WISCONSIN BURNING 2018–2019

TABLE OF CONTENTS

INTRODUCTION

The Wisconsin Department of Safety and Professional Services Fire Prevention Program is pleased to present the *2018–2019 Wisconsin Burning Report*. This report presents data on fire department incidents to help readers understand the Wisconsin fire situation and to help the fire service improve public safety services. This data is also used at the national level to help identify challenges facing the fire service and understand what resources are needed to meet those challenges. All the data for the *2018–2019 Wisconsin Burning* was collected from fire department submissions into the National Fire Incident Reporting Systems (NFIRS). Currently, Wisconsin has 812 fire departments, of which 801 are required to report data to the NFIRS data base (11 departments are not required per their status being Federal/State/Military/Private or an Affiliate of another fire department).

Incident reporting provides essential information about fires, their causes and consequences, as well as descriptive data about many other types of emergency services that fire departments provide. This data can help communities improve their fire protection systems while helping fire departments improve service delivery. Also, as we track data across the years, we can identify trends and determine how the fire problem in Wisconsin is changing.
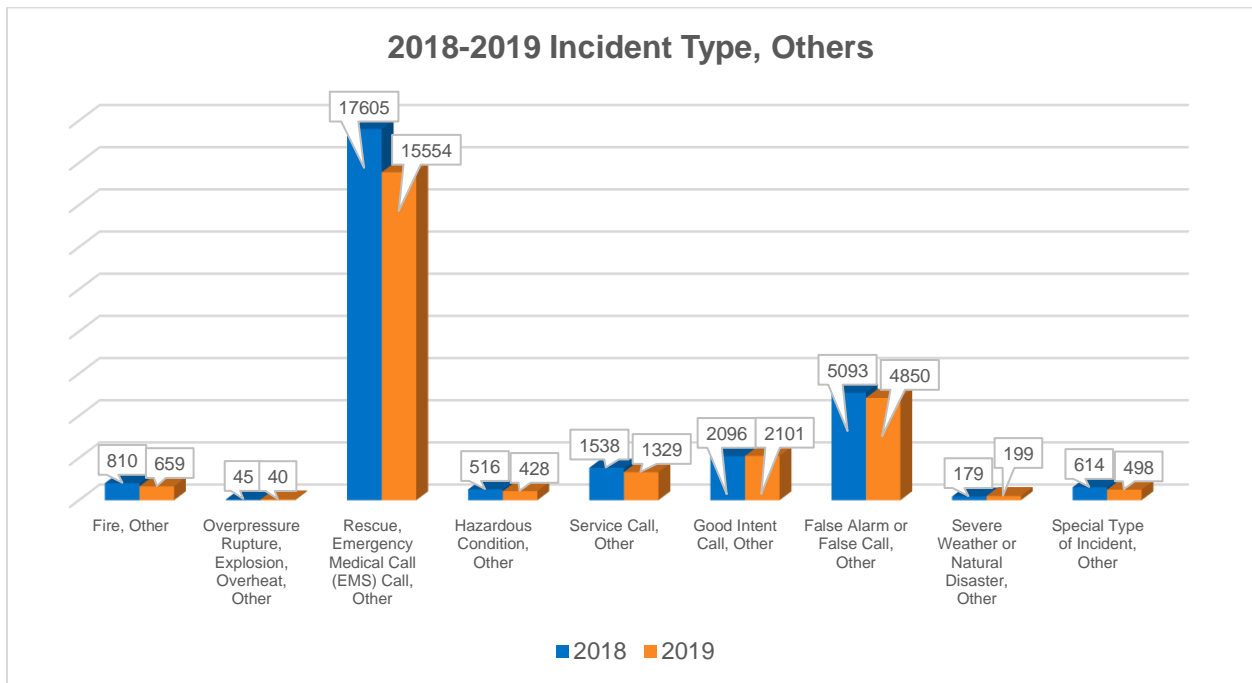
We hope this information will be useful to fire departments, elected officials, and the public as a planning tool for meeting the future needs of the fire service and promoting fire safety in Wisconsin.

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STATISTICS DISCLAIMER

As you read through *2018-2019 Wisconsin Burning,* you may question some of the numbers reported. The data in this report contains information that was supplied by our Wisconsin fire departments. Incident information submitted does not always translate into usable data once it enters NFIRS. NFIRS requires a minimum amount of data for an incident to be considered valid. If critical data, such as type of fire, is missing the incident cannot be accurately analyzed. Some fire departments report all responses, while others only report fire responses. To paint a true picture of the fire departments' role in Wisconsin communities, this report contains information on all reported response types. Developing incident response data for a fire department can help determine the use of limited resources and budget dollars. Data submitted on fire cause determination has improved since the 2017 report. When reporting incidents, we need to be more specific and not overuse the "OTHER" category i.e., 100-Fire, other; 200-Overpressure, other. For example, in 2018 the "OTHER" category was used a total of **28,496** times and in 2019 "OTHER" was used **25,658.** That's up from the 2017 numbers, which was **22,767** times. We did see an improvement from 2018 to 2019, that number comes in at just under 3,000 incidents. *Wisconsin State Statute § 165.55 requires a fire chief to investigate the cause, origin and circumstances of every fire occurring in his or her jurisdiction.* This information tells us that that statutory requirement is not always being met. If we want a more accurate rate of assessment of Wisconsin's fire problem, these number must get better. The DSPS Fire Prevention staff trains fire departments in accessing and properly submitting fire incident data. Fire departments are encouraged to reach out to your Fire Prevention Coordinator for training or if you have questions while filling out a report you can contact Sarah Brown.

2018-2019 Incident Type, Others

Incident Type	2018	2019
Fire, Other	810	659
Overpressure Rupture, Explosion, Overheat, Other	45	40
Rescue, Emergency Medical Call (EMS) Call, Other	17605	15554
Hazardous Condition, Other	516	428
Service Call, Other	1538	1329
Good Intent Call, Other	2096	2101
False Alarm or False Call, Other	5093	4850
Severe Weather or Natural Disaster, Other	179	199
Special Type of Incident, Other	614	498

CURRENT FIRE DEPARTMENT STATISTICS

	So far in 2020
FDID's in Wisconsin	812
FDID's that reported incidents to NFIRS	682
FDID's not reporting incidents to NFIRS (11 departments aren't required to report)	130
Career Firefighters in Career Departments	3,550
Career Firefighters in Combination Departments	1,134
Paid Volunteer Firefighters in Combination Departments	3,663
Unpaid Volunteer Firefighters in Combination Departments	303
Paid Volunteer Firefighters in Volunteer Departments	9,246
Unpaid Volunteer Firefighters in Volunteer Departments	7,873
Non-Firefighter Staff in all Departments	9,491
Career Fire Departments	34
Combination Fire Departments	119
Volunteer Fire Departments	610
Affiliate Fire Departments	1
Federal/State/Military Fire Departments	9
Private Fire Brigades	1

WHAT'S NEW WITH NFIRS

NFIRs Decommissioning of Federal Client Tools (Data Entry Tool (DET) & System Admin Tool

Since 1998, the USFA has offered a basic Java client software (Data Entry Tool (DET) and System Admin Tool, or "Federal Client Tools") at no cost to states who wished to support its use for NFIRS reporting within their state. The software assisted fire departments that could not afford a third-party reporting product to participate in NFIRS. Currently, the USFA offers several web-based tools that perform the same functions eliminating the need to install and maintain the client software. With the next USFA Tools release, planned in early **October 2020**, **all functions of the Data Entry Tool (DET) and System Admin Tool functions will be provided in the new modernized web-based tool set, eNFIRS.** The USFA will then decommission the client software (Data Entry Tool and System Admin Tool (DET), or "federal client tool").

What this means to states and users:

- The USFA Client Tool (Data Entry Tool (DET) and System Admin Tool) software will no longer connect with the NFIRS national database.

- State agencies and users who do not use a vendor product to create an incident report must use the USFA's *web-based* tool in **eNFIRS** for incident data collection (currently known as the Data Entry Browser Interface (DEBI)), which will have a modernized interface.

- A local database option will no longer be provided or supported by the USFA. Off-line users of the DET will not be able to reset their password or update their DET version.

All functions necessary for participation in NFIRS will continue to be available in a modernized form in the USFA's eNFIRS tool set. This includes:

- Tools to perform NFIRS user account, permissions, and group maintenance (replacing the client software System Admin Tool).

- Tools to create and manage plus one codes and special studies for NFIRS incident reports.

- NFIRS Bulk Import and Export Utilities, forms-based Incident reports (FBIRs), and Summary Output Reports Tool.

- Access to the NFIRS Data Warehouse (DW) and its reports. Contact your State Program Manager or the NFIRS Support Center about using the NFIRS DW reports.

- Password reset.

The major factor requiring decommission of the USFA client software involves the old software code. The java code and the patches added to it over many years are no longer acceptable by current security and vulnerability scan engines. The next release modernizes the system code and provides all functions

necessary to participate in NFIRS in a web-based tool format. States and users are encouraged to submit their data directly to the NFIRS national database as allowed by state requirements.

If you have additional questions, please contact the NFIRS Support Center via email at fema-nfirshelp@fema.dhs.gov or 888-382-3827

NFIRS Coding Information for COVID-19 Special Study

General:

The U. S. Fire Administration (USFA) is conducting *the National NFIRS COVID-19 Special Study* (a.k.a., the Special Study). The Special Study is looking to determine whether COVID-19 was, or was not, a factor in any incident response by the fire service. In most cases, the Special Study is going to be centered around a person, typically a person involved or a patient. A sick bystander or family-member at the scene could alter the response. The Special Study question asks about the impact on the entire incident, independent of the incident type. Some of the frequently asked questions regarding the study are as follows.

Is the Special Study a plus-one code? Should we create plus-one codes for COVID-19 incidents?

The Special Study is not a plus-one code; it is a separate section (Supplemental Form 1S - Section E3) of the NFIRS Basic Module. Since COVID-19 interactions can occur at various types of call responses, there is no single incident type code that can capture all instances of COVID-19 encounters.

A plus-one code should not be created for the National Special Study's codes 1–4.

If there is a factor the state or a department wishes to capture based on a national length code in another field, a plus-one code can be created. Refer to the NFIRS Gram, Use of Plus-one Codes, on the USFA NFIRS website: https://www.usfa.fema.gov/data/nfirs/support/training.html or contact your state NFIRS program manager or the NFIRS Support Center.

Is the Special Study required or mandatory?

The Special Study is voluntary but strongly encouraged. This Special Study data is not validated and does not make an incident invalid, and the record must be in the proper format. 2 National Fire Data Center - National Fire Incident Reporting System May 2020

I use a third-party vendor software. How do I participate in this Special Study?

