**Just the Numbers:**

**Hindsight is 2020**

The goal of Firefighter Rescue Survey ([FirefighterRescueSurvey.com](http://www.FirefighterRescueSurvey.com) or check us out on Facebook) is to gather as much information as possible from actual rescues in the hopes of making us all more effective and efficient on our firegrounds. By collecting data from firefighters who have been in the exact situation that most of us spend a career preparing for, we hope to provide firefighters from around the globe a better chance to save a life. We have recently analyzed the data from 2020 (data was collected on 1.20.21), 293 recorded rescues and we'd like to share this info with everyone.

Before we get started though, here are a couple of rules for interpreting these data:

* We need to understand the entire context as any one specific data set is limited and has qualifications.
* We have been, and will continue to fine-tune the survey questions and answers in an attempt to make these data as accurate, well-defined, objective, and digestible as possible.
* Correlation does not always equal causation.
* We can’t always get an ‘ought’ from an ‘is’.
* More analysis is always needed.
* Take this data, and make it work for your department and your citizens.
* Lastly, if you have removed a civilian from a fire, please fill out a survey for each rescue at FirefighterRescueSurvey.com.

**Time of Day v Total Recorded Rescues:**

00:00 – 02:59 – 67 = 22.3 grabs/hour

03:00-05:59 – 37 = 12.3 grabs/hour

06:00-08:59 – 23 = 7.7 grabs/hour

09:00-11:59 – 46 = 15.3 grabs/hour

12:00-14:59 – 27 = 9 grabs/hour

15:00-17:59 – 37 = 12.3 grabs/hour

18:00-20:59 – 28 = 9.3 grabs/hour

21:00-23:59 – 43 = 14.3 grabs/hour

**Time of Day v Survival Rate:**

00:00 – 02:59 – 63% (42/67)

03:00-05:59 – 47% (17/36)

06:00-08:59 – 55% (12/22)

09:00-11:59 – 76% (35/46)

12:00-14:59 – 41% (11/27)

15:00-17:59 – 47% (17/36)

18:00-20:59 – 64% (18/28)

21:00-23:59 – 79% (34/43)

**Were There Reports of a Victim v Total Recorded Rescues:**

Yes - Report of Victim(s) – 75% (217/291)

Yes – Report of Everyone is Out – 2% (5/291)

No – No Report of Victim(s) – 18% (51/291)

No – No Report at All – 6% (18/291)

**Were There Reports of a Victim v Survival Rate:**

Yes - Report of Victim(s) – 63% (135/216)

Yes – Report of Everyone is Out – 100% (5/5)

No – No Report of Victim(s) – 66% (33/50)

No – No Report at All – 67% (12/18)

**Who Made the Statement About Victims Inside v Total Recorded Rescues:**

Resident of Fire Building – 50% (124/247)

Police – 6% (15/247)

Neighbor – 21% (53/247)

Bystander – 7% (18/247)

Unknown/Other - 15% (37/247)

**Who Made the Statement About Victims Inside v Survival Rate:**

Resident of fire building – 74% (91/123)

Police – 53% (8/15)

Neighbor – 34% (18/53)

Bystander – 61% (11/18)

Unknown/Other - 70% (26/37)

**Were Victim Reports Accurate (i.e. number of victims, location of victims, etc.) v Total Recorded Rescues:**

Yes – 80% (157/197)

No – 20% (40/197)

N/A – 91

**Were Victim Reports Accurate (i.e. number of victims, location of victims, etc.) v Survival Rate:**

Yes – 67% (104/156)

No – 70% (28/40)

N/A – 59% (53/90)

**When Was Search Initiated v Total Recorded Rescues:**

Pre Knockdown – 83% (242/291)

Post Knockdown – 17% (49/291)

**When Was Search Initiated v Survival Rate:**

Pre Knockdown – 68% (163/241)

Post Knockdown – 44% (21/48)

**When Was Search Initiated v Total Recorded Rescues:**

Pre RIT/RIC Assignment – 96% (279/292)

Post RIT/RIC Assignment – 4% (13/292)

