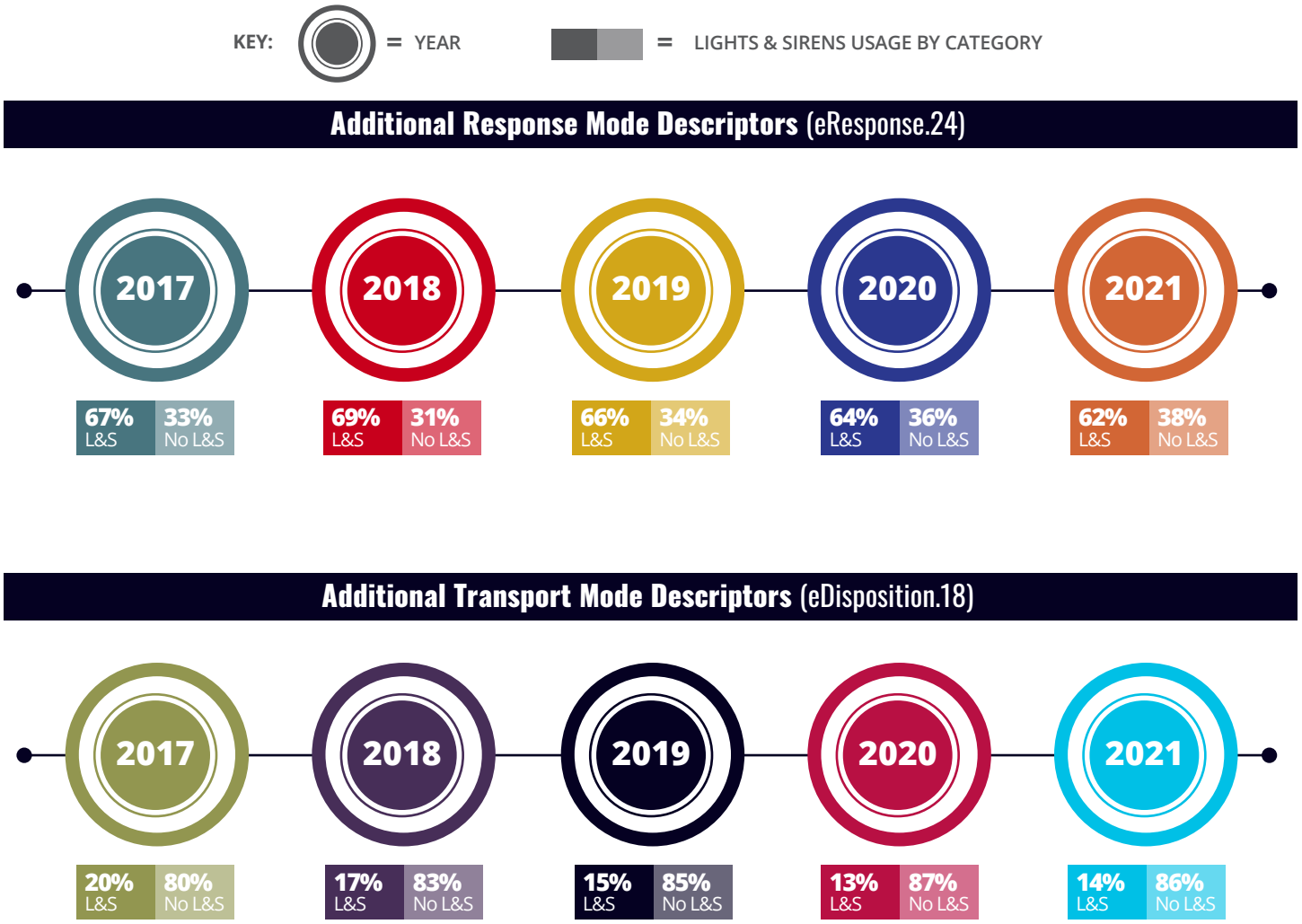
IMAGETREND

Lights and Sirens Usage Across the Nation

Lights and Sirens utilization in the prehospital setting can be one of the most dangerous actions taken during an incident not only to the responding crew, but also to the communities they service. The usage of lights and sirens has a purpose, but the data suggests that the industry over utilizes these modes. National organizations, such as National EMS Quality Alliance (NEMSQA), have established quality measures to monitor the usage and the adoption of dispatch triage systems continue to bring awareness and ensure appropriate response modes based upon patient condition.

