# ROGERS Research Center

# 2022 WI Fire and EMS Mental Health Survey - Analysis

Prepared for Professional Fire Fighters of Wisconsin Charitable Foundation

# **OVERVIEW**

In consultation with Rogers Behavioral Health, the Professional Firefighters of Wisconsin Charitable Foundation developed a mental health survey made accessible to all professional and volunteer Fire and EMS professionals across the state of Wisconsin from October 17, 2022, to January 06, 2023. Full-time, part-time, volunteer, and retired firefighters and EMS responders completed the 43-item survey designed to provide insights on job-related critical stress and associated behavioral health needs. The survey included limited demographic information (race, ethnicity, gender, years of service) and inquired about critical incidents or traumatic events on the job, thoughts of self-harm, sleep issues, substance use, engagement with department or municipal support services, and perception of mental health stigma in the field. A brief psychological screening tool for depression, anxiety, and general psychological distress the PHQ-4—was also included.

This was the third year distributing the survey, and for the first time the survey included an optional, validated self-reported, measure of professional quality of life, the Pro-QoL. This instrument was utilized to gather insight into work satisfaction, secondary trauma, and burnout in "helping" professionals.

1515 individuals responded to the survey (an increase from 777 and 1022 respondents in 2020 and 2021, respectively), and 777 took the optional Pro-QoL assessment in 2022. [note: the 777 Pro-QoL completers in 2022 is only coincidentally the same number of respondents as the 777 total respondents in 2020]. Further respondent delineation follows:

| S   |
|-----|
|     |
| 7%) |
| %)  |
| %)  |
| )%) |
|     |
| S   |
| )%) |
| )   |

108 (58.1%)

78 (41.9%)

186 (12.3%)

Employment Status:

Services Provided:

Private

|              | All          | Males       | Females     |
|--------------|--------------|-------------|-------------|
| EMS          | 332 (21.9%)  | 147 (44.3%) | 185 (55.7%) |
| Fire         | 118 (7.8%)   | 109 (92.4%) | 9 (7.6%)    |
| Fire and EMS | 1065 (70.3%) | 929 (97.2%) | 134 (2.8%)  |

Fire Rank:

|               | All         | Males       | Females     |
|---------------|-------------|-------------|-------------|
| Chief officer | 192 (16.2%) | 179 (93.2%) | 13 (6.8%)   |
| Driver        | 166 (14.0%) | 155 (93.3%) | 11 (6.7%)   |
| Firefighter   | 551 (46.6%) | 447 (81.1%) | 103 (18.9%) |
| Line officer  | 274 (23.2%) | 257 (93.8%) | 16 (6.2%)   |

\* Out of 1183 who responded to this question

#### EMS Level:

|                         | All         | Males       | Females     |
|-------------------------|-------------|-------------|-------------|
| Critical care paramedic | 136 (9.7%)  | 111 (81.6%) | 25 (18.4%)  |
| EMT advanced            | 156 (11.2%) | 100 (64.1%) | 56 (35.9%)  |
| EMT basic               | 441 (31.6%) | 317 (71.9%) | 123 (28.1%) |
| First responder         | 150 (10.7%) | 111 (74.0%) | 39 (26.0%)  |
| Paramedic               | 514 (36.8%) | 437 (85.0%) | 76 (15.0%)  |

\* Out of 1397 who responded to this question

## Years of Service:

|                    | All         | Males       | Females    |
|--------------------|-------------|-------------|------------|
| 2 years or less    | 95 (6.3%)   | 57 (60.0%)  | 37 (40.0%) |
| 2-5 years          | 173 (11.4%) | 104 (60.1%) | 69 (39.9%) |
| 5-10 years         | 257 (17.0%) | 185 (72.0%) | 72 (28.0%) |
| 10-15 years        | 231 (15.2%) | 187 (81.0%) | 43 (19.0%) |
| 15-20 years        | 204 (13.5%) | 172 (84.3%) | 32 (15.7%) |
| 20-25 years        | 217 (14.3%) | 189 (87.1%) | 28 (12.9%) |
| More than 25 years | 338 (22.3%) | 291 (86.1%) | 47 (13.9%) |

#### Race and Ethnicity:

| American Indian or Alaskan Native | 7 (0.5%)     |
|-----------------------------------|--------------|
| Asian                             | 6 (0.4%)     |
| Black or African American         | 16 (1.1%)    |
| Hispanic, Latinx or Spanish       | 21 (1.4%)    |
| Multiracial                       | 25 (1.7%)    |
| White                             | 1427 (94.2%) |

| Other   | 8 (0.5%) |
|---------|----------|
| Unknown | 5 (0.3%) |

| Responses by county with zo responses of more. |             |            |            |  |  |  |
|--|-------------|------------|------------|--|--|--|
| Brown  | 39 (2.6%)   | Racine     | 70 (4.6%)  |  |  |  |
| Dane   | 189 (12.5%) | Rock       | 34 (2.2%)  |  |  |  |
| Fond du Lac                                    | 35 (2.3%)   | Sheboygan  | 30 (2.0%)  |  |  |  |
| Kenosha  | 51 (3.4%)   | Washington | 35 (2.3%)  |  |  |  |
| La Crosse                                      | 30 (2.0%)   | Waukesha   | 91 (6.0%)  |  |  |  |
| Marathon                                       | 49 (3.2%)   | Winnebago  | 112 (7.4%) |  |  |  |
| Milwaukee                                      | 184 (12.1%) | Wood       | 41 (2.7%)  |  |  |  |
| Outagamie                                      | 31 (2.0%)   |            |            |  |  |  |