**When Was Search Initiated v Survival Rate:**

Pre RIT/RIC Assignment – 65% (181/277)

Post RIT/RIC Assignment – 31% (4/13)

**Occupancy Type v Total Recorded Rescues:**

SFD – 53% (155/293)

MFD – 34% (101/293)

Mobile Home – 9% (26/293)

Other – 3% (8/293)

Commercial – 1% (3/293)

**Occupancy Type v Survival Rate:**

SFD – 56% (85/153)

MFD – 85% (85/100)

Mobile Home – 31% (8/26)

Other – 75% (6/8)

Commercial – 33% (1/3)

**Number of Floors Above Grade v Total Recorded Rescues:**

1 Story – 44% (128/291)

2 Stories – 34% (99/291)

3 Stories – 18% (53/291)

>3 Stories – 4% (11/291)

**Number of Floors Above Grade v Survival Rate:**

1 Story – 53% (68/128)

2 Stories – 59% (57/96)

3 Stories – 92% (49/53)

>3 Stories – 100% (11/11)

**Exterior Conditions Upon Arrival v Total Recorded Rescues:**

Nothing Showing – 4% (12/292)

Smoke Only – 36% (105/292)

<25% - 23% (67/292)

25-50% - 26% (75/292)

51-75% - 9% (26/292)

>75% - 2% (7/292)

**Exterior Conditions Upon Arrival v Survival Rate:**

Nothing Showing – 92% (11/12)

Smoke Only – 81% (84/104)

<25% - 65% (43/66)

25-50% - 49% (36/74)

51-75% - 38% (10/26)

>75% - 0% (0/7)

**Fire Location (Floor) v Total Recorded Rescues:**

Basement – 5% (14/292)

1st Floor – 59% (171/292)

2nd Floor – 17% (51/292)

3rd Floor – 9% (25/292)

>3 – 1% (4/292)

Multiple Floors – 9% (27/292)

Attic – 0% (0/292)

**Fire Location (Floor) v Survival Rate:**

Basement – 38% (5/13)

1st Floor – 57% (97/169)

2nd Floor – 76% (39/51)

3rd Floor – 96% (24/25)

>3 – 100% (4/4)

Multiple Floors – 56% (15/27)

Attic – N/A

**Fire Location (Room) v Total Recorded Rescues:**

Bedroom – 18% (52/290)

Bathroom – 1% (3/290)

Kitchen – 26% (76/290)

Family Room – 20% (58/290)

Garage – 0% (1/290)

Attic – 1% (3/290)

Exterior – 2% (5/290)

Multiple Rooms – 32% (92/290)

**Fire Location (Room) v Survival Rate:**

Bedroom – 67% (35/52)

Bathroom – 67% (2/3)

Kitchen – 85% (64/75)
Family Room – 57% (33/58)

Garage – 0% (0/1)

Attic – 67% (2/3)

Exterior – 80% (4/5)

Multiple Rooms – 47% (43/91)

**Fire Conditions Upon Entry v Total Recorded Rescues:**

Incipient – 7% (19/291)

Room and Contents – 42% (122/291)

Multiple Rooms – 30% (88/291)

Structure – 21% (62/291)

**Fire Conditions Upon Entry v Survival Rate:**

Incipient – 100% (19/19)

Room and Contents – 73% (88/121)

Multiple Rooms – 61% (53/87)

Structure – 39% (24/62)

**Initial Mode of Operation v Total Recorded Rescues:**

Offensive – 93% (268/289)

Defensive – 7% (21/289)

**Initial Mode of Operation v Survival Rate:**

Offensive – 67% (177/265)

Defensive – 29% (6/21)

**Visibility v Total Recorded Rescues:**

High Viz – 5% (16/292)

Moderate Viz – 19% (56/292)

Low Viz – 46% (135/292)

Zero Viz – 29% (85/292)

**Visibility v Survival Rate:**

High Viz – 81% (13/16)

Moderate Viz – 76% (42/55)

Low Viz – 60% (80/133)

Zero Viz – 59% (50/85)

**Conditions at Victim Location v Total Recorded Rescues:**

Fire – 3% (10/288)