The usage of Lights and Sirens in the prehospital setting is made up of two components, Additional Response Mode Descriptors (eResponse.24) and Additional Transport Mode Descriptors (eDisposition.18).[1] In this report we look at a variety of data points that focus specifically on the utilization of Lights and Sirens across the nation. A sampling of over 26 million records from 2017 to June 2021 were used in this report.

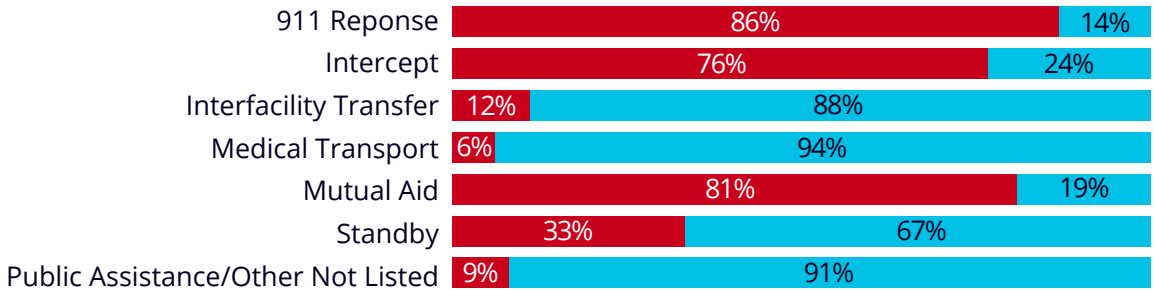


RESPONSE MODE TO SCENE

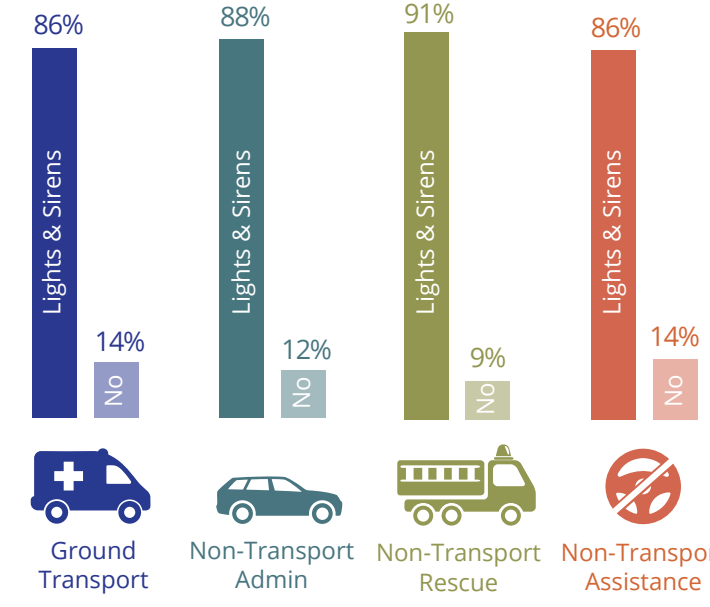
KEY: = LIGHTS & SIRENS = NO LIGHTS & SIRENS