Responses by county with 20 responses or more:

# Job-Related Critical Stress:

When asked "Have you experienced a critical incident or a traumatic event on the job?", of the 1515 respondents, 1414 (93.3%) indicated they had experienced a job-related critical incident or traumatic event. Previously, 726 out of 777 (93.4%) and 935 out of 1022 respondents (91.5%) in 2020 and 2021, respectively, answered 'yes' to this question.

Of the 1414 respondents in 2022 who indicated they had experienced job-related critical stress, 268 (19%) reported having nightmares about the events or unwanted thoughts about the events within the last *month*- 242 (17.1%) of whom reported trying to not think about the event(s) or going out of their way to avoid situations that reminded them of the event(s). Likewise, 509 respondents (36%) reported having nightmares or unwanted thoughts of the events within the last *year*, and of those, 391 (27.7%) reported trying to not think about the event(s) or going out of their way to avoid situations that reminded them of the event(s). The following tables further delineate the complications experienced as the result of job-related critical stress:

# By Employment Status

|                                 | All     | Full-time | Part-time | Retired  | Volunteer | NBC*      |
|---------------------------------|---------|-----------|-----------|----------|-----------|-----------|
| Total Respondents               |         | 874       | 126       |          |           |           |
|                                 | 1,515   | (57.7%)   | (8.3%)    | 106 (7%) | 409 (27%) | 6,962     |
| Respondents that experienced    | 1414    | 827       | 114       | 105      | 368       | 6,598     |
| a critical or traumatic event   | (93.3%) | (94.6%)   | (90.5%)   | (99.1%)  | (90.0%)   | (94.2%)   |
| Change in view of job or future | 605     | 407       | 43        | 43       | 112       | 2,685     |
|                                 | (42.8%) | (49.2%)   | (37.7%)   | (41.0%)  | (30.4%)   | (49.4%)   |
| Sleep problems                  | 834     | 535       | 64        | 61       | 174       | 3,867     |
|                                 | (59.0%) | (64.7%)   | (56.1%)   | (58.1%)  | (47.3%)   | (71.1%)   |
| Family or relationship problems | 539     | 377       | 38        | 34       | 90        | 3,211     |
|                                 | (38.1%) | (45.6%)   | (33.3%)   | (32.4%)  | (24.5%)   | (59.1%)** |
| Thoughts of suicide or self-    | 209     | 129       | 23        | 18       | 39        | 1,046     |
| harm                            | (14.8%) | (15.6%)   | (20.2%)   | (17.1%)  | (10.6%)   | (19.2%)** |
| Substance abuse                 | 221     | 165       |           | 17       |           | 1,451     |
|                                 | (15.6%) | (20.0%)   | 9 (7.9%)  | (16.2%)  | 30 (8.2%) | (26.7%)** |
| Easily angered or withdrawn     | 716     | 482       |           | 46       | 131       | 2,597     |
|                                 | (50.6%) | (58.3%)   | 57 (0.5%) | (43.8%)  | (35.6%)   | (66.2%)   |
| None of the above               | 309     | 134       | 31        | 23       | 121       |           |
|                                 | (21.9%) | (16.2%)   | (27.2%)   | (21.9%)  | (32.9%)   |           |

\*NBC National Survey -- https://www.nbcnewyork.com/news/local/firefighters-mental-health-survey-ptsd/1809

\*\*Statistically significant –PFFW survey respondents reported these challenges significantly less than the national average

Percentages reported with a shaded background are based on all responses; percentages reported with a white background are based on only the respondents who indicated they had experienced job-related critical stress.

# By Department Type

|  | All          | Municipal    | Private     |
|--|--------------|--------------|-------------|
| Total Respondents                          | 1,515        | 1329 (87.7%) | 186 (12.3%) |
| Respondents that experienced a critical or | 1414 (93.3%) | 1246 (93.8%) | 168 (90.3%) |
| traumatic event                            |              |              |             |
| Change in view of job or future            | 605 (42.8%)  | 534 (42.9%)  | 71 (42.3%)  |
| Sleep problems                             | 834 (59.0%)  | 743 (59.6%)  | 91 (54.2%)  |
| Family or relationship problems            | 539 (38.1%)  | 482 (38.7%)  | 57 (33.9%)  |
| Thoughts of suicide or self-harm           | 209 (14.8%)  | 179 (14.4%)  | 30 (17.9%)  |
| Substance abuse                            | 221 (15.6%)  | 201 (16.1%)  | 20 (11.9%)  |
| Easily angered or withdrawn                | 716 (50.6%)  | 637 (51.1%)  | 79 (47.0%)  |
| None of the above                          | 309 (21.9%)  | 270 (21.7%)  | 39 (23.2%)  |

Percentages reported with a shaded background are based on all responses; percentages reported with a white background are based on only the respondents who indicated they had experienced job-related critical stress.