All vendors have been contacted and provided specific information about this Special Study, and many vendors have already deployed, or are currently working on deploying the study in their software. If the Special Study is not immediately apparent in your software, please contact your software vendor to assist.

When you export your incidents from your vendor software, your exported data file must include the Special Study record and its data. The Special Study will be part of the incident when submitted (imported) to the NFIRS national database by you or your state.

This Special Study was released in March. Can I go back and add the Special Study responses in incidents that occurred before the release?

Absolutely, in fact, it is encouraged. The start date of this Special Study was January 1, 2020. Incidents in NFIRS can be updated as new information is obtained. Since this pandemic started earlier this year, the incident can be updated if applicable. It is recommended that a note is made in the Remarks section advising of the change to the report.

Is there a penalty for not using the Special Study?

There is no mandate or penalty from the USFA; however, some states are requiring its use. It is recommended that you speak with your state NFIRS program manager if you are unsure (https://www.usfa.fema.gov/pocs/).

Does the Special Study apply to every single incident type reported to NFIRS (e.g., Incident Type 321 and fire related incident types)?

Each incident has the potential for a COVID-19 exposure; therefore, it should be used on all incident types. The Special Study should be used on every incident including those incidents in which COVID-19 was not a factor or unknown. There is no prerequisite for inclusion of the Special Study.

What is the difference between codes 3 and 4?

Code 3 (No, COVID-19 was not a factor) would be used in the event of a COVID-19 negative person involved, patient, or encounter. For example, if the fire department were dispatched to clean up after a vehicle collision and there was no person involved or patient, therefore no contact, the Special Study would be coded as a three (3).

Code 4 (Unknown) would be used if the presence or impact of COVID-19 on the incident is simply not known. This could include an asymptomatic person involved in the incident.

Should we only fill-in the Special Study if Codes 1 or 2 fit?

No, if the Special Study is used, it should be used for all incidents, not just those that could be coded as 1 or 2. This prevents inaccurate or skewed data when analyzing the Special Study results.

How do we use the Special Study with calls that are canceled en route?

When reporting an incident with Incident Type 611, Canceled en route, the best response in the Special Study is code 3, COVID-19 was not a factor. This is the appropriate response because there was no interaction between the fire department and a potential patient. In the Basic Module, enter the Actions Taken Code 93, for Canceled en route.

Our department responded to a call where COVID-19 was suspected or confirmed. Several personnel went to the scene. How do we report that accurately in the Basic and Fire Service Casualty modules?

If multiple fire service personnel are on the scene of an incident where COVID-19 is suspected or confirmed, the personnel in the immediate area of the suspected or confirmed COVID-19 individual can be considered health exposures for NFIRS reporting. This allows the fire service personnel to be counted as fire service injuries in Block H1 of the Basic Module. A Fire Service Casualty Module should be

completed for each fire service member exposed and recorded as a fire service exposure (Block G3: Severity code 1, Report only, including exposure).

Example: An engine company with a crew of four (4) arrives to an incident scene to provide manpower assistance to an ambulance with a COVID-19 confirmed patient. Two members of the engine company assist the ambulance crew, while the other two control traffic. In this case, the COVID-19 Special Study would be set to a value of 2 (Yes, COVID-19 was a confirmed factor in this incident); two (2) would be entered as fire service injuries (i.e., health exposures) in Block H1 on the Basic Module, and two (2) Fire Service Casualty Modules would be completed and coded as health exposures in G3 Severity field (code 1, Report only, including exposure). For the Special Study code, enter code 1 (Yes, COVID 19 was confirmed).

If a firefighter tests positive to COVID-19, is this an NFIRS incident by itself?

No, in NFIRS, fire service casualties are reported if the firefighter was *on duty*. The firefighter with confirmed COVID-19 must be linked to an exposure or hazard encountered while *on duty.* If a firefighter were *off duty*, felt ill, went to the doctor, and tested positive for COVID-19, *the illness would not be documented in NFIRS unless* the firefighter's exposure can be linked to a person with COVID-19 that the firefighter came in contact with while on duty.

To fill-in all required Basic Module fields, entering the injury in the Casualties section, as well as completing the Fire Service Casualty Module for each casualty. For the Special Study, code 1, Yes, COVID-19 was suspected, could be used.

If one of our firefighters or staff members tests positive for COVID-19 and the firefighter is reasonably certain that the contraction was due to incident response, do we need to create a non-run related NFIRS report that shows the firefighter injury? How do we do this – what codes do we use and what fields need to be completed?

This situation would be treated as any other fire service exposure. You could create an incident, likely an EMS incident, and enter the address of the fire department; enter one Fire Service Casualty and add the Fire Service Casualty Module for the exposed firefighter. You will be required f a firefighter is injured or exposed to a hazardous substance (e.g., COVID-19) while *on duty*, and if the injury or exposure is not part of an ongoing incident, the injury or exposure initiates the creation of the incident. When the on-duty injury creates an incident, the Basic Module and the Fire Service Casualty Module are completed. This NFIRS rule has been in place since the start of NFIRS 5.0. The incident type would most likely be in the 300 EMS category, e.g., 321. If the incident is COVID-19 related, the National NFIRS COVID-19 Special Study should be completed. Anytime the facts of an incident change, the incident report should be updated to reflect those changes.

Can we report on the status or lack of PPE such as lack of N95 masks, suits, or disposable gloves?

On the Fire Service Casualty Module, protective equipment sections (Sections K1-K4) apply ONLY when reporting failure or a problem with the PPE that contributed to the firefighter injury.

The Basic Module's Remarks narrative can be used for PPE details, (such as the type N95 mask), availability, and use.

Can I change my COVID-19 Special Study choice after I have submitted my report to NFIRS?

As always, an incident's data and status can be updated after it is submitted to the NFIRS national database. It should be **updated and resubmitted** to ensure that the incident is accurate and complete in NFIRS.

How can I monitor and run reports on the COVID-19 Special Study data with my incidents?

The USFA has developed COVID-19 reports that can be run in the NFIRS Data Warehouse (DW) so that the fire service can determine how COVID-19 has impacted their departments. Users can access the NFIRS DW with appropriate permissions. Please contact your state NFIRS program manager (https://www.usfa.fema.gov/pocs/) to request accounts, permissions, and assistance.

Is the Special Study title going to be updated?

It is unlikely that there will be an update to how the Special Study is titled. The specific title is not critical but should be consistent with the recommendations from the USFA. We have spoken to numerous vendors and reiterated the same. The crucial point is that the Special Study ID and its codes remain unchanged.

Should we use the Special Study? What is the benefit for our department?

Yes. The USFA strongly recommends the inclusion of the Special Study for all incidents. The collection of this data is invaluable in determining the pandemic's impact to the fire service, locally, regionally, and nationally.

In addition to using the USFA's Special Study for COVID-19, states and fire departments can set up their own special studies in the NFIRS national database (and similarly, plus-one codes). The data can be used at the state and local levels. Additional studies (or plus-one codes) should be carefully planned and defined for meaningful data and coordinated with the state NFIRS program manager. Contact the NFIRS Support Center for initial guidance on special studies or plus-one codes that will be recognized ("defined" with your descriptions) when imported to NFIRS.

If you have additional questions, please contact the NFIRS Support Center at fema-nfirshelp@fema.dhs.gov or 888-382-3827

We are here to assist you, to improve the data submitted to NFIRS, and to make NFIRS useful to your department and your state.

NFIRS Reporting – Invalids

When completing a NFIRS incident report there is a minimum amount of data that must be entered into the NFIRS system for the incident to be deemed a valid incident. Warning and Critical errors will occur when a required module is missed or incomplete and when module questions are answered incorrectly or not at all. Certain modules are "Required" based on the incident type reported and depending on if the question is a "Required" question or if it is just considered "Additional Information" will determine whether it is a Warning or a Critical error. It is very important to answer all the required questions in all

the required modules as completely as possible. When an incident is deemed invalid the data is considered unusable in the NFIRS system and therefore cannot be used in data analysis. As you can see in the following charts, work is needed to get invalid incidents under control.

Ways to check your NFIRS reporting for Invalid Incidents:

1. Run an **Incident Listing** report in the Summary Output Report Tool filtered to just show your Invalids.

2. Run a **Monthly Incident Counts** report in the Summary Output Report Tool filtered to just show your Invalids.

3. If you are using third party software, you should be looking at the **Log File** that is emailed to you after NFIRS has completed your import. Invalids will show at the bottom under the Incident Summary. See example to the right.
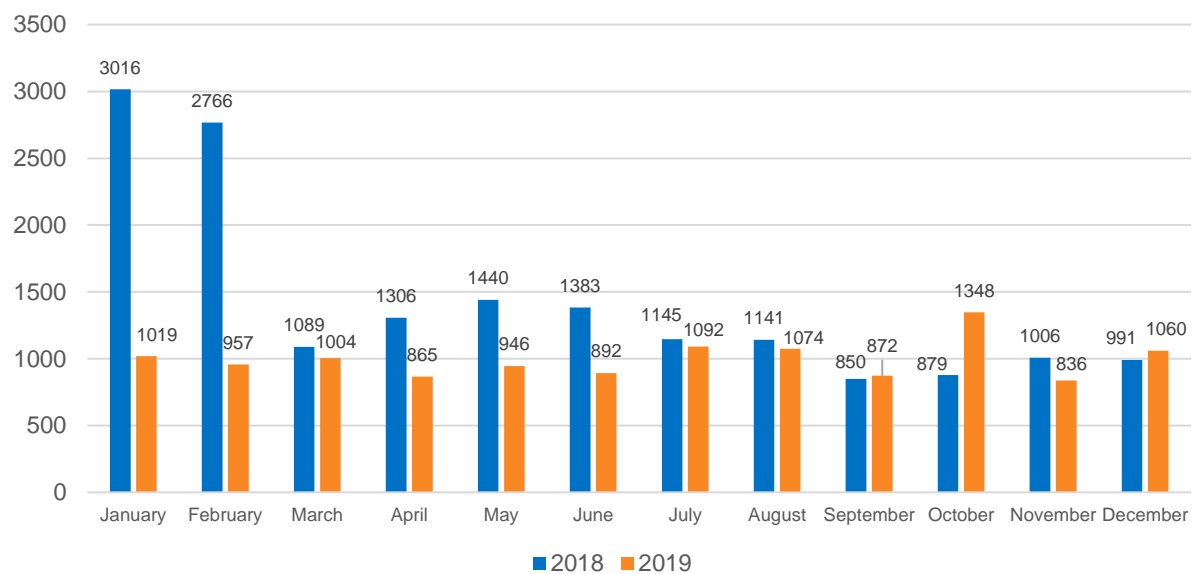
```
Incident Summary:
Valid imports:      22
Invalid imports:     0
Deleted Incidents    5
Import failures:     3
TOTAL Processed:    30
```

If you would like assistance with Invalids contact your Fire Coordinator or Sarah Brown.

