

# ND Office of the Attorney General State Fire Marshals Division 2019 Fire Report



Douglas Nelson  
State Fire Marshal

## Executive Summary

This report is comprised of statistics compiled by the State Fire Marshal's Office for calendar year 2019:

- There were 2,257 fires reported:
  - Structure Fires        785
  - Vehicle Fires         476
  - Other fires            996
  - On average, Fire departments in North Dakota responded to:
    - 6 fires every day
    - A fire every 4 hours
    - A structure fire every 11 hours
  - One out of every 356 residents experienced a fire
- Most fires in single family residential homes occurred between 3:00 PM and 6:00 PM, and were attributed to heating equipment.
- **Eight** fires resulted in a fatality
- **Thirteen** civilians were injured in fires
  - On average, a fire resulted in a fatality or injury every 17 days
- In 16% of fires (361), the cause was either undetermined or it was still under investigation.
- **Dollar loss attributed to fire in 2019 - \$25,461,162.00.**
  - On average this resulted in:
    - \$69,756.61 of fire loss per day
    - \$2,906.53 of fire loss per hour
    - \$48.44 of fire loss per minute

## TOP 5 DETERMINED HEAT SOURCES

\*The heat source could not be determined in 34% of fires.

1. Radiated, conducted heat from operating equipment ....11.74%
2. Spark, ember or flame from operating equipment .....6.62%
3. Heat from powered equipment, other .....6.41%
4. Arcing .....6.05%
5. Hot ember or ash .....5.69%

## TOP 5 REPORTED TYPES OF FIRES

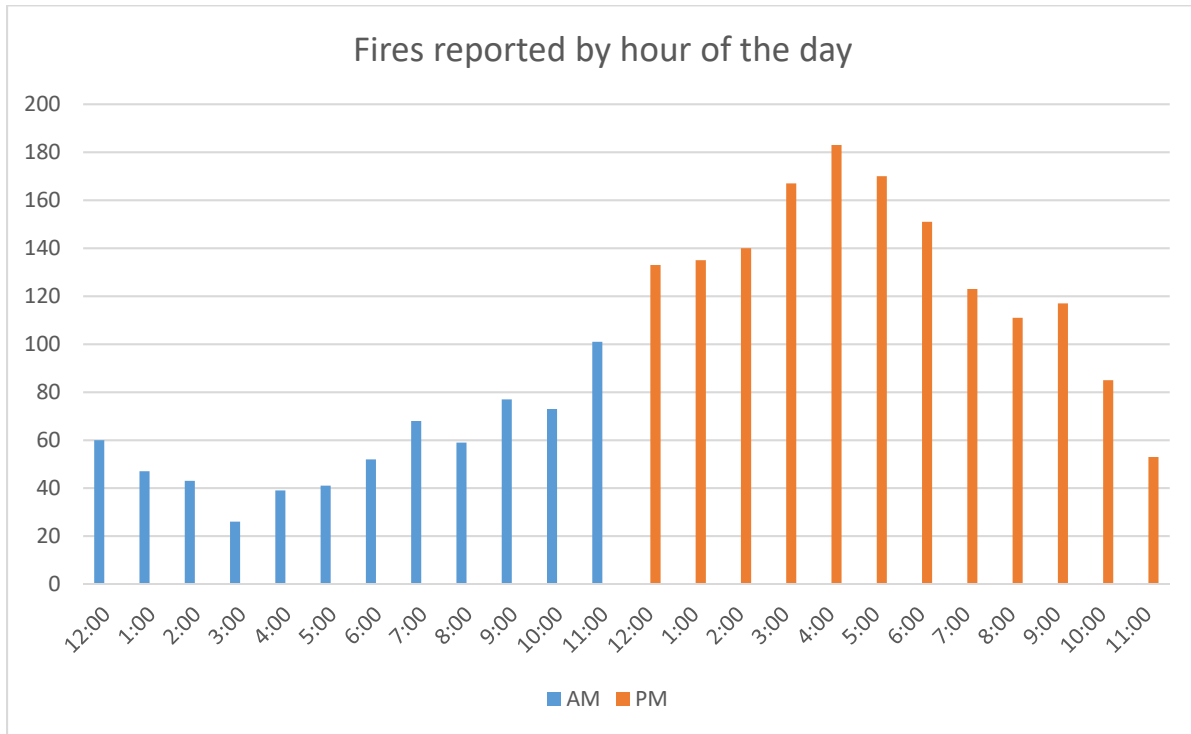
1. Building fires .....17.91%
2. Grass fires .....17.43%
3. Passenger vehicle fire .....11.75%
4. Cooking fire, confined to container .....8.45%
5. Brush, or brush and grass mixture fire .....6.65%