# By Gender

|  | All          | Male         | Female      |
|--|--------------|--------------|-------------|
| Total Respondents                          | 1,515        | 1185 (78.2%) | 328 (21.7%) |
| Respondents that experienced a critical or | 1414 (93.3%) | 1119 (94.4%) | 293 (89.3%) |
| traumatic event                            |              |              |             |
| Change in view of job or future            | 605 (42.8%)  | 479 (42.8%)  | 125 (42.7%) |
| Sleep problems                             | 834 (59.0%)  | 656 (58.6%)  | 177 (60.4%) |
| Family or relationship problems            | 539 (38.1%)  | 453 (40.5%)  | 85 (29.0%)  |
| Thoughts of suicide or self-harm           | 209 (14.8%)  | 161 (14.4%)  | 47 (16.0%)  |
| Substance abuse                            | 221 (15.6%)  | 194 (17.3%)  | 26 (8.9%)   |
| Easily angered or withdrawn                | 716 (50.6%)  | 586 (52.4%)  | 129 (44.0%) |
| None of the above                          | 309 (21.9%)  | 243 (21.7%)  | 65 (22.2%)  |

Percentages reported with a shaded background are based on all responses; percentages reported with a white background are based on only the respondents who indicated they had experienced job-related critical stress.

# By Years of Service

|                           | All     | 2 years | 2-5     | 5-10    | 10-15   | 15-20   | 20-25   | 25 +    |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                           | ,       | or less | years   | years   | years   | years   | years   | Years   |
| Total Respondents         |         | 95      | 173     | 257     | 231     | 204     | 217     | 338     |
|                           | 1,515   | (6.3%)  | (11.4%) | (17%)   | (15.2%) | (13.5%) | (14.3%) | (22.3%) |
| Respondents that          | 1414    | 65      | 151     | 244     | 221     | 199     | 206     | 328     |
| experienced a critical or | (93.3%) | (68.4%) | (87.3%) | (94.9%) | (95.6%) | (97.5%) | (94.9%) | (97.0%) |
| traumatic event           |         |         |         |         |         |         |         |         |
| Change in view of job or  | 605     | 17      | 61      | 114     | 107     | 103     | 88      | 115     |
| future                    | (42.8%) | (26.2%) | (40.4%) | (46.7%) | (48.4%) | (51.8%) | (42.7%) | (35.1%) |
| Sleep problems            | 834     | 33      | 80      | 142     | 135     | 141     | 131     | 172     |
|                           | (59.0%) | (50.8%) | (53.0%) | (58.2%) | (61.1%) | (70.9%) | (63.6%) | (52.4%) |
| Family or relationship    | 539     | 18      | 46      | 95      | 84      | 97      | 96      | 103     |
| problems                  | (38.1%) | (27.7%) | (30.5%) | (38.9%) | (38.0%) | (48.7%) | (46.6%) | (31.4%) |
| Thoughts of suicide or    | 209     | 11      | 26      | 37      | 31      | 30      | 31      | 43      |
| self-harm                 | (14.8%) | (16.9%) | (17.2%) | (15.2%) | (14.0%) | (15.1%) | (15.0%) | (13.1%) |
| Substance abuse           | 221     | 9       | 16      | 39      | 32      | 38      | 45      | 42      |
|                           | (15.6%) | (13.8%) | (10.6%) | (16.0%) | (14.5%) | (19.1%) | (21.8%) | (12.8%) |
| Easily angered or         | 716     | 20      | 72      | 123     | 127     | 116     | 110     | 148     |
| withdrawn                 | (50.6%) | (30.8%) | (47.7%) | (50.4%) | (57.5%) | (58.3%) | (53.4%) | (45.1%) |
| None of the above         | 309     | 22      | 37      | 52      | 42      | 31      | 35      | 90      |
|                           | (21.9%) | (33.8%) | (24.5%) | (21.3%) | (19.0%) | (15.6%) | (17.0%) | (27.4%) |

Percentages reported with a shaded background are based on all responses; percentages reported with a white background are based on only the respondents who indicated they had experienced job-related critical stress.