2018: Top 10 Invalid Reasons	Total Invalids: 16,804
1. Incident Type related	1,415
2. Incident Actions Taken incorrect or left blank	1,289
3. Property Use left blank	1,218
4. Incident Arrival Time incorrect or left blank	1,177
5. Incident Arrival Date incorrect or left blank	1,158
6. Incident Last Unit Cleared Time incorrect or left blank	1,042
7. Apparatus Type not answered	991
8. Apparatus Use not answered	927
9. Incident Last Unit Cleared Date incorrect or left blank	891
10. State not answered	470

2019: Top 10 Invalid Reasons	Total Invalids: 11,694
1. Incident Arrival Time incorrect or left blank	997
2. Incident Arrival Date incorrect or left blank	964
3. Incident Type related	731
4. Incident last Unit Clear Data incorrect or left blank	683
5. Incident Last Unit Clear Date incorrect or left blank	637
6. Incident Actions Taken incorrect or left blank	591
7. Property Use left blank	553
8. Incident Mutual Aid Given or Received left blank	413
9. Non-Fire Service Fatalities incorrect or left blank	375
10. Fire Service Fatalities incorrect or left blank	374

Invalids by the Month

NFIRS Modules with Critical Errors

	Basic Module	Apparatus Module	Fire Module	Structure Fire Module	Wildland Module	Fire Service Casualty Module	HazMat Module	Civilian Fire Casualty Module	Arson Module	EMS Module
2018	13241	2590	620	195	129	16	7	4	0	2
2019	10375	562	496	162	66	10	9	7	6	1

■2018 ■2019
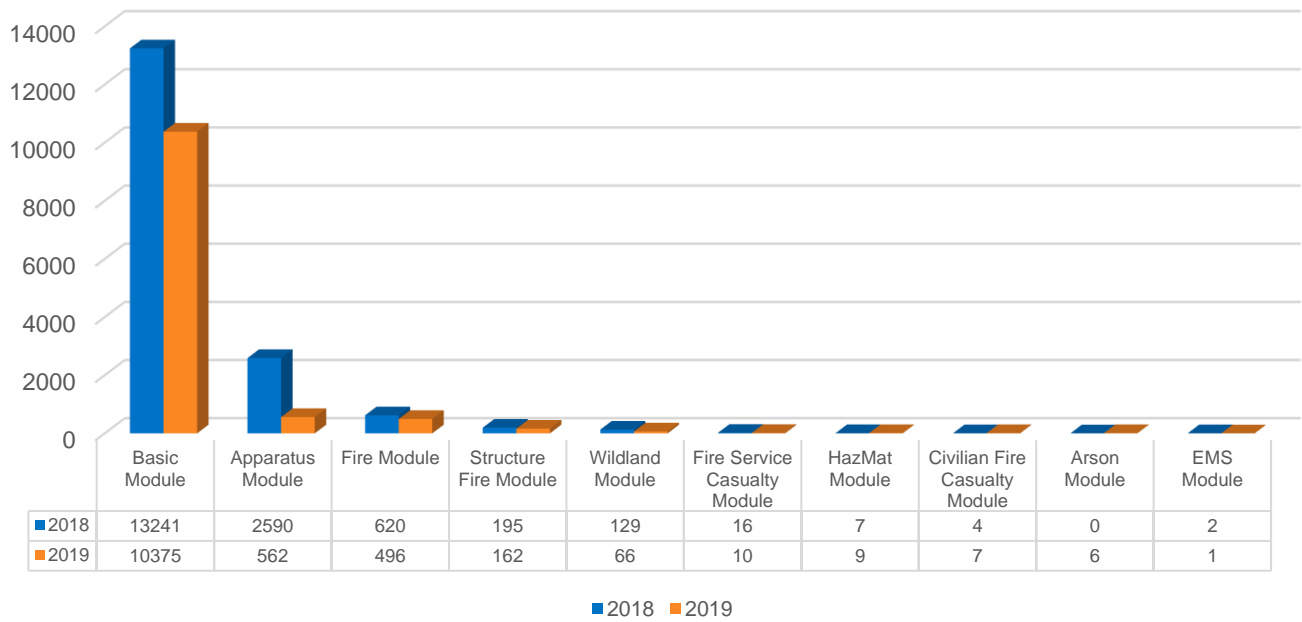
NFIRS Incident Code Guide

100 Series (Fire)

(11) Structure fire
- (111) Building Fire
- (112) Fires in structures other than in a building
- (113) Cooking fire, confined to container
- (114) Chimney or flue fire, confined to chimney or flue
- (115) Incinerator overload or malfunction, fire confined
- (116) Fuel burner/boiler malfunction, fire confined
- (117) Commercial compactor fire, confined to rubbish
- (118) Trash, or rubbish fire in a structure, no flame damage

(12) Fire in mobile property used as fixed structure
- (121) Fire in mobile home used as a fixed residence
- (122) Fire in motor home, camper, recreational vehicle
- (123) Fire in portable building, fixed location

(13) Mobile property (vehicle) fire
- (131) Passenger vehicle fire
- (132) Road freight or transport vehicle fire
- (133) Rail vehicle fire
- (134) Water vehicle fire
- (135) Aircraft vehicle fire
- (136) Self-propelled motor home or recreational vehicle fire
- (137) Camper or recreational vehicle
- (138) Off-road vehicle or heavy equipment fire

(14) Natural vegetation fire
- (141) Forest, woods, or wildland fire
- (142) Brush, or brush and grass mixture fire
- (143) Grass fire, includes fire confined to area

(15) Outside rubbish fire
- (151) Outside rubbish, trash, or waste fire
- (152) Garbage dump or sanitary landfill fire
- (153) Construction or demolition landfill fire
- (154) Dumpster or other outside trash receptacle fire
- (155) Outside stationary compactor/compacted trash fire

(16) Special outside fire
- (161) Outside storage fire on residential or commercial/industrial property
- (162) Outside equipment fire
- (163) Outside gas or vapor combustion explosion
- (164) Outside mailbox fire

(17) Cultivated vegetation, crop fire
- (171) Cultivated grain or crop fire
- (172) Cultivated orchard or vineyard fire
- (173) Cultivated trees or nursery stock fire

200 Series (Overpressure Explosion, Overheat – No Fire)

(21) Overpressure rupture from steam (no ensuing fire)
- (211) Overpressure rupture of steam pipe or pipeline
- (212) Overpressure rupture of steam boiler
- (213) Steam rupture of pressure or process vessel

(22) Overpressure rupture from air or gas – no fire
- (221) Overpressure rupture of air or gas pipe/pipeline
- (222) Overpressure rupture of boiler from air or gas
- (223) Air or gas rupture or pressure or process vessel

(23) Overpressure rupture, chemical reaction – no fire
- (231) Chemical reaction rupture of pressure or process vessel

(24) Explosion (no fire)
- (241) Munitions or bomb explosions (no fire)
- (242) Blasting agent explosion (no fire)
- (243) Fireworks explosion (no fire), all classes of fireworks

(25) Excessive heat, scorch burns with no ignition
- (251) Excessive heat, scorch burins with no ignition

300 Series (Rescue & EMS Incidents)

(31) Medical assist
- (311) Medical assist, assist EMS crew

(32) Emergency medical service (EMS) incident
- (321) EMS call, excluding vehicle accident with injury
- (322) Vehicle accident with injuries
- (323) Motor vehicle/pedestrian accident (MV Ped)
- (324) Motor vehicle accident with no injuries

(33) Lock-in
- (331) Lock-in, includes vehicles (if lock-out, use 511)

(34) Search for lost person
- (341) Search for person on land
- (342) Search for person in water
- (343) Search for person underground

(35) Extrication, rescue
- (351) Extrication of victim(s) from building/structure
- (352) Extrication of victim(s) from vehicle
- (353) Removal of victim(s) from stalled elevator
- (354) Trench/below grade rescue
- (355) Confined space rescue
- (356) High angle rescue
- (357) Extrication of victim(s) from machinery

(36) Water or ice-related rescue
- (361) Swimming/recreational water areas rescue
- (362) Ice rescue
- (363) Swift water rescue
- (364) Surf rescue
- (365) Watercraft rescue

(37) Electrical rescue
- (371) Electrocution or potential electrocution
- (372) Trapped by power lines

(38) Rescue or EMS standby
- (381) Rescue or EMS standby; hazardous conditions

400 Series (Hazardous Conditions – No Fire)

(41) Combustible/flammable spills & leaks
- (411) Gasoline or other flammable liquid spill, Class I
- (412) Gas leak (natural gas or LPG)
- (413) Oil or other combustible liquid spill, Class II or III

(42) Chemical release, reaction, or toxic condition
- (421) Chemical hazard (no spill or leak)
- (422) Chemical spill or leak
- (423) Refrigeration leak
- (424) Carbon monoxide incident

(43) Radioactive condition
- (431) Radiation leak, radioactive material

(44) Electrical wiring/equipment problem
- (441) Heat from short circuit (wiring), defective/worn insulation
- (442) Overheated motor or wiring
- (443) Breakdown of light ballast
- (444) Power line down
- (445) Arcing, shorted electrical equipment

(45) Biological hazard
- (451) Biological hazard, confirmed or suspected

(46) Accident, potential accident
- (461) Building or structure weakened or collapsed
- (462) Aircraft standby
- (463) Vehicle accident, general cleanup

(47) Explosive, bomb removal
- (471) Explosive, bomb removal (for bomb scare, use 721)

(48) Attempted burning, illegal action
- (481) Attempt to burn
- (482) Threat to burn

500 Series (Service Call)

(51) Person in distress
- (511) Lock-out
- (512) Ring or jewelry removal, no transport to hospital

(52) Water problem
- (521) Water (not people) evaluation
- (522) Water or steam leak, includes open hydrants

(53) Smoke problem
- (531) Smoke or odor removal

(54) Animal problem or rescue
- (541) Animal problem
- (542) Animal rescue

(55) Public service assistance
- (551) Assist police or other governmental agency
- (552) Police matter
- (553) Public service, not government agencies
- (554) Assist invalid
- (555) Defective elevator, no occupants

(56) Unauthorized burning
- (561) Unauthorized burning

(57) Cover assignment, standby at fire station, move-up
- (571) Cover assignment, standby, move-up

600 Series (Good Intent Calls)

(61) Dispatched and canceled en route
- (611) Dispatched and canceled en route

(62) Wrong location, no emergency found
- (621) Wrong location
- (622) No incident found at dispatch address

(63) Controlled burning
- (631) Authorized controlled burning
- (632) Prescribed fire (with prior written, approved fire plan)