Overall Lights & Siren Use

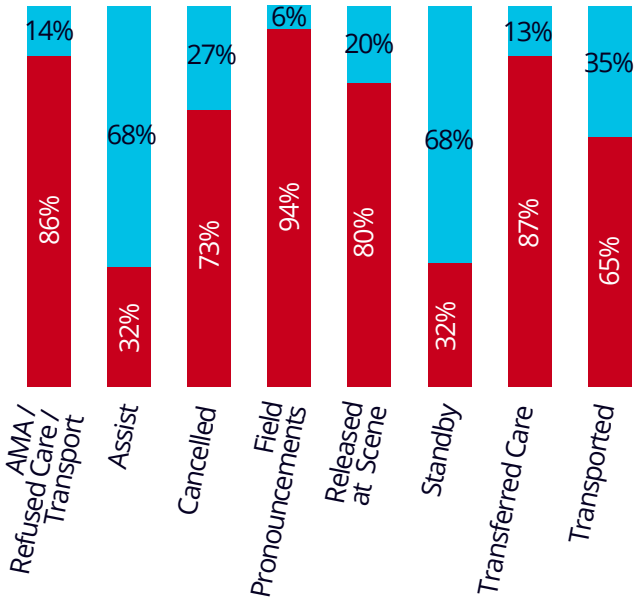
Type of Service Requested (eResponse.05) by Response Mode to Scene



Primary Role of the Unit (eResponse.07) by Response Mode to Scene for 911 Incidents



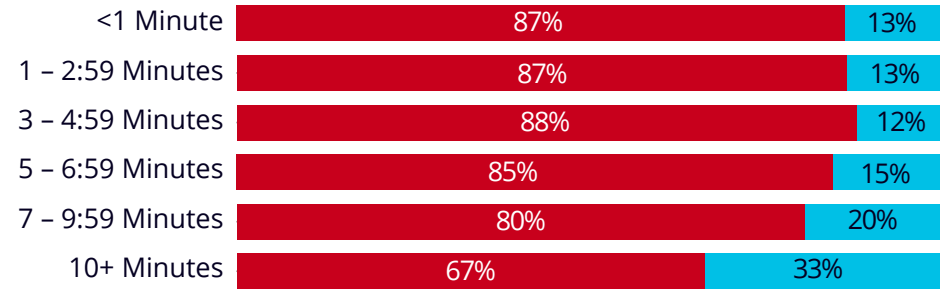
Incident Patient Disposition (eDisposition.12) Groups by Response Mode to Scene

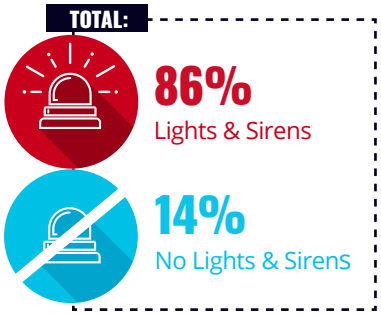


RESPONSE MODE TO SCENE (CONT.)

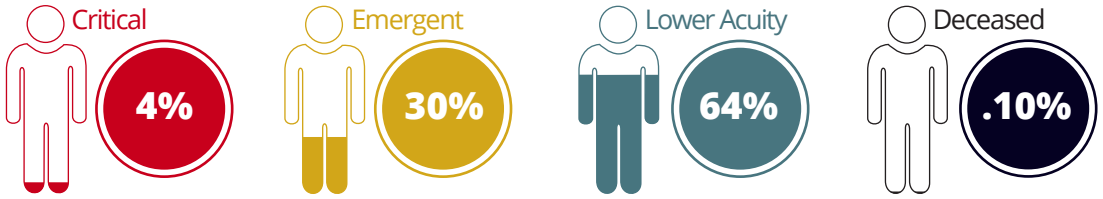
KEY: = LIGHTS & SIRENS = NO LIGHTS & SIRENS

Chute or Turn Out Time by Response Mode to Scene (Dispatch to Enroute Time)

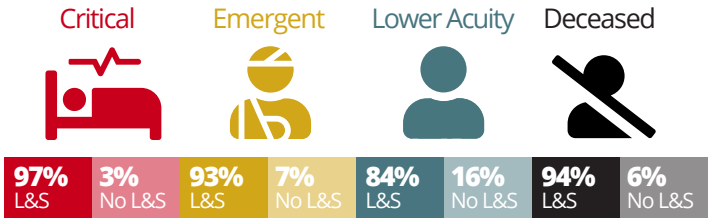




Initial Patient Acuity (eSituation.13) Breakdown by Response Mode to Scene for 911 Incidents