# By Services Provided

|  | All          | EMS         | Fire        | Fire and EMS |
|--|--------------|-------------|-------------|--------------|
| Total Respondents                          | 1,515        | 332 (21.9%) | 118 (7.8%)  | 1065 (70.3%) |
| Respondents that experienced a critical or | 1414 (93.3%) | 294 (88.6%) | 104 (88.1%) | 1016 (95.4%) |
| traumatic event                            |              |             |             |              |
| Change in view of job or future            | 605 (42.8%)  | 125 (42.5%) | 29 (27.9%)  | 451 (44.4%)  |
| Sleep problems                             | 834 (59.0%)  | 171 (58.2%) | 42 (40.4%)  | 621 (61.1%)  |
| Family or relationship problems            | 539 (38.1%)  | 89 (30.3%)  | 27 (26.0%)  | 423 (41.6%)  |
| Thoughts of suicide or self-harm           | 209 (14.8%)  | 52 (17.7%)  | 10 (9.6%)   | 147 (14.5%)  |
| Substance abuse                            | 221 (15.6%)  | 38 (12.9%)  | 4 (3.8%)    | 179 (17.6%)  |
| Easily angered or withdrawn                | 716 (50.6%)  | 141 (48.0%) | 36 (34.6%)  | 539 (53.1%)  |
| None of the above                          | 309 (21.9%)  | 76 (25.9%)  | 32 (30.8%)  | 201 (19.8%)  |

Percentages reported with a shaded background are based on all responses; percentages reported with a white background are based on only the respondents who indicated they had experienced job-related critical stress.

# Sleep Problems

Respondents were asked to describe any sleep problems as a result of their work. Over 80% of respondents reported at least one sleep problem. Details are provided in the charts that follow:

| Years of Service |   |         |         |         |         |         |          |          |
|------------------|---|---------|---------|---------|---------|---------|----------|----------|
|                  | All 2 years 2-5 5-10 10-15 15-20 20-25 (+) than |         |         |         |         |         | (+) than |          |
|                  |   | or less | years   | years   | years   | years   | years    | 25 years |
| Sleep            | 1250  | 73      | 140     | 221     | 190     | 181     | 187      | 258      |
| problem          | (82.5%)   | (76.8%) | (80.9%) | (86.0%) | (82.3%) | (88.7%) | (86.2%)  | (76.3%)  |

| Employment Status             |             |             |            |            |             |  |
|-------------------------------|-------------|-------------|------------|------------|-------------|--|
|                               | All         | Full-time   | Part-time  | Retired    | Volunteer   |  |
| Total Respondents             | 1,515       | 874 (57.7%) | 126 (8.3%) | 106 (6.9%) | 409 (2.7%)  |  |
| Difficulty falling asleep     | 676 (44.6%) | 418 (47.8%) | 63 (50.0%) | 37 (34.9%) | 158 (38.6%) |  |
| Not Feeling Rested            | 987 (65.1%) | 610 (69.8%) | 95 (75.4%) | 57 (53.8%) | 225 (55.0%) |  |
| Waking up frequently          | 753 (49.7%) | 463 (53.0%) | 57 (45.2%) | 56 (52.8%) | 177 (43.3%) |  |
| Difficulty staying awake      | 262 (17.3%) | 171 (19.6%) | 23 (18.3%) | 13 (12.3%) | 55 (13.4%)  |  |
| Use substances to fall asleep | 188 (12.4%) | 140 (16.0%) | 11 (8.7%)  | 11 (10.4%) | 26 (6.4%)   |  |
| Use Medication to Stay Awake  | 225 (14.9%) | 163 (18.6%) | 22 (17.5%) | 5 (4.7%)   | 35 (8.6%)   |  |
| Use Medication to fall asleep | 257 (17.0%) | 160 (18.3%) | 24 (19.0%) | 24 (22.6%) | 49 (12.0%)  |  |
| Multiple sleep problems       | 947 (62.5%) | 590 (67.5%) | 88 (69.8%) | 61 (57.5%) | 208 (50.9%) |  |
| No sleep problems             | 265 (17.5%) | 124 (14.2%) | 17 (13.5%) | 25 (23.6%) | 99 (24.2%)  |  |

| Services Provided             |             |             |            |              |  |  |  |
|-------------------------------|-------------|-------------|------------|--------------|--|--|--|
|                               | All EMS     |             | Fire       | Fire and EMS |  |  |  |
| Total Respondents             | 1,515       | 332 (21.9%) | 118 (7.8%) | 1065 (70.3%) |  |  |  |
| Difficulty falling asleep     | 676 (44.6%) | 167 (50.3%) | 37 (31.4%) | 472 (44.3%)  |  |  |  |
| Not Feeling Rested            | 987 (65.1%) | 212 (63.9%) | 59 (50.0%) | 716 (67.2%)  |  |  |  |
| Waking up frequently          | 753 (49.7%) | 169 (50.9%) | 44 (37.3%) | 540 (50.7%)  |  |  |  |
| Difficulty staying awake      | 262 (17.3%) | 62 (18.7%)  | 11 (9.3%)  | 189 (17.7%)  |  |  |  |
| Use substances to fall asleep | 188 (12.4%) | 37 (11.1%)  | 6 (5.1%)   | 145 (13.6%)  |  |  |  |
| Use Medication to Stay Awake  | 225 (14.9%) | 60 (18.1%)  | 11 (9.3%)  | 154 (14.5%)  |  |  |  |
| Use Medication to fall asleep | 257 (17.0%) | 88 (26.5%)  | 10 (8.5%)  | 159 (14.9%)  |  |  |  |
| Multiple sleep problems       | 947 (62.5%) | 221 (66.6%) | 45 (38.1%) | 681 (63.9%)  |  |  |  |
| No sleep problems             | 265 (17.5%) | 63 (19.0%)  | 30 (25.4%) | 172 (16.2%)  |  |  |  |