(64) Vicinity Alarm
- (641) Vicinity alarm (incident in other location)

(65) Steam, other gas mistaken for smoke
- (651) Smoke scare, odor of smoke, not steam
- (652) Steam, vapor, fog or dust thought to be smoke
- (653) Smoke from barbeque, tar kettle (not hostile fire)

(66) EMS call where party has been transported
- (661) EMS call, party transported by non-fire agency

(67) Hazmat release investigation w/ no hazmat
- (671) Hazmat release investigation w/ no hazmat found
- (672) Biological hazard, none found

700 Series (False Alarms and False Calls)

(71) Malicious, mischievous false alarm
- (711) Municipal alarm system, malicious false alarm
- (712) Direct tie to FD, malicious/false alarm
- (713) Telephone, malicious false alarm
- (714) Central station, malicious false alarm
- (715) Local alarm system, malicious false alarm

(72) Bomb scare
- (721) Bomb scare – no bomb

(73) System or detector malfunction
- (731) Sprinkler activation due to system malfunction or failure
- (732) Extinguishing system activation due to malfunction
- (733) Smoke detector activation due to malfunction
- (734) Heat detector activation due to malfunction
- (735) Alarm system activation due to malfunction
- (736) CO detector activation due to malfunction

(74) Unintentional system/detector operation – no fire
- (741) Sprinkler activation, no fire – unintentional
- (742) Extinguishing system activation
- (743) Smoke detector activation, no fire – unintentional
- (744) Detector activation, no fire – unintentional
- (745) Alarm system activation, no fire – unintentional
- (746) Carbon monoxide detector activation, no CO

(75) Biological hazard
- (751) Biological hazard, malicious false report

800 Series (Severe Weather and Natural Disaster)

(81) Severe Weather & Natural Disaster
- (811) Earthquake assessment, not rescue/other service
- (812) Flood assessment, not water rescue
- (813) Wind storm, tornado/hurricane assessment
- (814) Lightning strike (no fire), includes investigation
- (815) Severe weather or natural disaster standby

900 Series (Special Incident Type)

(91) Citizen complaint
- (911) Citizen complaint, includes code violations

INCIDENT REPORTING

2018–2019 Wisconsin Burning contains information on the total number of incidents reported by participating fire departments. In 2018, a total of 799 fire departments reported incident data to NFIRS. This is 19 more fire departments than reported in 2019 (780). 11 of the total 812 fire departments in Wisconsin are not required to report to NFIRS because they are Federal/State/Military/Private fire brigade, or they are an affiliate of another fire department.

For 2018 and 2019, **SPS 314 and NFPA 1 (2012)** had the following requirements under **1.11.3.2**, "The fire department shall keep a record of fire and other emergency responses occurring within its jurisdiction and of facts concerning the same, including statistics as to the extent and damage caused by such fires or emergencies." In addition, Wisconsin State Statutes § 101.141 shall apply; **101.141 RECORD KEEPING OF FIRES. (1)** Each city, village, and town fire department shall file a report for each fire that involves a building and that occurs within the boundaries of the city, village, or town with the U.S. fire administration for placement in the fire incident reporting system maintained by the U.S. fire administration. The report shall be filed within 60 days after the fire occurs.

SPS 314.01 (11) FIRE INCIDENT REPORTS. Substitute the following wording for the requirements in NFPA 1 section 1.11.3.2:

(a) 1. For each fire, a record shall be compiled by a fire department serving the municipality in which the fire occurred.

2. The record in subd. 1. shall include all applicable information specified in s. 101.141 (2), Stats., shall be filed with the federal agency specified in s. 101.141 (1), Stats., and shall be filed no later than the deadline specified in s. 101.141(1) .

The fire service, the DSPS, and the U.S. Fire Administration recognize the importance of accurately reporting all fires. To be eligible for federal government fire grants, fire departments must report all incidents to the NFIRS. Failure to report can disqualify a department from receiving grants and may also disqualify members from attending training at the National Fire Academy.

To report the 2018 and 2019 fire incident data, Wisconsin fire departments used one of the following methods:

1. State-provided Image Trend

2. Federally provided Data Entry Tool (DET)

3. Federally provided Data Entry Browser Interface (DEBI)

4. Third party software (Firehouse, Fire Programs, Emergency Reporting, ProPhoenix etc.)

Summary by Incident Type

100-Fire (Fire)

According to NFIRS 2018 had a reported 19,663 fire incidents in Wisconsin. 2019 had slightly less, coming in at 16,629. The decrease in number could possibly be due to the fact that 19 departments didn't report a single incident for 2019.

Fire by Incident Type & Code	Mutual Aid None	Mutual Aid Given	Mutual Aid Received	Other Aid Given	Exposures	Total Incidents
Year	2018 / 2019	2018 / 2019	2018 / 2019	2018 / 2019	2018 / 2019	2018 / 2019
Building Fires (110-118, 120-123)	4,067 / 3,678	4,932 / 4,372	1,671 / 1,507	35 / 21	97 / 74	10,804 /.9,638
Vehicle Fire (130-138)	2,584 / 2,409	244 / 282	181 / 209	3 / 7	44 / 33	3,055 / 2,935
Other Fires (100, 140-173)	4,185 / 3,126	1,043 / 575	553 / 340	16 / 15	7 / 7	5,804 / 4,056

200 – Overpressure Rupture, Explosion, Overheat (Exp)

There was a total of 826 in 2018 and 878 in 2019. Excessive heat, scorch burns with no ignitions was the number one reason in both years.

300 – Rescue and Emergency Medical Service Incident (EMS)

Rescue and EMS incidents accounted for 302,841 in 2018 and 296,780 in 2019. Per the norm, EMS lands at the top with the most calls of all the incident types.

400 – Hazardous Calls (Hazard)

The number of Hazardous calls increased from 16,038 in 2018 to 17,406 in 2019. We have seen a continuous rise in Hazardous calls since 2017. Gas leaks were the number one incident type class in this category for both 2018 and 2019. There was a total of 8,118 gas leaks combined for both years.

500 – Service Calls (Service)

Wisconsin fire departments had 20,712 service calls in 2018. The top 5 classes were Assist invalid—4,881, Smoke or odor removal—2,429, Assist police or other governmental agency—1,575, Police matter—1,549, and Service call, other—1,538. 2019 didn't have much of an increase with no real change in top 5 except the order. Assist invalid—5,421, Smoke or odor removal—2,319, Police matter—1,799, Assist police or other governmental agency—1,647, and Public service—1,388.

600 – Good Intent Calls (Assist)

There was a total of 25,110 in 2018 and 25,648 in 2019. For both years, the number 1 reason went to Dispatched & Canceled en route—14,388 (2018) and 14,782 (2019). The second reason for both years was No Incident found at dispatch address—3,882 (2018) and 4,305 (2019).

700 – False Call

Incident Type and Code	Mutual Aid None	Mutual Aid Given	Mutual Aid Received	Other Aid Given	Total False Calls
Year	2018 / 2019	2018 / 2019	2018 / 2019	2018 / 2019	2018 / 2019
Malicious Call (710-715, 751)	2,064 / 1,875	11 / 10	40 / 42	3 / 1	2,118 / 1,928
All other False Calls (700, 721-746)	30,058 / 31,041	517 / 479	637 / 638	44 / 25	31,253 / 31,184

800 – Severe Weather and Natural Disaster (Weather)

Wisconsin had 808 Severe Weather Calls in 2018 and an increase in 2019 to a reported 1,049. The majority of the Severe Weather calls for both years were for Windstorm, Tornado/Hurricane assessment.

900 – Special Incident Type (Other)

	2018	2019
Special type of incident, other	614	498
Citizen complaint	353	393

When looking at the Fire, Other category, which is the 100 series incident type that ends in zero, we find that over the course of 4.5 years we have accumulated a total of 2,380 Other fires. That is 2,380 fires that we can count but we really don't know what happened. We don't know if it was a car fire, a building fire or a grass fire—just that there was a fire. We need to get away from using the Other category when reporting. The only time we should be using this is when we have no other choice available, and then note in your narrative what you found on scene. The following pages contain charts of the Fire, Other categories to help separate them out to look more closely at where improvement in reporting is needed.

Fire, Other

Incident Type	2016			2017			2018			2019			2020 (8/31)		
	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp
100 -- Fire, other	600	236	0	609	217	8	534	230	0	436	189	1	201	63	0
110 -- Structure fire, other (conversion only)	1	3	0	1	3	0	0	0	0	5	9	0	1	10	0
120 -- Fire in mobile prop. used as a fixed structure, other	6	5	0	10	4	0	6	5	0	10	2	0	8	0	0
130 -- Mobile property (vehicle) fire, other	205	21	0	220	26	4	229	29	1	207	31	4	96	14	0
140 -- Natural vegetation fire, other	245	25	0	195	24	0	206	40	0	137	18	2	101	6	0
150 -- Outside rubbish fire, other	261	10	0	266	18	0	270	15	0	208	7	0	114	4	0
160 -- Special outside fire, other	183	16	1	159	9	0	114	14	1	91	8	2	63	4	0
170 -- Cultivated vegetation, crop fire, other	41	13	1	36	10	0	35	15	0	17	10	0	10	5	0

Incident Type	2016			2017			2018			2019			2020 (8/31)		
	Inc Type Cnt	Aid Giv-en	Exp	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Giv-en	Exp	Inc Type Cnt	Aid Giv-en	Exp	Inc Type Cnt	Aid Giv-en	Exp
100 -- Fire, other	600	236	0	609	217	8	534	230	0	436	189	1	201	63	0
110 -- Structure fire, other (conversion only)	1	3	0	1	3	0	0	0	0	5	9	0	1	10	0
111 -- Building fires	3,127	3,910	92	3,344	3,983	96	3,188	4,438	83	2,879	3,903	64	1,226	1,514	25
112 -- Fires in structures other than in a building	135	76	2	133	107	4	166	121	3	146	106	0	44	37	3
113 -- Cooking fire, confined to container	1,349	73	0	1,370	64	0	1,424	85	0	1,206	66	0	517	32	0
114 -- Chimney or flue fire, confined to chimney or flue	299	78	0	303	89	0	316	94	0	286	98	1	145	48	0
115 -- Incinerator overload or malfunction, fire confined	14	3	0	12	4	0	6	4	0	21	13	0	8	3	0
116 -- Fuel burner/ boiler malfunction, fire confined	58	12	0	47	20	0	49	14	0	51	7	0	21	5	0
117 -- Commercial Compactor fire, confined to rubbish	17	1	0	11	3	0	18	17	0	13	8	0	4	1	0
118 -- Trash or rubbish fire, contained	231	18	1	301	24	0	331	22	0	313	25	1	168	21	0
120 -- Fire in mobile prop. used as a fixed struc., other	6	5	0	10	4	0	6	5	0	10	2	0	8	0	0
121 -- Fire in mobile home used as fixed residence	44	27	0	52	21	0	44	28	3	43	34	2	14	13	1
122 -- Fire in motor home, camper, recreational vehicle	18	8	0	27	5	1	27	5	5	22	6	2	8	4	0
123 -- Fire in portable building, fixed location	15	3	3	12	3	0	12	2	0	12	8	0	5	3	0
130 -- Mobile property (vehicle) fire, other	205	21	0	220	26	4	229	29	1	207	31	4	96	14	0
131 -- Passenger vehicle	2,064	118	27	1,945	96	27	1,862	118	34	1,783	131	25	652	42	11
132 -- Road freight or transport vehicle fire	203	30	10	208	37	0	240	23	2	244	55	2	93	11	5
133 -- Rail vehicle fire	8	0	0	5	0	0	11	8	0	6	1	0	2	1	0
134 -- Water vehicle	29	5	1	22	6	0	22	4	1	18	1	0	10	0	0
135 -- Aircraft fire	5	3	0	3	3	0	2	12	0	3	0	0	1	0	0
136 -- Self-propelled motor home or recreational vehicle	13	0	0	10	1	0	2	0	0	8	1	0	2	1	0