Fire and Smoke – 28% (80/288)

Smoke – 68% (195/288)

No Fire or Smoke – 1% (3/288)

**Conditions at Victim Location v Survival Rate:**

Fire – 0% (0/10)

Fire and Smoke – 47% (37/79)

Smoke – 74% (143/193)

No Fire or Smoke – 67% (2/3)

**Did the Structure appear Vacant or Abandoned v Total Recorded Rescues:**

Yes – 2% (5/291)

No – 98% (286/291)

**Did the Structure Appear Vacant or Abandoned v Survival Rate:**

Yes – 80% (4/5)

No – 63% (179/283)

**Did the Structure Have Working Smoke Alarms v Total Recorded Rescues:**

Yes – 37% (107/293)

No – 30% (89/293)

Unknown – 33% (97/293)

**Did the structure have working smoke alarms v Survival Rate:**

Yes – 78% (82/105)

No – 55% (48/88)

Unknown – 57% (55/97)

**Victim Location (Floor) v Total Recorded Rescues:**

Basement – 6% (17/292)

1st Floor – 59% (172/292)

2nd Floor– 22% (63/292)

3rd Floor – 12% (36/292)

>3 – 1% (4/292)

**Victim Location (Floor) v Survival Rate:**

Basement – 38% (6/16)

1st Floor – 57% (97/171)

2nd Floor– 68% (43/63)

3rd Floor – 97% (35/36)

>3 – 100% (4/4)

**Victim Location (Room) v Total Recorded Rescues:**

Bedroom – 43% (125/292)

Family – 14% (41/292)

Other – 21% (60/292)

Hallway – 10% (30/292)

Kitchen – 7% (20/292)

Bathroom – 5% (16/292)

**Victim Location (Room) v Survival Rate:**

Bedroom – 59% (74/125)

Family – 61% (25/41)

Other – 81% (48/59)

Hallway – 57% (17/30)

Kitchen – 63% (12/19)

Bathroom – 56% (9/16)

**Was the Victim Found Behind a Closed Door/Isolated From Fire v Total Recorded Rescues:**

Yes – 18% (52/292)

No – 82% (240/292)

**Was the Victim Found Behind a Closed Door/Isolated From Fire v Survival Rate:**

Yes – 75% (39/52)

No – 61% (146/238)

**Location of Victim (Within Compartment) v Total Recorded Rescues:**

On Floor Within 6' of an Exterior Door – 13% (38/292)

On Floor Directly Beneath a Window – 7% (19/292)

Closet – 1% (3/292)

In Crib – 1% (4/292)

On Bed – 13% (38/292)

Under Bed – 1% (2/292)

Couch/Sofa/Chair – 4% (12/292)

Floor – 37% (108/292)

Standing – 16% (46/292)

Bath Tub/Shower – 3% (8/292)

Other – 5% (14/292)

\* All Floor Categories (Non-Bed/Crib/Chair/Standing/Other) – 61% (178/292)

**Location of Victim (Within Compartment) v Survival Rate:**

On Floor Within 6' of an Exterior Door – 46% (17/37)

On Floor Directly Beneath a Window – 47% (9/19)

Closet – 33% (1/3)

In Crib – 100% (4/4)

On Bed – 53% (20/38)

Under Bed – 0% (0/2)

Couch/Sofa/Chair – 67% (8/12)

Floor – 61% (65/107)

Standing – 100% (46/46)

Bath Tub/Shower – 50% (4/8)

Other – 79% (11/14)

\* All Floor Categories (Non-Bed/Crib/Chair/Standing/Other) – 55% (96/176)

**Victim Age v Total Recorded Rescues:**

0-2 – 3% (9/289)

3-5 – 3% (10/289)

6-12 – 2% (6/289)

13-18 – 3% (8/289)

19-64 – 53% (154/289)

>65 – 35% (102/289)

**Victim Age v Survival Rate:**

0-2 – 78% (7/9)

3-5 – 40% (4/10)

6-12 – 67% (4/6)

13-18 – 88% (7/8)

19-64 – 63% (97/153)