## Sleep Problems Reported by Schedule:

California: 24 hours on, 24 hours for 2 cycles, then 24 hours on, 96 hours off

Chicago: 24 hours on, 48 hours off

48/96: 48 hours on, 96 hours off

|                               | Full-Time Firefighters- Work Schedule |            |             |             |            |  |  |
|-------------------------------|---------------------------------------|------------|-------------|-------------|------------|--|--|
|                               | 40 hours/wk                           | 48/96      | California  | Chicago     | Other      |  |  |
| Total Respondents             | 110                                   | 96         | 428         | 181         | 59         |  |  |
| Difficulty Falling Asleep     | 47 (42.7%)                            | 51 (53.1%) | 194 (45.3%) | 91 (50.3%)  | 35 (59.3%) |  |  |
| Not Feeling Rested            | 73 (66.4%)                            | 64 (66.7%) | 301 (70.3%) | 134 (74.0%) | 38 (64.4%) |  |  |
| Waking Frequently             | 51 (46.4%)                            | 55 (57.3%) | 228 (53.3%) | 99 (54.7%)  | 30 (50.8%) |  |  |
| Difficulty Staying Awake      | 27 (24.5%)                            | 17 (17.7%) | 73 (17.1%)  | 41 (22.7%)  | 13 (22.0%) |  |  |
| Use Substances to Fall Asleep | 17 (15.5%)                            | 18 (18.8%) | 70 (16.4%)  | 24 (13.3%)  | 11 (18.6%) |  |  |
| Use Medication to Stay Awake  | 17 (15.5%)                            | 17 (17.7%) | 71 (16.6%)  | 41 (22.7%)  | 17 (28.8%) |  |  |
| Use Medication Fall Asleep    | 22 (20.0%)                            | 20 (20.8%) | 65 (15.2%)  | 32 (17.7%)  | 21 (35.6%) |  |  |
| Multiple Sleep Problems       | 74 (67.3%)                            | 68 (70.8%) | 279 (65.2%) | 129 (71.3%) | 40 (67.8%) |  |  |
| No Sleep Problem              | 16 (14.5%)                            | 12 (12.5%) | 65 (15.2%)  | 23 (12.7%)  | 8 (13.6%)  |  |  |

# Anxiety, Depression and Psychological Stress Screening (PHQ-4)

The PHQ-4 is a 4-question screening that assesses respondents for anxiety and depression symptoms as well as approximate degree of psychological stress.

Of the total 1515 responses, 263 (17.4%) screened positive for **anxiety** symptoms, and 248 (16.4%) screened positive for **depression** symptoms. Of the 874 full-time firefighters, 162 (18.5%) screened positive for **anxiety** symptoms, and 151 (17.3%) screened positive for **depression** symptoms. The results were notably higher for female respondents.

|                         | Total<br>Respondents | Anxiety     | Depression  | Anxiety and<br>Depression |
|-------------------------|----------------------|-------------|-------------|---------------------------|
| All                     | 1515                 | 263 (17.4%) | 248 (16.4%) | 151 (10.0%)               |
| Employment type         |                      |             |             |                           |
| Full-time               | 874                  | 162 (18.5%) | 151 (17.3%) | 89 (10.2%)                |
| Part-time               | 126                  | 27 (21.4%)  | 26 (20.6%)  | 17 (13.5%)                |
| Retired                 | 106                  | 14 (13.2%)  | 16 (15.1%)  | 9 (8.5%)                  |
| Volunteer               | 409                  | 60 (14.7%)  | 55 (13.4%)  | 36 (8.8%)                 |
| Primary department      |                      |             |             |                           |
| Municipal               | 1329                 | 219 (16.5%) | 201 (15.1%) | 122 (9.2%)                |
| Private                 | 186                  | 44 (23.7%)  | 47 (25.3%)  | 29 (15.6%)                |
| Services provided       |                      |             |             |                           |
| EMS                     | 332                  | 82 (24.7%)  | 84 (25.3%)  | 57 (17.2%)                |
| Fire                    | 118                  | 11 (9.3%)   | 11 (9.3%)   | 5 (4.2%)                  |
| Fire and EMS            | 1065                 | 170 (16.0%) | 153 (14.4%) | 89 (8.4%)                 |
| Fire rank               |                      |             |             |                           |
| Chief officer           | 192                  | 21 (10.9%)  | 15 (7.8%)   | 11 (5.7%)                 |
| Driver                  | 166                  | 32 (19.3%)  | 30 (18.1%)  | 18 (10.8%)                |
| Firefighter             | 551                  | 88 (16.0%)  | 83 (15.1%)  | 49 (8.9%)                 |
| Line officer            | 274                  | 40 (14.6%)  | 36 (13.1%)  | 16 (5.8%)                 |
| EMS level               |                      |             |             |                           |
| Critical care paramedic | 136                  | 32 (23.5%)  | 33 (24.3%)  | 20 (14.7%)                |
| EMT advanced            | 156                  | 34 (21.8%)  | 30 (19.2%)  | 21 (13.5%)                |
| EMT basic               | 441                  | 85 (19.3%)  | 81 (18.4%)  | 55 (12.5%)                |
| First responder         | 150                  | 17 (11.3%)  | 14 (9.3%)   | 10 (6.7%)                 |
| Paramedic               | 514                  | 84 (16.3%)  | 79 (15.4%)  | 40 (7.8%)                 |
| Sex                     |                      |             |             |                           |
| Male                    | 1185                 | 177 (14.9%) | 164 (13.8%) | 91 (7.7%)                 |
| Female                  | 328                  | 85 (25.9%)  | 83 (25.3%)  | 60 (18.3%)                |