## TOP 5 REPORTED STRUCTURES WHERE FIRE OCCURRED

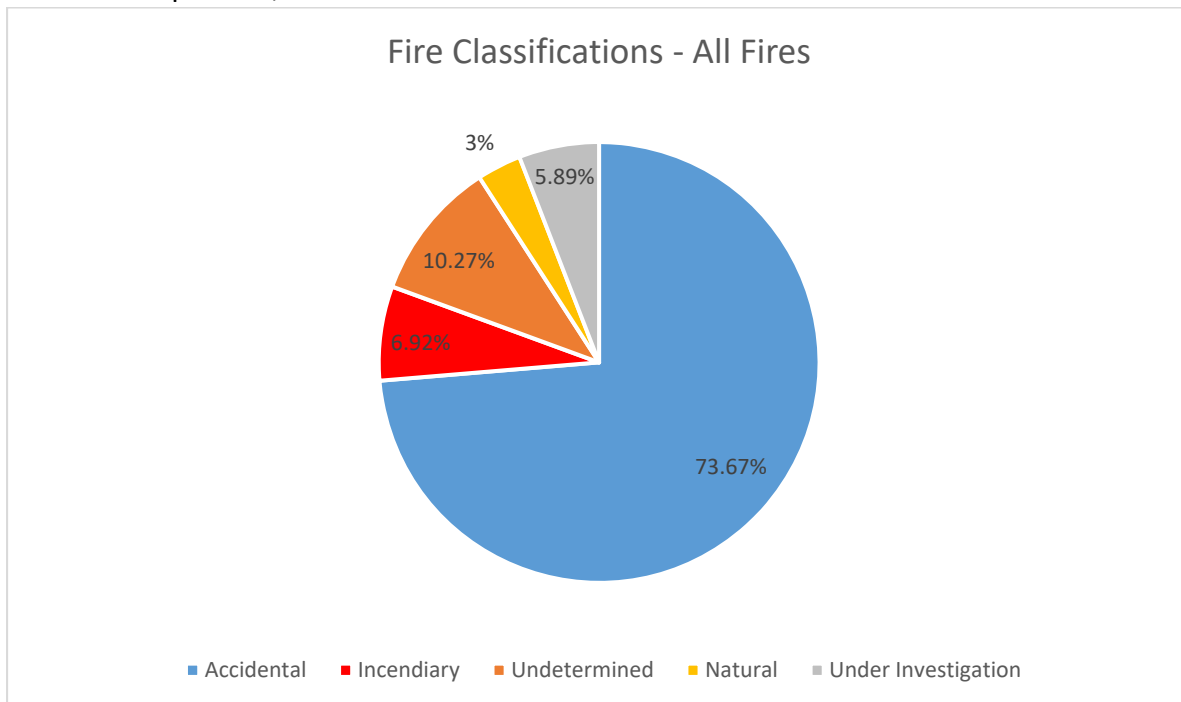
\*Other Residential structures include anything other than single family dwellings, apartments, hotels/motels, long-term care facilities and dormitories.

1. 1 or 2 Family Dwelling .....247
2. Multifamily Dwellings .....200
3. Storage .....63
4. Other Residential .....58
5. Non-Building Structures .....56

The most common fires were reported to be accidental, and occur between 3:00 PM and 6:00 PM. Fires increase in the early afternoon hours and decrease towards the end of the day.