>65 – 63% (64/101)

**Crew Locating Victim v Total Recorded Rescue:**

Primary – 64% (186/292)

Attack – 26% (76/292)

Other – 3% (10/292)

Secondary – 3% (8/292)

Salvage/Overhaul – 3% (8/292)

PD – 1% (2/292)

Ventilation – 1% (2/292)

**Crew Locating Victim v Survival Rate:**

Primary – 67% (125/186)

Attack – 64% (47/74)

Other – 80% (8/10)

Secondary – 25% (2/8)

Salvage/Overhaul – 0% (0/8)

PD – 50% (1/2)

Ventilation – 100% (2/2)

**Did the Search Crew That Located the Victim Physically Have a Hoseline With Them v Total Recorded Rescues:**

Yes – 27% (80/291)

No – 73% (211/291)

**Did the Search Crew That Located the Victim Physically Have a Hoseline With Them v Survival Rate:**

Yes – 62% (48/78)

No – 64% (136/211)

**Number of Firefighters Assigned to Search Before Victim Was Located v Total Recorded Rescues:**

0 – 9% (27/291)

1 – 5% (15/291)

2 – 30% (88/291)

3 – 22% (64/291)

4 – 15% (43/291)

5 – 6% (17/291)

>5 – 13% (37/291)

**Number of Firefighters Assigned to Search Before Victim Was Located v Survival Rate:**

0 – 58% (15/26)

1 – 73% (11/15)

2 – 68% (60/88)

3 – 67% (43/64)

4 – 52% (22/42)

5 – 59% (10/17)

>5 – 62% (23/37)

**Search Type v Total Recorded Rescues:**

Split – 36% (85/237)

Left Hand/Right Hand – 22% (52/237)

Oriented – 16% (39/237)

VES/VEIS – 25% (60/237)

Search Line – <1% (1/237)

\*Not Assigned to Search – 54

**Search Type v Survival Rate:**

Split – 61% (52/85)

Left Hand/Right Hand – 62% (32/52)

Oriented – 64% (25/39)

VES/VEIS – 72% (43/60)

Search Line – 0% (0/1)

\*Not Assigned to Search – 63% (33/52)

**Was a Thermal Imaging Camera Used to Assist Search v Total Recorded Rescues:**

Yes – 35% (101/288)

No – 65% (187/288)

**Was a Thermal Imaging Camera Used to Assist Search v Survival Rate:**

Yes – 57% (57/100)

No – 68% (126/186)

**Time From FD Arrival on Scene Until Arrival at Victim (Search Time) v Total Recorded Rescues:**

<2 minutes – 15% (45/291)

2-4 minutes – 24% (70/291)

4-6 minutes – 26% (77/291)

6-8 minutes – 11% (32/291)

>8 minutes – 23% (67/291)

**Time From FD Arrival on Scene Until Arrival at Victim (Search Time) v Survival Rate:**

<2 minutes – 78% (35/45)

2-4 minutes – 74% (52/70)

4-6 minutes – 72% (55/76)

6-8 minutes – 59% (19/32)

>8 minutes – 36% (24/66)

**Time From Arrival at Victim Until Victim Removed (Removal Time) v Total Recorded Rescues:**

<2 minutes – 44% (128/288)

2-4 minutes – 24% (69/288)

4-6 minutes – 11% (31/288)

6-8 minutes – 6% (16/288)

>8 minutes – 15% (44/288)

**Time From Arrival at Victim Until Victim Removed (Removal Time) v Survival Rate:**

<2 minutes – 69% (87/126)

2-4 minutes – 84% (58/69)

4-6 minutes – 68% (21/31)

6-8 minutes – 56% (9/16)

>8 minutes – 23% (10/44)

**Time From FD Arrival on Scene Until Victim Removed (Total Rescue Time) v Total Recorded Rescues:**

<6 minutes – 44% (125/287)

6 - 10 minutes – 29% (82/287)

11 - 15 minutes – 9% (26/287)

16 - 20 minutes – 8% (24/287)

21 – 30 minutes – 3% (9/287)

>30 minutes – 7% (21/287)