Incident Type	2016			2017			2018			2019			2020 (8/31)		
	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp	Inc Type Cnt	Aid Given	Exp
137 -- Camper or recreational vehicle (RV) fire	19	3	1	24	10	1	25	6	1	29	13	1	5	2	0
138 -- Off-road vehicle or heavy equipment fire	274	35	0	301	30	1	298	35	3	228	44	1	105	20	3
140 -- Natural vegetation fire, other	245	25	0	195	24	0	206	40	0	137	18	2	101	6	0
141 -- Forest, woods	221	62	0	178	55	2	276	112	1	187	41	0	90	35	0
142 -- Brush, or brush and grass mixture fire	601	96	2	631	128	1	768	233	1	438	92	0	333	51	1
143 -- Grass fire	592	97	1	695	114	0	839	238	1	552	110	0	297	57	0
150 -- Outside rubbish	261	10	0	266	18	0	270	15	0	208	7	0	114	4	0
151 -- Outside rubbish, trash or waste fire	769	22	6	775	22	0	790	31	0	642	16	0	310	12	1
152 -- Garbage dump or sanitary landfill fire	11	0	0	18	12	0	8	8	0	10	1	0	5	5	0
153 -- Construction or demolition landfill fire	18	1	0	17	4	0	9	4	0	14	1	0	7	1	0
154 -- Dumpster or other outside trash receptacle fire	529	5	3	500	5	0	441	12	2	371	8	1	199	6	2
155 -- Outside stationary compactor/compacted	5	0	0	10	0	0	6	0	0	10	3	0	4	0	0
160 -- Special outside	183	16	1	159	9	0	114	14	1	91	8	2	63	4	0
161 -- Outside storage	52	26	2	53	32	0	52	23	0	51	26	1	14	8	0
162 -- Outside equip-	166	22	0	132	11	0	165	21	0	138	21	0	77	5	0
163 -- Outside gas or vapor combustion explosion	10	1	0	9	1	0	8	5	0	9	0	0	2	0	0
164 -- Outside mailbox	5	0	0	4	0	0	2	0	0	5	0	0	1	0	0
170 -- Cultivated vegetation, crop fire, other	41	13	1	36	10	0	35	15	0	17	10	0	10	5	0
171 -- Cultivated grain	47	22	0	30	23	0	51	14	0	32	9	0	21	8	0
173 -- Cultivated trees or nursery stock fire	13	0	0	6	2	0	8	2	0	4	1	0	1	0	0

Fires Over the Years

The Fire Prevention Program was recently asked "How have the numbers of fires compared over the years?" There are so many different scenarios that we could run looking at fires, so we narrowed it down by Incident Type. We are including 2020 numbers in the chart, but we want to be clear final 2020 reporting is not available, so we expect those numbers to increase. As you can see in the charts on the previous pages Building Fires account for the most fires in any given year. We see that Building fires have been decreasing since 2017. As of September 1, 2020, we have 1,226 building fires recorded for 2020, that is almost halfway to the amount of Building Fires in 2019.

Passenger vehicle fires come in 2nd and those numbers have been decreasing since 2016 as well. When we compare 2020's numbers we can see Wisconsin isn't even halfway to last year's numbers yet. It looks like 2020 is on track to be less than 2019 numbers of fires.

Cooking Fires contained to a container stayed even between 2016 and 2017 and then in 2018 a bit of a spike and then a decrease in 2019 to 1,206 cooking fires. For 2020 we are at about 43% of 2019. Hopefully 2020's numbers stay low with more people staying home and an increased amount of cooking at home taking place.

Let's talk about Outside Rubbish fires. In this incident type we see that Outside rubbish, trash, or waste fires was the most reported of this incident category from 2016-2019. These numbers stay consistent from 2016 to 2019. At the highest we had 790 rubbish fires 2018.

Wisconsin had a spike in Grass fires in 2018 of 839 and then a sharp decrease down to 552 grass fires in 2019. Currently in 2020 we have 297 Grass fires reported.

When looking at the least number of recorded fires in Wisconsin, according to the chart 2016 and 2017 each had (1) Structure fire, other in each year. In 2018 we had a tie for last place with (2) Aircraft and (2) Self-propelled motorhome or recreational vehicle fires. In 2019, the least number of fires was (3) Aircraft fires and in 2020 so far, we have a 4-way tie going on in the Structure fire other, Aircraft fire, outside mailbox and Cultivated trees or nursery stock fire categories. Each of these categories had 1 fire recorded.

We haven't seen a lot of changes between over the past few years where the types of fires are concerned. For instance, from 2016-2019 the top 3 incident type groups have been in the exact same order as to which had the most to the least number of incidents. Building Fires, Mobile Property Fires and Cooking Fires. The 4th leading incident type group fluctuates between Grass, Brush and Outside Rubbish fires over the course of those years. The least number of fires over the years were consistent throughout the 3 years. 2016 had 5 Aircraft fires and 5 Mailbox fires. 2017 had 3 Aircraft fires. 2018 had a three-way tie between Aircraft, Self-propelled Motorhome or RV and Mailbox fires each having 2. Aircraft fires had the least in 2019 with 3 fires. And so far for 2020 we have a three-way tie between Aircraft, Mailbox and Cultivated Trees or Nursery stock fires. Each of these groups have 1 fire as of August 31.

Cause of Ignition

2018 Cause of Ignition	Total
Unintentional	5,262
Cause Undetermined after Investigation	1,862
Failure of Equipment or Heat Source	1,113
Cause Under Investigation	1,090
Intentional	818
Acts of Nature	2,017
Cause, Other	179
Incomplete Data	9,133
Total Fires in 2018	21,474

2019 Cause of Ignition	Total
Unintentional	4,550
Cause Undetermined after Investigation	1,644
Failure of Equipment or Heat Source	1,078
Cause Under Investigation	941
Intentional	622
Acts of Nature	180
Cause, Other	143
Incomplete Data	7,471
Total Fires in 2019	16,629

Detector Presence

Reason for Detector Fail	2018	2019
Battery Missing or Disconnected	46	38
Undetermined	44	37
Battery Discharged or Dead	33	21
Other	15	15
Defective	8	4
Improper Installation or Placement	4	6
Hardwired power failure, shut-off or disconnect	6	3
Lack of cleaning	2	5

During 2018–2019 there were a reported 20,442 Structure fires in the State of Wisconsin. Of those fires, it was reported there were **3,676 Detector Present**, **2,563** were reported as **No Detector Present** and in **1,668** cases it was reported as **Undetermined** if detectors were present or not. In the case of **12,535 incidents the data was inconclusive and couldn't be used in the study.** When detectors were present the data collected said that the **Occupants Were Alerted** by the detector 1,879 times, 52 times the **Detector Failed to Alert** the occupants, 234 times **No Occupants** were found at the structure. 76 times the **Occupants Failed to Respond** to the detector and in 140 incidents it was **Undetermined** if they were alerted.

The most common types of detectors in the structures were **Smoke detectors** (2,977), 191 times it was **Undetermined** what type of detector was present. Coming in third was a **Combination smoke/heat detectors** (185).

Detector Operational	2018	2019
Operated	1,207	1,175
Fire too small to operate	314	302
Undetermined	216	163
Failed to Operate	158	129

It is very important we educate our communities on checking/servicing their detectors every 6 months to be sure they are in good working condition. Smoke detectors were recorded 84 times as having missing or disconnected batteries and 54 times the batteries were dead.

Cooking Fires in Residential Buildings

Wisconsin fire departments responded to a combined 2,544 cooking fires in residential buildings in 2018 and 2019 resulting in:

- 31 civilian injuries

- 2 civilian deaths

- 6 firefighter injuries

- Just over $3 million in property loss

Incidents by Month

There was a total of 420,338 incidents recorded in 2018 and 413,049 recorded in 2019. Each month, for both years had between 30,000 and 40,000 incidents. The month with the most incidents for both years was July—2018 with 38,297 and 2019 with 39,569. The fewest calls came in February 2018 with 31,458 and November 2019 with 31,458.

When we further breakdown the incidents by incident type we find that EMS had the most incidents in both years. EMS's busiest month for both years was also July—2018 with 27,144 and 2019 with 26,801. Coming in at a distant second place for both years was False Calls—33,371 in 2018 and 32,099 in 2019.