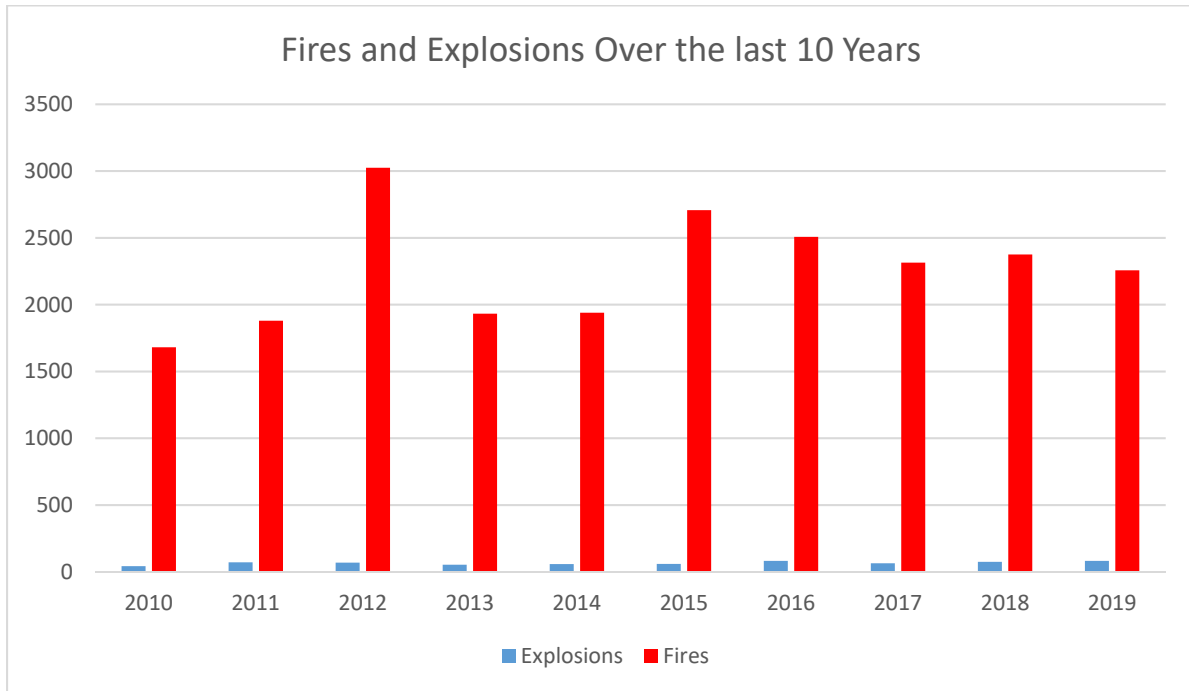


Almost seven percent, or approximately 157 fires were determined to be incendiary in nature. Another ten percent, or 225 fires were undetermined.