Initial Patient Acuity (eSituation.13) by Response Mode to Scene for 911 Incidents

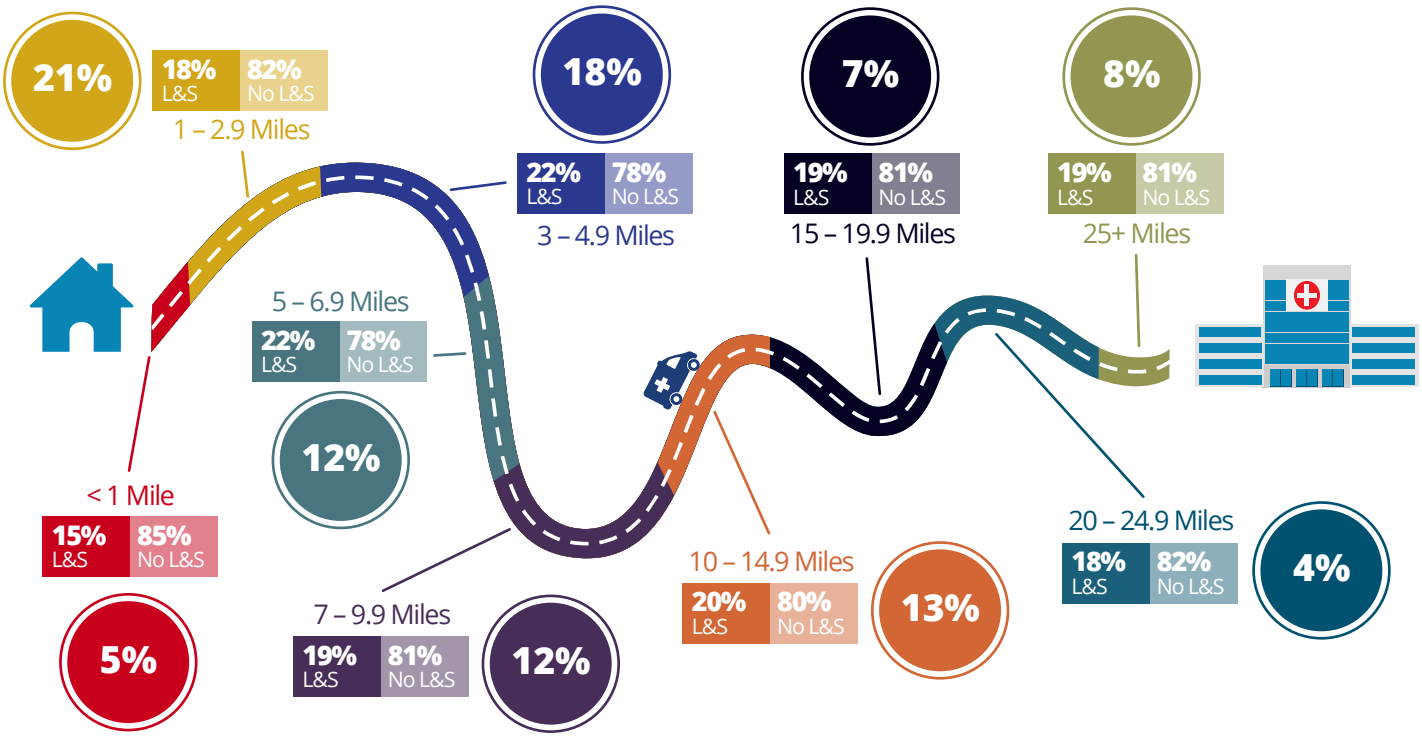


Overall Lights & Siren Usage for 911 Incidents with Patient Contact

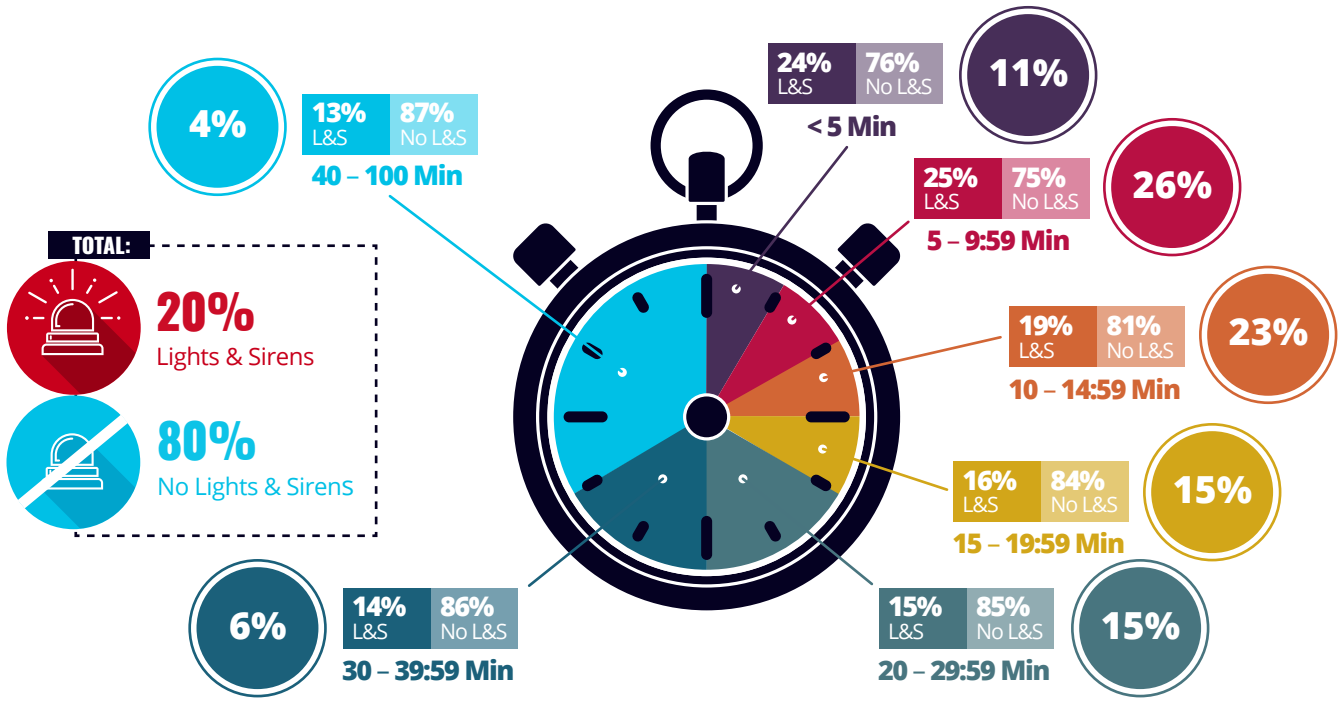
TRANSPORT MODE TO RECEIVING FACILITY

KEY: = OVERALL INCIDENT BREAKDOWN = LIGHTS & SIRENS USAGE BY CATEGORY

Transport Loaded Mileage by Transport Mode



Transport Times by Transport Mode



TRANSPORT MODE TO RECEIVING FACILITY (CONT.)

Response Mode to Scene Compared to Transport Mode to Receiving Facililty

		Transport Mode from Scene	
Response Mode Compared to Transport Mode		Lights & Sirens	No Lights & Sirens
Response Mode to Scene	Lights & Sirens	23%	77%
	No Lights & Sirens	2%	98%