|                        | All         | Anxiety Only | Depression<br>Only | Anxiety and<br>Depression |
|------------------------|-------------|--------------|--------------------|---------------------------|
| All (includes EMS)     | 1515        | 263 (17.4%)  | 248 (16.4%)        | 151 (10.0%)               |
| Full-time firefighters | 874 (57.7%) | 162 (18.5%)  | 151 (17.3%)        | 89 (10.2%)                |
| Men                    | 754 (86.3%) | 130 (17.2%)  | 113 (15.0%)        | 64 (8.5%)                 |
| Women                  | 119 (13.6%) | 32 (26.9%)   | 37 (31.1%)         | 25 (21.0%)                |

\*The Anxiety and Depression Association of America estimates 18.1% of adults in the U.S. have anxiety and 6.7% of adults in the U.S. have depression at some point every year. Consistently, research shows that women exhibit depression at a rate 2-3 times higher than men through age 45.

Overall psychological stress is measured by the PHQ-4 with ranges of distress: "None" (0-2), "Mild" (3-5), "Moderate" (6-8), and "Severe" (9-12), where a higher score denotes a greater degree of psychological stress.

|                        |                   | Degree of Psychological Distress |             |                   |                   |
|------------------------|-------------------|----------------------------------|-------------|-------------------|-------------------|
|                        | Total Respondents | None (0-2)                       | Mild (3-5)  | Moderate<br>(6-8) | Severe (9-<br>12) |
| All (includes EMS)     | 1515              | 858 (56.6%)                      | 437 (28.8%) | 131 (8.6%)        | 89 (5.9%)         |
| Full-time firefighters | 874               | 464 (53.1%)                      | 280 (32.0%) | 79 (9.0%)         | 51 (5.8%)         |
| Men                    | 754               | 418 (55.4%)                      | 236 (31.3%) | 65 (8.6%)         | 35 (4.6%)         |
| Women                  | 119               | 46 (38.7%)                       | 43 (36.1%)  | 14 (11.8%)        | 16 (13.4%)        |

# Trauma Screening (PC-PTSD-5)

The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) is a 5-item assessment designed to identify individuals with probable PTSD. Those who screen positive are recommended for further, formal assessment.

Of the total 1515 responses, 205 (13.5%) screened positive for probable PTSD within the last *year*, and 127 (8.4%) screened positive in the last *month* prior to the survey.

Of the 874 full-time firefighters, 111 (12.7%) screened positive within the last *year*, and 83 (9.5%) screened positive within the last *month*. Further delineation by sex and co-occurring anxiety and depression is below. To be noted, there is a correlation between anxiety and depression and the potential for post-traumatic stress. Females reported the highest rates of both co-occurring anxiety and depression.

|                                  | Possible PTSD within last year ** | Probable PTSD within the last month |
|----------------------------------|-----------------------------------|-------------------------------------|
| All respondents (n = 1,515)      | 205 (13.5%)                       | 127 (8.4%)                          |
| Full-time firefighters (n = 874) | 111 (12.7%)                       | 83 (9.5%)                           |
| Men (n = 754)                    | 90 (11.9%)                        | 69 (9.2%)                           |
| Women (n = 119)                  | 21 (17.6%)                        | 13 (10.9%)                          |

|                                 | Co-occurring <b>anxiety</b> and probable<br>PTSD symptoms within the last<br>month | Co-occurring <b>depression</b> and probable PTSD symptoms within the last month |
|---------------------------------|--|---|
| All respondents (n = 127)       | 84 (66.1%)   | 74 (58.3%)  |
| Full-time firefighters (n = 83) | 58 (69.9%)   | 50 (60.2%)  |
| Men (n = 69)                    | 47 (68.1%)   | 38 (55.1%)  |
| Women (n = 13)                  | 11 (84.6%)   | 11 (84.6%)  |

## Stigma

Respondents were asked to respond to questions about potential stigma associated with seeking treatment or support for behavioral health needs. Consistent with reports from previous years, over 98% of respondents would encourage their peers to seek support- a rate much higher than they would seek support for themselves. In 2022, the rate of those agreeing with the statement: "I would feel comfortable asking for my own behavioral health support" was 62.5%.