2018	Fire	EXP	EMS	Hazard	Service	Assist/ Good Intent	False Alarm/ False Call	Weather	Special Incident
Jan	1,619	68	26,143	1,206	1,807	1,979	3,030	3	52
Feb	1,231	56	23,625	994	1,467	1,773	2,246	17	49
Mar	2,084	64	23,972	996	1,535	1,875	2,269	3	88
Apr	2,546	59	23,935	1,371	1,591	1,969	2,273	54	85
May	2,301	70	26,133	1,226	1,838	2,267	2,823	33	104
June	1,505	77	25,787	1,471	1,796	2,129	3,199	106	98
July	1,845	71	27,144	1,640	1,849	2,388	3,168	95	97
Aug	1,347	74	26,782	1,813	2,001	2,287	3,223	362	89
Sept	1,171	77	25,627	1,406	1,742	2,225	3,169	94	87
Oct	1,312	70	24,847	1,506	1,739	2,137	3,085	37	102
Nov	1,328	72	23,748	1,230	1,644	1,998	2,488	4	66
Dec	1,374	70	25,098	1,179	1,703	2,083	2,398	0	50

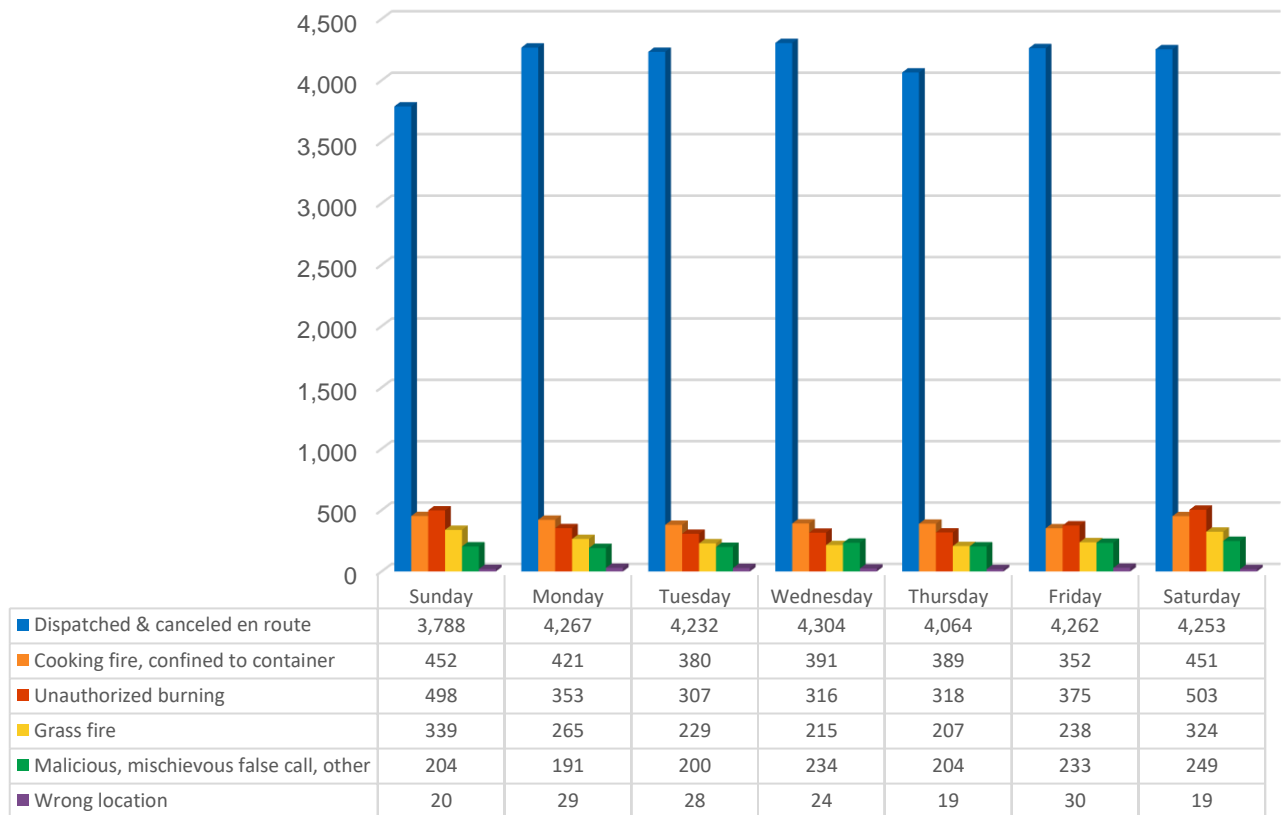| 2019	Fire	EXP	EMS	Hazard	Service	Assist/ Good Intent	False Alarm/ False Call	Weather	Special Incident
Jan	1,540	88	24,114	1,385	1,879	2,101	3,116	5	55
Feb	1,225	61	24,220	1,565	2,003	2,081	2,896	19	63
Mar	1,550	14	25,216	1,241	1,777	2,058	1,555	96	71
Apr	1,876	79	23,950	1,143	1,594	2,020	1,459	21	78
May	1,548	81	24,959	1,373	1,785	2,053	2,744	50	88
June	1,491	70	24,513	1,610	1,840	2,285	2,831	130	98
July	1,611	79	26,801	2,337	2,153	2,515	3,497	481	95
Aug	1,316	79	26,651	1,515	1,834	2,341	2,943	78	83
Sept	1,063	61	25,172	1,308	1,834	2,141	3,329	94	70
Oct	1,086	71	25,023	1,488	1,848	2,121	3,023	40	88
Nov	1,159	70	22,736	1,224	1,594	1,939	2,406	15	52
Dec	1,164	59	23,425	1,216	1,600	1,988	2,300	20	50

Incidents by Day of the Week

When we look at the data that was reported for 2018 and 2019, we notice two things:

- The incidents are consistent throughout the week. There is no real spike in incidents on a certain day.

- We notice that in 2018 the most incidents happened on a Monday (63,359) but in 2019 the most happened on a Friday (61,004).

In past years Fridays and Saturdays had the most incidents recorded. Most fires happened on a Monday in 2018 (3,058) and on Saturday in 2019 (2,654) and the least number of fires happened on Thursdays for both years—2,586 in 2018 and 2,248 in 2019.

In the chart below you will see a sample of the combined data for both years in the Incident Type Classifications of dispatched and canceled, cooking fires, unauthorized burn, grass fires, malicious fires and dispatched to the wrong location.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Dispatched & canceled en route	3,788	4,267	4,232	4,304	4,064	4,262	4,253
Cooking fire, confined to container	452	421	380	391	389	352	451
Unauthorized burning	498	353	307	316	318	375	503
Grass fire	339	265	229	215	207	238	324
Malicious, mischievous false call, other	204	191	200	234	204	233	249
Wrong location	20	29	28	24	19	30	19

Fires by Time of the Day

When tracking fire incidents by time of day, patterns do emerge. For example, for both years fires with the incident type listed as a 113-Cooking Fires, happened the most during the 1600 (4:00 p.m.) and 1900 (7:00 p.m.) time span. The peak hour for 2018 was the 1700 (5:00 p.m.) with a total of 165 fires and the peak hour during 2019 was 1800 (6:00 p.m.) with a total of 144 fires. More than likely this is having to do with the fact that people are awake and cooking dinner during those early evening hours.

The fires with a Fire Cause of Smoking peaked during the 1400 hour (2:00 p.m.) for both years. Most of Wisconsin's Heating related fires happened during the 1700 (5:00 p.m.) and 1800 (6:00 p.m.) hours.

Fires with a Mobile Property incident type of 130-138 in 2018 were at their highest during the 1200 (12:00 p.m.) hour. There were 215 fires during this hour. At their lowest, 58 fires during 0400 (4:00 a.m.) hour. In 2019 the peak for Mobile Property fires was during the 1600 (4:00 p.m.) hour which had 222 fires and at its lowest was also the 0400 (4:00 a.m.) hour with a count of 46.


Building Fires was the number one incident category for 2018 and 2019. Together they totaled 14,549. In 2018, the peak time for fires was during the 1400 (2:00 p.m.) hour which totaled 440 fires. In 2019 the peak hour was 1600 (4:00 p.m.). During this hour, 413 fires occurred in Wisconsin. If we grab a chunk of time that is the peak of both years, we would be looking at between 1300-1600 (1:00-4:00 p.m.) hours. During that period, there were a total of 3,170 fires. 974 of them occurred in a 1 or 2 family dwelling. 974 were in a multi-family dwelling and 174 were in an outbuilding or shed. The leading cause of ignition was listed as unintentional.

2018 chimney fires also reflected an even pattern with decrease between 0100 (1:00 a.m.) and 0400 (4:00 a.m.) and gradually rise throughout the rest of the day. A major increase during the 1800 (6:00 p.m.) hour and then back to a gradual decline for the rest of the evening. The most chimney fires happened during the 1800 (6:00 p.m.) hour. 40 chimney fires were reported. The chimney fires that were reported in 2019 had a peak of 34 during the 2000 (8:00 p.m.) hour. The least amount happened during the 0200 (2:00 a.m.) hour.

Overall, looking at all fires in 2018, the 1400 (2:00 p.m.) hour time frame had the most at 1,363 fires. Peak time in 2019 was an hour later with 1,139 fires being reported. Below you will see a chart that compares 2018 to 2019. Notice that the only time that 2019 had more fires than 2018 was at 7:00 a.m. hour.
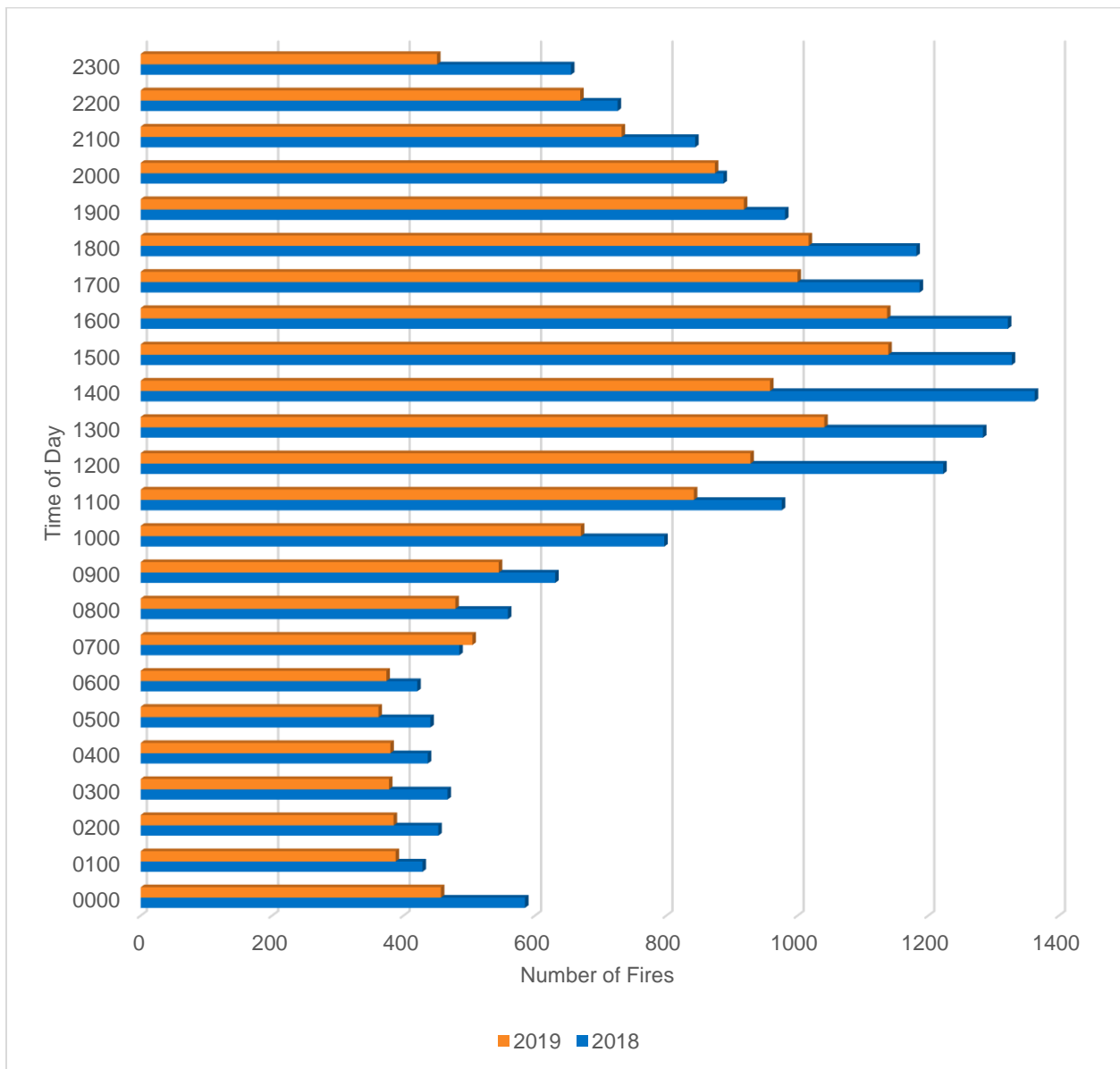
WISCONSIN FIRE INSPECTIONS 2019