TOTAL Lights & Sirens use for both components

15% Lights & Sirens

85% No Lights & Sirens

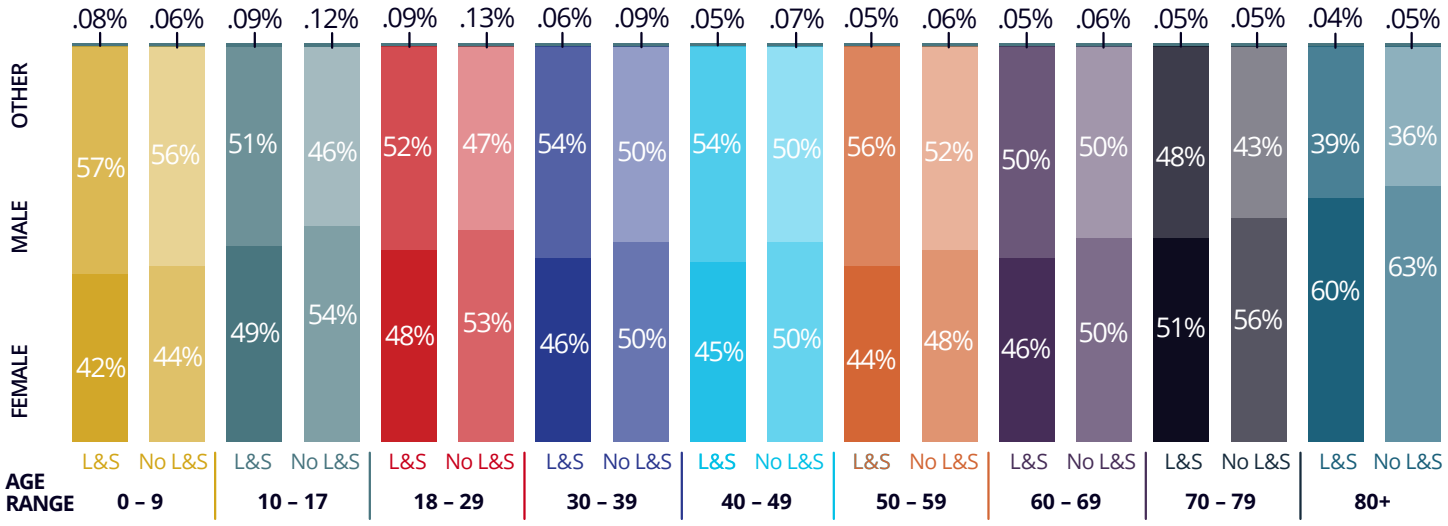
Patient Age Groups and Gender by Transport Mode

TOTAL:

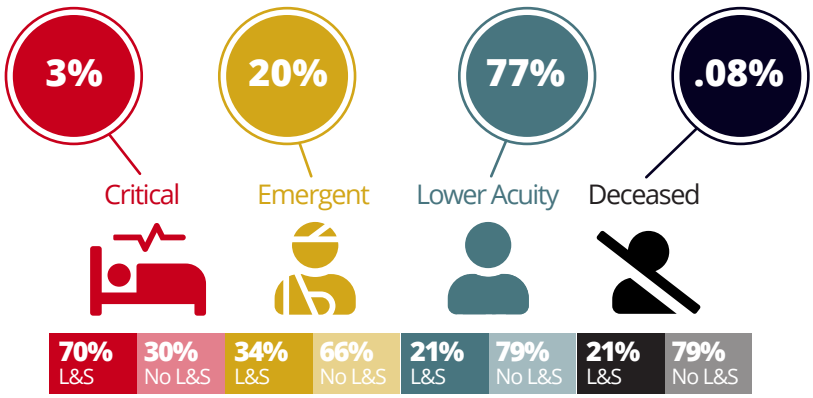
Male: **16%** L&S, **84%** L&S

Female: **14%** L&S, **86%** L&S

Other: **8%** L&S, **92%** L&S



Final Patient Acuity (eDisposition.19) by Transport Mode to Receiving Facility for 911 Incidents



TOTAL:

14% Lights & Sirens

86% No Lights & Sirens

Complaint Reported by Dispatch (eDispatch.01)	Response Mode to Scene (eResponse.24)		Transport Mode From Scene (eDisposition.18)	
	L&S	No L&S	L&S	No L&S
Abdominal Pain/Problems	76%	24%	12%	88%
Airmedical Transport	17%	83%	8%	92%
Allergic Reaction/Stings	86%	14%	19%	81%
Animal Bite	83%	17%	15%	85%
Assault	81%	19%	13%	87%
Automated Crash Notification	94%	6%	16%	84%
Back Pain (Non-Traumatic)	71%	29%	10%	90%
Breathing Problem	94%	6%	23%	77%
Burns/Explosion & Explosion	83%	17%	32%	68%
Carbon Monoxide/Hazmat/Inhalation/CBRN	79%	21%	18%	82%
Cardiac Arrest/Death	91%	9%	59%	41%
Chest Pain (Non-Traumatic)	95%	5%	22%	78%
Choking	91%	9%	23%	77%
Convulsions/Seizure	93%	7%	21%	79%
Diabetic Problem	87%	13%	18%	82%
Drowning/Diving/SCUBA Accident	95%	5%	46%	54%
Electrocution/Lightning	89%	11%	24%	76%
Eye Problem/Injury	66%	34%	11%	89%
Falls	81%	19%	15%	85%
Fire	88%	12%	25%	75%
Headache	82%	18%	12%	88%
Healthcare Professional/Admission	63%	37%	9%	91%
Heart Problems/AICD	91%	9%	20%	80%
Heat/Cold Exposure	85%	15%	13%	87%
Hemorrhage/Laceration	81%	19%	13%	87%
Industrial Accident/Inaccessible Incident/Other Entrapments (Non-Vehicle)	93%	7%	29%	71%
Medical Alarm	81%	19%	13%	87%
No Other Appropriate Choice	51%	49%	8%	92%
Overdose/Poisoning/Ingestion	88%	12%	20%	80%
Pandemic/Epidemic/Outbreak	63%	37%	7%	93%
Pregnancy/Childbirth/Miscarriage	87%	13%	26%	74%
Psychiatric Problem/Abnormal Behavior/Suicide Attempt	60%	41%	10%	90%
Sick Person	69%	31%	15%	85%
Stab/Gunshot Wound/Penetrating Trauma	92%	8%	53%	47%
Standby	52%	48%	15%	85%
Stroke/CVA	94%	6%	38%	62%
Traffic/Transportation Incident	94%	6%	24%	76%
Transfer/Interfacility/Palliative Care	10%	90%	5%	95%
Traumatic Injury	77%	23%	22%	78%
Unconscious/Fainting/Near-Fainting	95%	5%	25%	75%
Unknown Problem/Person Down	86%	14%	23%	77%
Well Person Check	77%	23%	24%	76%

About Collaborate

ImageTrend Collaborate™ aggregates de-identified, data to perform research, identify trends, benchmarks and drive public health awareness for the good of our communities. Collaborate is a research and analysis program developed by ImageTrend that is dedicated to the enhancement of healthcare and public safety industries. Collaborate provides insights and a higher-level awareness through industry-leading research. Collaborate utilizes a vast set of de-identified data sources including clinical, operational, licensing/credentialing, system of care registries and patient outcomes.

Methodology[1]

All data is collected and stored within ImageTrend Collaborate with the permission of each organization to opt in to utilize their data for research purposes. Data reported within this report is based from the National Emergency Medical Services Information System (NEMSIS) data elements. Over 26 million EMS Incidents from 2017 to June 2021 were used in this report.

ImageTrend's Clinical and Research Services Team

ImageTrend enhanced its data analysis solutions by establishing a Clinical and Research Services Team to better serve customers public health, public safety, and emergency response industries. Not only does this team provide insight into ImageTrend's solutions, but also bridges the gap between data collection and a need for industry-wide research.

About ImageTrend

ImageTrend, Inc. is dedicated to connecting life's most important data in the healthcare and emergency response community. We deliver software solutions, data analytics and services for EMS, hospitals, community paramedicine/mobile integrated healthcare programs (CP/MIH), critical care, fire, and preparedness to enable fully integrated patient-centric healthcare and public safety. Our commitment to innovation, our clients, and providing world-class implementation and support is unsurpassed. Based in Lakeville, Minnesota, we combine business analysis, creative design, and data-driven architecture to offer scalable solutions and strategies for today and the future. | ***www.ImageTrend.com***