|                   | All Respondents (includes EMS)  |  |  |   |  |  |  |
|-------------------|---|--|--|---|--|--|--|
|                   | Firefighters think<br>treatment for<br>behavioral health is a<br>sign of personal<br>weakness | I would encourage<br>a firefighter co-<br>worker to get<br>behavioral health | l would ask for<br>my own<br>behavioral health | I would know where<br>to go for my own<br>behavioral health |  |  |  |
| Strongly agree    | 182 (12.0%)   | 1175 (77.6%)   | 351 (23.2%)                                    | 407 (26.9%)   |  |  |  |
| Agree             | 554 (36.6%)   | 311 (20.5%)  | 595 (39.3%)                                    | 741 (48.9%)   |  |  |  |
| Neither           | 353 (23.3%)   | 25 (1.7%)  | 304 (20.1%)                                    | 172 (11.4%)   |  |  |  |
| Disagree          | 303 (20.0%)   | 1 (0.1%)   | 214 (14.1%)                                    | 163 (10.8%)   |  |  |  |
| Strongly disagree | 123 (8.1%)  | 3 (0.2%)   | 51 (3.4%)                                      | 32 (2.1%)   |  |  |  |

|                   | Full-time Firefighters  |   |  |  |  |  |  |
|-------------------|---|---|--|--|--|--|--|
|                   | Firefighters think<br>treatment for<br>behavioral health is<br>a sign of personal<br>weakness | I would encourage a<br>firefighter co-worker<br>to get behavioral<br>health | I would ask for<br>my own<br>behavioral health | I would know<br>where to go for<br>my own<br>behavioral health |  |  |  |
| Strongly agree    | 96 (10.9%)  | 668 (76.4%)   | 189 (21.6%)                                    | 253 (28.9%)  |  |  |  |
| Agree             | 314 (35.9%)   | 186 (21.3%)   | 335 (38.3%)                                    | 435 (49.8%)  |  |  |  |
| Neither           | 210 (24%)   | 18 (2%)   | 185 (21.2%)                                    | 101 (11.6%)  |  |  |  |
| Disagree          | 201 (22.9%)   | 0 (0%)  | 135 (15.4%)                                    | 67 (7.7%)  |  |  |  |
| Strongly disagree | 53 (6%)   | 2 (0%)  | 30 (3.4%)                                      | 18 (2%)  |  |  |  |



### Resources

When asked which people or entities they would be comfortable asking for behavioral health assistance, respondents were most likely to turn to a treatment provider (52.7%), a family member or friend (49.9%), or peer/co-worker (45.7%). 6.5% indicated they would not be comfortable seeking support.

For full-time firefighters, the rates were similar- treatment provider (49.9%), family/friend (49.1%), or peer/coworker (48.6%). 5.8% indicated they would not be comfortable seeking support.

| All Respondents (includes EMS)                   |                           |                            |  |
|--|---------------------------|----------------------------|--|
|  | I would ask the following | I have previously received |  |
|  | for behavioral health     | help from the following    |  |
|  | assistance.               | resources.                 |  |
| City/county/district employee assistance program | 468 (30.9%)               | 140 (9.2%)                 |  |
| Treatment provider                               | 798 (52.7%)               | 361 (23.8%)                |  |
| Family member or friend                          | 756 (49.9%)               | 257 (17.0%)                |  |
| Peer or co-worker                                | 693 (45.7%)               | 255 (16.8%)                |  |
| Department employee assistance program           | 556 (36.7%)               | 165 (10.9%)                |  |
| PFFW member assistance program                   | 310 (20.5%)               | 28 (1.8%)                  |  |
| Other  | 105 (6.9%)                | 68 (4.5%)                  |  |
| None of the above                                | 98 (6.5%)                 | 826 (54.5%)                |  |

| Full-time Firefighters                           |   |   |  |
|--|---|---|--|
|  | I would ask the following for behavioral health assistance. | I have previously received<br>help from the following<br>resources. |  |
| City/county/district employee assistance program | 302 (34.6%)   | 106 (12.1%)   |  |
| Treatment provider                               | 436 (49.9%)   | 205 (23.5%)   |  |
| Family member or friend                          | 429 (49.1%)   | 138 (15.8%)   |  |
| Peer or co-worker                                | 425 (48.6%)   | 145 (16.6%)   |  |
| Department employee assistance program           | 387 (44.3%)   | 122 (14.0%)   |  |
| PFFW member assistance program                   | 253 (28.9%)   | 21 (2.4%)   |  |
| Other  | 54 (6.2%)   | 40 (4.6%)   |  |
| None of the above                                | 51 (5.8%)   | 457 (52.3%)   |  |

### Satisfaction with Resources

Of the 1515 total responses, 165 people (11%) reported utilizing their department Employee Assistance Program- 56% of whom found satisfaction in the services. 140 (9%) indicated that they sought help from an EAP provided by their city, county, or district- 57% of whom found

satisfaction in the services. Of the full-time respondents, 28 (2%) reported seeking help from the PFFW member assistance program, and 79% were satisfied with the services.