New in 2020 the DSPS implemented a new software program called eSLA. With any new software there will be glitches, problems and headaches—eSLA was no different. We got through it and next year will be better!

We had a very successful 2% fire dues self-certification (even throwing a pandemic in the middle of it!) We only had 4 Fire Chiefs and 3 Municipality Clerks that didn't complete the self-certification this year. That means that 807 Fire Chiefs and 1,612 Municipality Clerks completed the self-certification. When everything was confirmed, and the calculations were computed DSPS sent out $22,449,747.57 in 2% Fire Dues distribution monies to Wisconsin Municipalities. When we designed the 2% portion of eSLA, the Fire Chiefs noticed some changes to the form. This year we wanted to start capturing more detailed data about the fire department personnel and fire inspections. We also wanted to be sure that we have the most current fire department information from everyone. Some of that data hadn't been updated in years.

Thank you to all of you for taking it in stride and getting us that information. So, as we promised we are going to share with you our findings. Below you will see a chart for the total of all departments. For the fire inspection numbers by District please refer to the specific District information in the following pages.

Number for Fire Inspectors	3,777
Number of Public Buildings and Places of Employment	206,805
Number Inspections Conducted	308,778
Number of Violations Recorded	135,267
Number of Violations Corrected	106,167

DSPS STAFF

Fire Prevention Office Personnel

Bradley Johnson, P.E. serves as a Section Chief with the Department of Safety and Professional Services where he is involved in evaluating, improving, and implementing the business model and mission for all programs with specific emphasis in the Fire Prevention and POWTS Programs. He has been employed by the State of Wisconsin for 29 years and with the Division for 23 of those years. Brad was previously employed by the Wisconsin Department of Natural Resources and the Wisconsin Department of Commerce.

While employed by the State of Wisconsin, he also served 23 years in the fire service as a part-time firefighter rising to the rank of Division Chief of Fire Prevention. He graduated from the University of Wisconsin-Madison with a Bachelor of Science Degree in Civil and Environmental Engineering and is registered as a Professional Engineer in the state of Wisconsin. Brad can be reached at (920) 492-5605 or via email at Bradley.Johnson@wisconsin.gov.

Sarah Brown has served as the Operations Program Associate and NFIRS Program Manager for the Department of Safety and Professional Services Fire Prevention Program for the last 4 years. In that time, she has been to the National Fire Academy for NFIRS Program Manager training and for NFIRS Data Warehouse training. Graduating both times at the top of her class. Sarah is also a Subject Matter Expert in our new database eSLA, the 2% Fire Dues Program and has authored the Wisconsin Burning report since 2017. You will always see Sarah in the DSPS Fire Prevention booth at many of Wisconsin's fire conventions and conferences. Sarah is from the Medford area and now lives in Park Falls with her husband Matt and they have 3 children. Sarah can be reached at (715) 934-9082 or by email at Sarah2.Brown@wisconsin.gov.

District 1

Rick Sommerfeld currently serves as the Fire Prevention Coordinator with the Wisconsin Department of Safety and Professional Services for District 1. Rick has been very active in the fire service for past 33 years serving in many roles and is currently the fire chief of his local volunteer fire department. Rick has also worked as an EMT for his local volunteer ambulance service for the past 31 years. He has completed Firefighter 1 and 2, Fire Inspector 1, Fire Officer, Rappelling, Extrication, Driver-Operator, Fire Investigation, Grain Bin Rescue, Open Water Diver and many other fire and EMS trainings. Rick also completed the National Fire Academy's NFIRS Program State Manager class. In his spare time Rick likes to hunt, camp and fish with his four daughters. If you need to contact Rick, he is available by email at Richard.Sommerfeld@wisconsin.gov or by phone at (715) 944-4114.

District 1 Statistics

Northwestern Wisconsin currently has 193 fire departments. The majority, 172 are Volunteer, 17 Combination and 4 Career fire departments. For both years District 1 recorded 63,077 incidents. Of those 62,723 were valid incidents and 354 invalids for both years combined, that is outstanding! When we break down the calls, we see that Rescue/EMS had by far the highest counts at 42,090 for both years. Fire calls followed behind with 5,339 for both years. In District 1, the top 2 most frequent types of fire calls were Structure fires for both years with a total of 2,660 and then in 2018 Natural Vegetation fires (551) and in 2019 Mobile property vehicle fire came in 2nd with 453. Total dollar loss from fires in 2018 was $47,661,375 and in 2019 $54,395,327, which is an increase of up to 40% from what was reported in 2017.

Casualty Summary	Civilian 2018 / 2019	Fire Service 2018 /2019
Fire related injuries	23 / 16	18 22
Non-fire related injuries	33 / 35	30 / 31
Fire related deaths	15 / 10	0 / 0
Non-fire related deaths	7 / 6	0 / 0

|	
Number of Fire Inspectors for 2019	604
Number of Public Buildings & Places of Employment	23,632
Number of Inspections Conducted	32,089
Number of Violations Recorded	10,888
Number of Violations Corrected	10,165

District 2

April Hammond currently serves as a Fire Prevention Coordinator with the Wisconsin Department of Safety and Professional Services (DSPS). April worked previously for DSPS as an Occupational Safety Inspector and served as a Subject Matter Expert throughout the SPS 330 code update process. She worked closely with stakeholders, committee members, and agency representatives during the process. April has served in the fire service as a volunteer firefighter for over 19 years and she is currently serving as her local fire department's Assistant Chief. April works part-time for Madison College as a Fire Service Instructor and serves as a Municipal Judge for her community. She has previously worked as a wildland firefighter, emergency dispatcher, EMT, and in law enforcement. April's educational background is in criminal justice and fire science. April lives in Dane County with her husband and two daughters, where they also help manage her family farm. April can be reached at (608) 225-6593 or by email at April.Hammond@wisconsin.gov.

District 2 Statistics
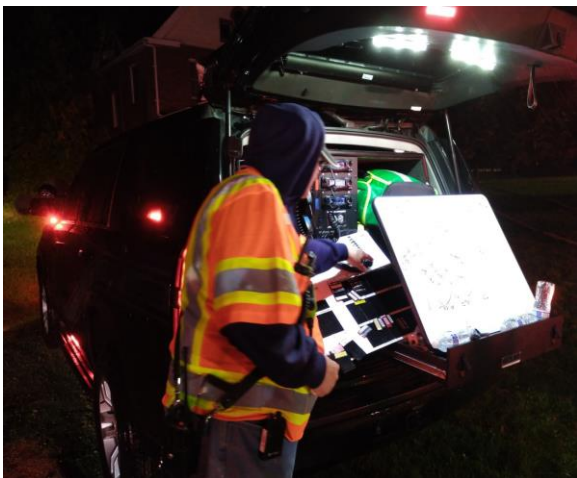
In southwestern Wisconsin, we currently have 211 fire departments. District 2 has 172 Volunteer, 30 Combination, 5 Career and 4 Military fire departments within its boundaries. They reported a total of 153,245 incidents during 2018 and 2019. 151,931 were valid and 1,314 were invalid. Great work District 2! The greatest number of calls were recorded as Rescue/EMS calls (99,199). False calls followed up behind with 14,129. When breaking down those EMS calls between the 2 years, we see that the most popular category was EMS call, excluding vehicle accident w/injury. The most frequent types of fire calls between the 2 years were Structure fires for both years 2,208 and 2,109, respectively. Natural Vegetation Fires came in 2nd for 2018 (759) and in 2019 Mobile Property Vehicle fires came in 2nd with 589. Total Fire Dollar loss in 2018 was $57,800,804 and in 2019 it went down to $46,780,385 which was slight increase from 2017 when the Total Fire Dollar loss was $45,412,150.

Casualty Summary	Civilian 2018 / 2019	Fire Service 2018 / 2019
Fire related injuries	28 / 27	22 / 24
Non-fire related injuries	66 / 48	102 / 105
Fire related deaths	9 / 14	0 / 0
Non-fire related deaths	24 / 11	0 / 1

Number of Fire Inspectors for 2019	628
Number of Public Buildings & Places of Employment	47,649
Number of Inspections Conducted	70,608
Number of Violations Recorded	26,564
Number of Violations Corrected	21,688

District 3

Robert "Bob" Kiser has served as the Fire Prevention Coordinator for District 3 since November of 2019. Before the Department of Safety and Professional Services, Robert was the Fire Marshal in Williston, North Dakota. During his 4-year commitment he ran a four-member full-service prevention department, conducted fire inspections, fire investigations, building plan reviews, new systems inspections, public education and training of his staff. Prior to that he was the Fire Chief for the City of De Pere. Throughout his 30 years of service, he has served in many different capacities at the state and local levels. Some of you may remember when Robert was a Wisconsin Fire Prevention Coordinator back in the 1990's. Robert has an associate degree in Fire Protection. He's also a Certified Fire Inspector 2 from the ICC, Fire Prevention officer from the National Fire Academy and attended University of Cincinnati for Fire Protection Engineering. Robert can be reached at (608) 219-9470 or Robert.Kiser@wisconsin.gov.