**Time From FD Arrival on Scene Until Victim Removed (Total Rescue Time) v Survival Rate:**

<6 minutes – 73% (91/124)

6 - 10 minutes – 79% (64/81)

11 - 15 minutes – 62% (16/26)

16 - 20 minutes – 38% (9/24)

21 – 30 minutes – 33% (3/9)

>30 minutes – 10% (2/21)

**Did Victim Exit Under Their Own Power v Total Recorded Rescues:**

Yes – 20% (59/292)

No – 80% (233/292)

**Did Victim Exit Under Their Own Power v Survival Rate:**

Yes – 100% (59/59)

No – 55% (126/231)

**How Was Victim Removed v Total Recorded Rescues:**

Drag or Carry (Dirty Drag) – 79% (214/270)

Drag of Carry with webbing (or similar) – 5% (13/270)

Ground Ladder – 16% (42/270)

Aerial Ladder – <1% (1/270)

**How Was Victim Removed v Survival Rate:**

Drag or Carry (Dirty Drag) – 59% (126/212)

Drag of Carry with webbing (or similar) – 23% (3/13)

Ground Ladder – 98% (41/42)

Aerial Ladder – 100% (1/1)

**Path of Removal v Total Recorded Rescues:**

Door – 57% (162/285)

Window – 19% (55/285)

Down or Up interior stairs - 24% (68/285)

Shelter in Place – 0% (0/285)

**Path of Removal v Survival Rate:**

Door – 60% (97/161)

Window – 67% (37/55)

Down or Up interior stairs – 75% (50/67)

Shelter in Place – N/A (/)

**Number of Rescuers Needed for Removal v Total Recorded Rescues:**

1 – 18% (50/284)

2 – 41% (117/284)

3 – 20% (56/284)

4-6 – 20% (56/284)

>6 – 2% (5/284)

**Number of Rescuers Needed for Removal v Survival Rate:**

1 – 74% (37/50)

2 – 62% (72/117)

3 – 57% (32/56)

4-6 – 74% (40/54)

>6 – 20% (1/5)

**Was a Cyanokit Used v Total Recorded Rescues:**

Yes – 12% (34/284)

No – 88% (250/284)

**Was a Cyanokit Used v Survival Rate:**

Yes – 71% (24/34)

No – 62% (155/249)

**Was CPR Performed on Victim v Total Recorded Rescues:**

Yes – 31% (91/292)

No – 69% (201/292)

**Was CPR Performed on Victim v Survival Rate:**

Yes – 36% (32/89)

No – 76% (153/201)

**Was Victim Transported to a Hospital v Total Recorded Rescues:**

Yes – 73% (213/290)

No – 27% (77/290)

**Was Victim Transported to a Hospital v Survival Rate:**

Yes – 77% (163/211)

No – 27% (21/77)

**Was Victim Conscious Upon Removal From Structure v Total Recorded Rescues:**

Yes – 38% (110/289)

No – 62% (179/289)

**Was Victim Conscious Upon Removal From Structure v Survival Rate:**

Yes – 99% (109/110)

No – 42% (75/177)

**Victim Burns v Total Recorded Rescues:**

None – 43% (124/291)

Mild – 29% (84/291)

Severe – 29% (83/291)

**Victim Burns v Survival Rate:**

None – 83% (102/123)

Mild – 61% (51/83)

Severe – 39% (32/83)

**Did Victim Suffer Smoke Inhalation v Total Recorded Rescues:**

Yes - 97% (281/291)

No – 3% (10/291)

**Did Victim Suffer Smoke Inhalation v Survival Rate:**

Yes - 63% (176/279)

No – 90% (9/10)

**Medical Treatment v Survival Rate:**

CPR – 36% (32/89)

Cyanokit – 71% (24/34)

Hospital – 77% (163/211)

**Condition of Victim v Survival Rate:**

Unconscious – 42% (75/177)

Severe Burns – 39% (32/83)

CPR – 36% (32/89)

**Total Recorded Rescues v Survival Rate:**

Alive – 64% (185/290)

Deceased – 36% (105/290)