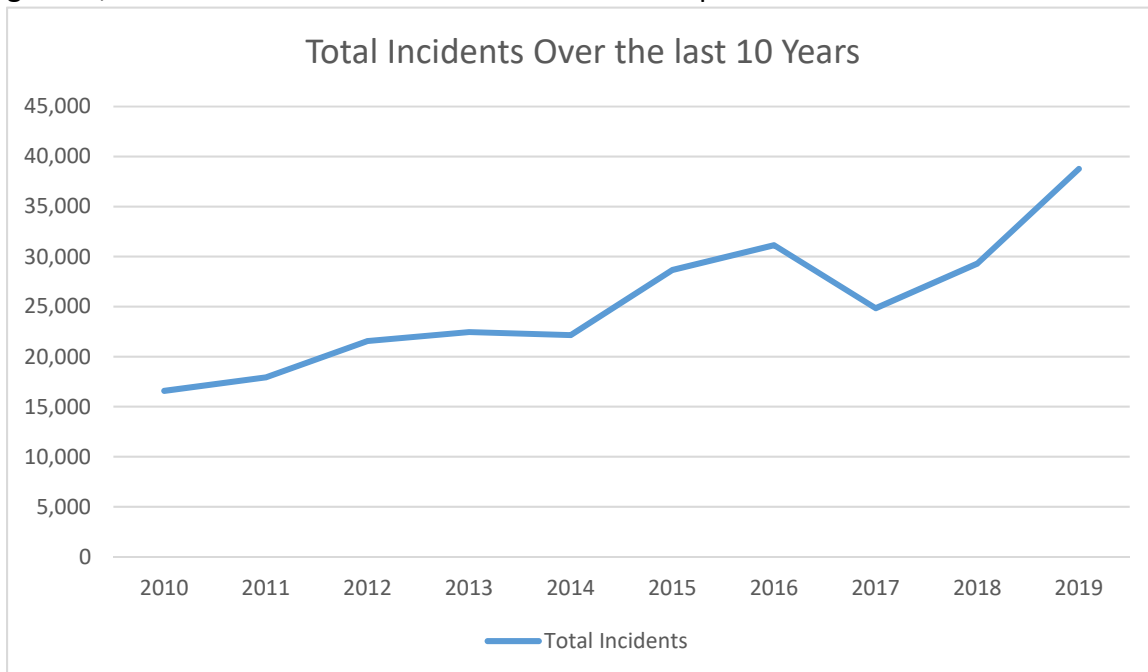


## Ten Year Fire Trends in North Dakota

Reported fires and explosions have remained relatively stable over the ten year period.



Total incidents include but are not limited to rescue calls, Emergency Medical Services, Hazardous Materials, false alarms, weather related, and many other types of incidents. Though fires and explosions remain relatively stable, especially compared to the State's population growth, total incidents continue to rise at a dramatic pace.

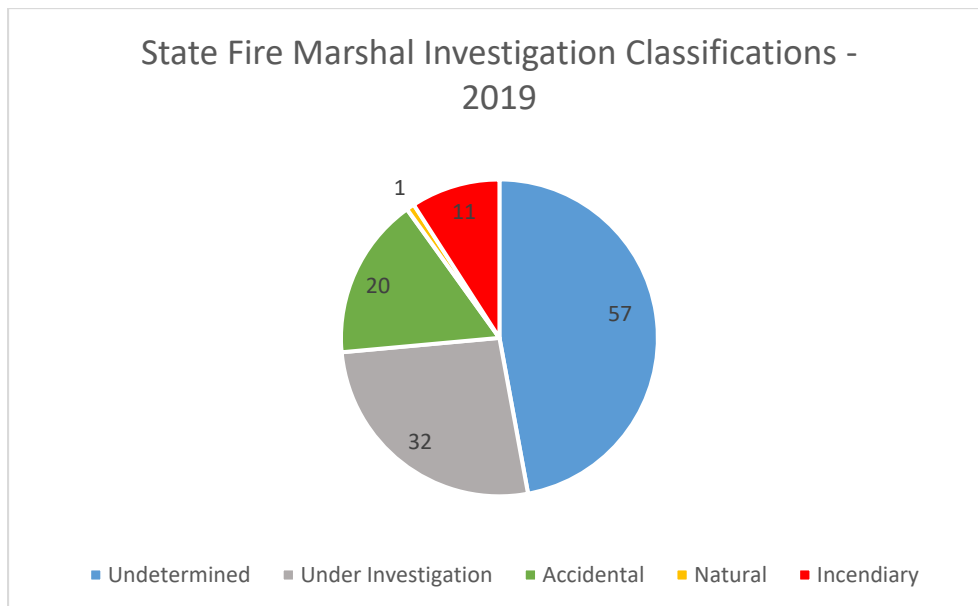


## FIRE DEPARTMENT INFORMATION

- Total number of certified fire departments in North Dakota – 366
  - 346 volunteer
  - 13 combination
  - 7 career
  
- Services provided
  - 341 Insurance Services Office Public Protection Classification 9 or better
    - ISO PPC is a rating given to fire departments that represents the level of fire protection given and affects local property insurance rates. Class 1 is the highest rating, class 10 is the lowest. Class 9 or better is required in North Dakota.
  - 135 report having established minimum training requirements
  - 205 actively reporting fires/incidents
  
- Total number of firefighters in North Dakota – 8,726
  - 8,177 volunteer
  - 549 full-time
  - 527 unfilled firefighter positions (6% vacancy rate)

## State Fire Marshal’s Office Investigations

Number of requested fire investigations ..... 121  
 Fire Tips received by the State Fire Marshal ..... 26





## FIRE CRIMES

Arson crimes reported – **83**

Arson crimes cleared - **29**

Arrests related to Arson: Adults – **13**

Juveniles - **8**