District 3 Statistics

District 3 is in northeastern Wisconsin and they currently have 208 fire departments. 173 Volunteer, 24 Combination, 8 Career, 3 Federal and 1 Military fire departments. During 2018 and 2019 District 3 had 149,666 reported incidents. 149,181 were valid and 485 were invalid. District 3 had the lowest percentage (3%) of invalids where both years were involved—Kudos District 3! The most incidents reported for both years was Rescue/EMS calls (48,630 in 2018 and 51,323 in 2019) followed up by Assist also known as Good Intent Calls (5,537 in 2018 and 5,569 in 2019). In District 3, fire calls were in 5th place and the most common fires for both years were Structure fires (2,740 for 2018 and 2,463 in 2019). Total Fire dollar loss for District 3 was $45,866,818 in 2018. The Fire dollar loss had a slight decrease in 2019. It was calculated to be $43,381,735.

Casualty Summary	Civilian 2018 / 2019	Fire Service 2018 /2019
Fire related injuries	66 / 48	49 / 29
Non-fire related injuries	77 / 72	40 / 62
Fire related deaths	15 / 15	2 / 0
Non-fire related deaths	20 / 15	0 / 1

Number of Fire Inspectors for 2019	1,109
Number of Public Buildings & Places of Employment	48,561
Number of Inspections Conducted	75,058
Number of Violations Recorded	32,153
Number of Violations Corrected	25,575

District 4

Steve Komar currently serves as a Fire Prevention Coordinator, District 4 with the Wisconsin Department of Safety and Professional Services (DSPS). He has worked most of his career in the Pewaukee and Waukesha fire departments as firefighter, fire inspector, fire investigator and public education coordinator. Steve holds 5 Wisconsin State licenses, 4 of them are as an inspector in Commercial Buildings, UDC Construction, UDC HVAC, Tank Systems and he is also a Wisconsin Emergency Medical Technician. Steve has an associate degree in Fire Protection Technician. He has also completed multiple classes and training activities at the state and national levels. In his free time, he enjoys spending time with family, deer hunting at this cabin, ice fishing and watching all of Wisconsin's sports teams. Steve can be reached at (608) 575-0179 or Steven.Komar@wisconsin.gov.

District 4 Statistics

District 4 is nestled in southeastern Wisconsin, currently servicing the area are 207 fire departments. District 4 has 23 Career , 57 Combination, 125 Volunteer , 1 Affiliate, and 1 Federal fire departments. District 4 had a total of 466,706 valid incidents and 2,772 invalid incidents for the 2 years. Awesome job District 4 on keeping your invalids low! The largest number of calls were for Rescue/EMS for both years. 2018 had 184,333 and 2019 had slight decrease to 174,046. False Calls came in 2nd place for both years with 18,874 in 2018 and in 2019 there were 18,910. In District 4, combined total of 14,556 fires. Most reported were Structure fires for both years (4,360 for 2018 and 3,612 for 2019). Mobile vehicle property fire came in 2nd with 1,323 in 2018 and 1,263 in 2019. Total fire dollar loss for District 4 was $149,130,096 in 2018 and $119,037,317 in 2019.

Casualty Summary	Civilian 2018 / 2019	Fire Service 2018 /2019
Fire related injuries	76 / 59	48 / 37
Non-fire related injuries	60 / 22	64 / 60
Fire related deaths	14 / 15	0 / 0
Non-fire related deaths	7 / 6	0 / 0

Number of Fire Inspectors for 2019	1,311
Number of Public Buildings & Places of Employment	83,216
Number of Inspections Conducted	127,261
Number of Violations Recorded	64,360
Number of Violations Corrected	47,500

FIRE PREVENTION DISTRICT MAP
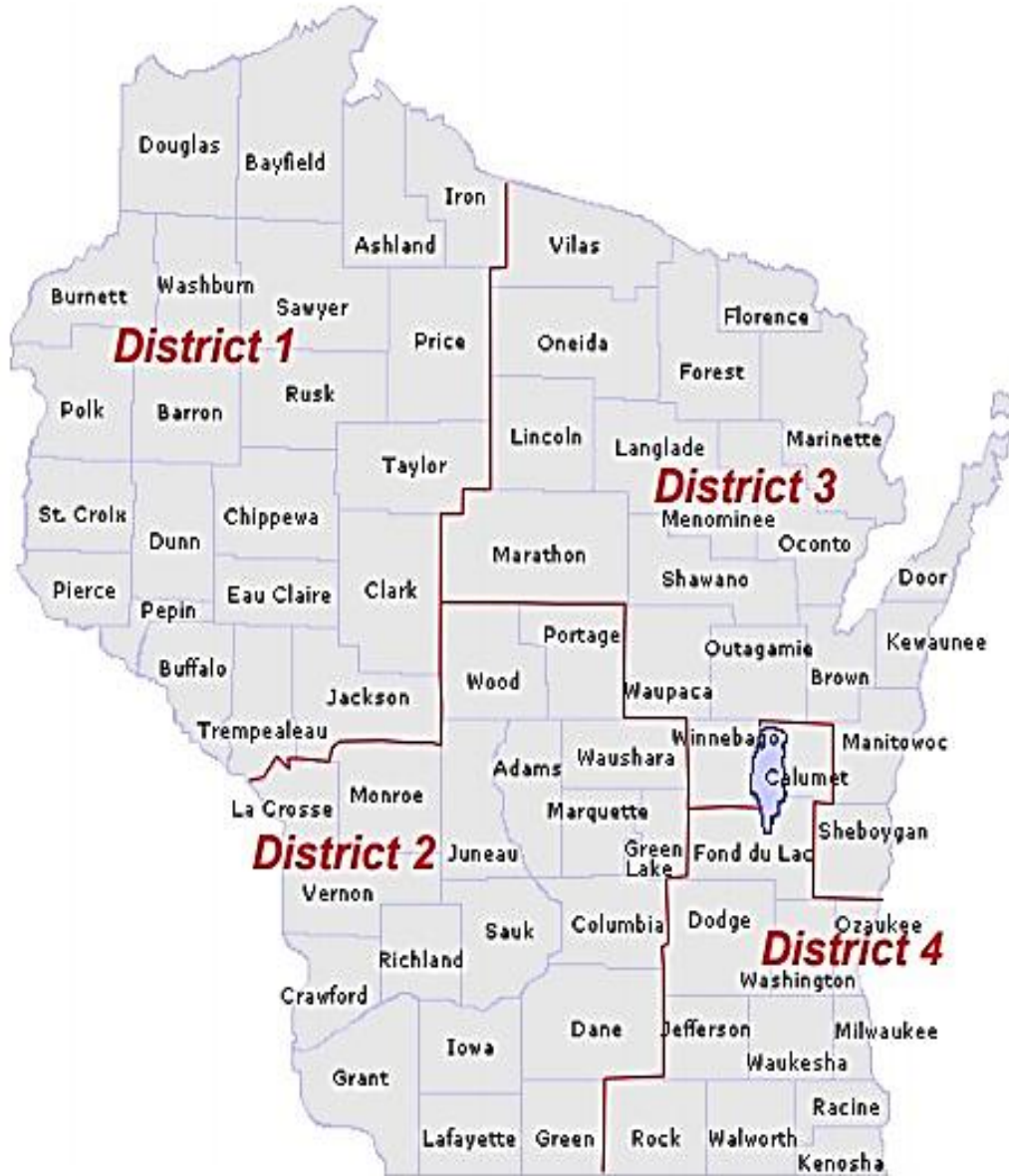
FIRE PREVENTION WEEK – OCTOBER 2020

Unfortunately, due to the Coronavirus pandemic, most of our Fire Prevention teams were not able to visit schools in person this year to talk about fire safety. They had to get creative and find other means to share the fire safety message. The fire prevention message for 2020 was "Serve up Fire Safety in the Kitchen."
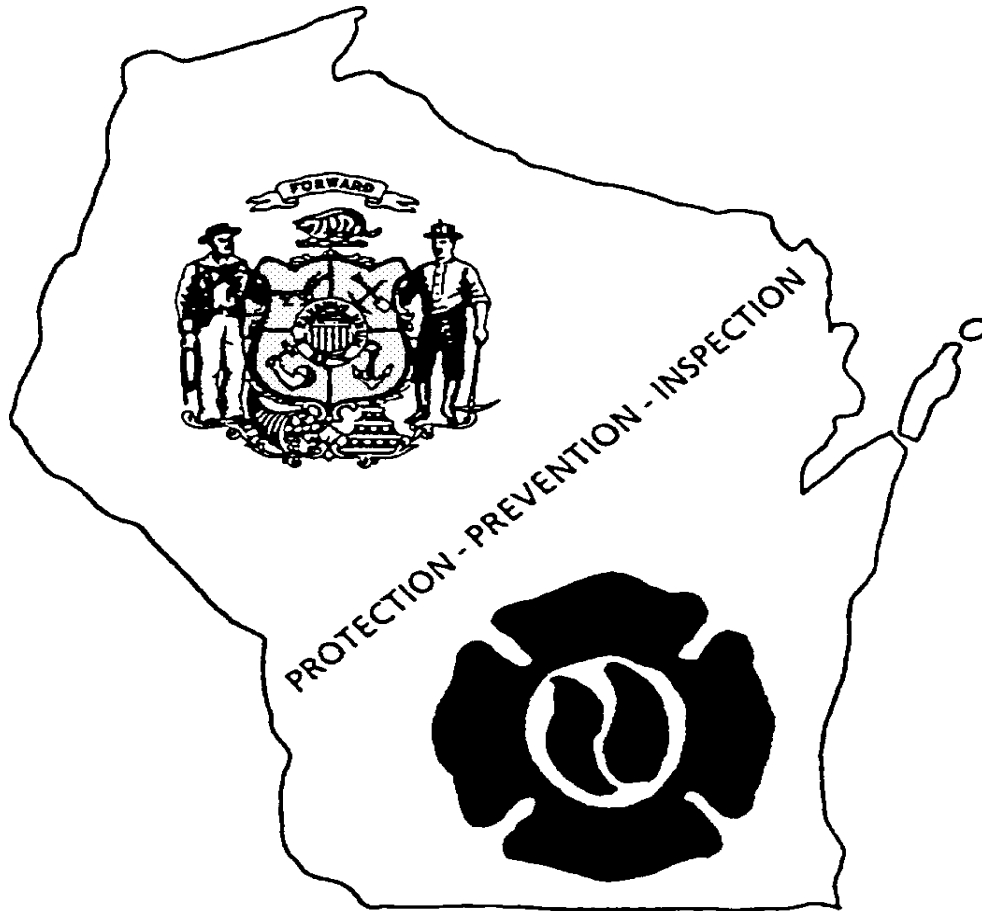
Marshfield Fire and Rescue's Fire Prevention Committee and other members from the fire department worked on a video. The video can be found here: Marshfield Fire & Rescue's Fire Prevention

FIRE DEPARTMENT TRAINING PICTURES

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