| All Respondents          |                          |                |            |
|--------------------------|--------------------------|----------------|------------|
|                          | City/County/District EAP | Department EAP | PFFW MAP   |
| Total                    | 140                      | 165            | 28         |
| Strongly agree           | 27 (19.3%)               | 35 (21.2%)     | 13 (46.4%) |
| Agree                    | 53 (37.9%)               | 57 (34.5%)     | 9 (32.1%)  |
| Neither agree / disagree | 28 (20.0%)               | 39 (23.6%)     | 4 (14.3%)  |
| Disagree                 | 15 (10.7%)               | 15 (9.1%)      | 0 (0.0%)   |
| Strongly disagree        | 17 (12.1%)               | 19 (11.5%)     | 2 (7.1%)   |

| Full-time Firefighters   |                          |                |            |
|--------------------------|--------------------------|----------------|------------|
|                          | City/County/District EAP | Department EAP | PFFW MAP   |
| Total                    | 106                      | 122            | 21         |
| Strongly agree           | 16 (15.1%)               | 25 (20.5%)     | 10 (47.6%) |
| Agree                    | 46 (43.4%)               | 40 (32.8%)     | 7 (33.3%)  |
| Neither agree / disagree | 18 (17.0%)               | 29 (23.8%)     | 3 (14.3%)  |
| Disagree                 | 12 (11.3%)               | 13 (10.7%)     | 0 (0.0%)   |
| Strongly disagree        | 14 (13.2%)               | 15 (12.3%)     | 1 (4.8%)   |

## Interest in Behavioral Health Training

Over half of the total respondents (55%) expressed interest in training to assist other firefighters with behavioral health needs. Of those, the level of experience most likely to show interest in peer-support training were individuals with 10 years or less of work experience.

# Professional Quality of Life

The Professional Quality of Life (Pro-QoL) instrument was offered to participants as an optional, validated 30-question self-report questionnaire to measure work satisfaction, secondary trauma, and potential burnout in "helping" professionals. The tool was developed as a measure of both the negative and positive effects of working with those who have experienced traumatic stress. Of the 1515 participants that completed the survey, 777 (51%) participants opted to take the additional Professional Quality of Life survey. To our knowledge, this is the largest sample of firefighters to have been assessed using the Pro-QoL.

Initial results are as follows:

Scoring for the Pro-QoL is categorical, and scores are assigned a level based on these ranges:

High: 42-50 Moderate: 23-41 Low: 0-22

| Pro-QOL Category           | Mean (sd)   | n (%)       |
|----------------------------|-------------|-------------|
| Compassion Satisfaction    | 37.2 (6.96) |             |
| High                       |             | 217 (27.9%) |
| Moderate                   |             | 538 (69.2%) |
| Low                        |             | 22 (2.8%)   |
| Burnout                    | 25.3 (6.52) |             |
| High                       |             | 3 (0.3%)    |
| Moderate                   |             | 503 (64.7%) |
| Low                        |             | 271 (34.9%) |
| Secondary Traumatic Stress | 23.9 (6.94) |             |
| High                       |             | 10 (1.3%)   |
| Moderate                   |             | 415 (53.4%) |
| Low                        |             | 352 (45.3%) |

In follow-up analyses, for publication purposes, we intend to evaluate those with moderate-tohigh secondary traumatic stress against other reported concerns such as sleep problems, potential other psychological distress, or personal concerns.







# Summary

From October 17, 2022, to January 06, 2023, 1515 Fire and EMS professionals and volunteers across the state of Wisconsin completed a 43-question electronic survey designed to evaluate behavioral health needs and supportive opportunities. Data was gathered anonymously, inquiring about critical/traumatic incidents, thoughts related to anxiety and depression, psychological distress, mental health stigma and engagement with support services. Below is a summary of each category gathered from the survey: job-related critical stress, anxiety and depression, sleep problems, distress and stigma, peer training and behavioral health resources.

Of the 1515 respondents, 1414 (93.3%) indicated they had experienced a job-related critical incident or traumatic event. Of those respondents, 268 (19%) reported having nightmares about the events or unwanted thoughts about the events within the last month, and 509 respondents (36%) reported having nightmares or unwanted thoughts of an event within the last year; 242 respondents (17.1%) reported they tried hard not to think about the event or avoided situations that would remind them of the event within the last month.

Over 80% of the total respondents reported at least one sleep problem.

263 (17.4%) screened positive for anxiety symptoms, and 248 (16.4%) screened positive for depression symptoms. Of the 874 full-time firefighters, 162 (18.5%) screened positive for anxiety symptoms, and 151 (17.3%) screened positive for depression symptoms.

98% of respondents would encourage their peers to seek support at a rate higher than they would seek support for themselves. In 2022, the rate of those agreeing with the statement "I would feel comfortable asking for my own behavioral health support" was 62.5%.

Of the 1515 respondents, just over half (51%) opted to respond to the optional Professional Quality of Life questionnaire. Results from the Pro-QoL revealed that 97% of the respondents reported a moderate-to-high degree of compassion satisfaction toward their job. 65% experienced a moderate-to-high degree of burnout, and 53% experienced a moderate-to-high degree of secondary traumatic stress.