

**BAINBRIDGE TOWNSHIP  
FIRE DEPARTMENT**



**2014**

**ANNUAL REPORT**

The following is a summary of the overall operations of the Bainbridge Township Fire Department for the year 2014.

Although saving lives and property remain our highest priority, fire prevention and public education play a significant role in day-to-day operations. With over 400 commercial establishments in the township, it is important that they are inspected regularly.

The Bainbridge Township Fire Department is an organization of dedicated professionals who are committed to serving the community by protecting life, property and the environment around the clock through emergency medical, fire suppression and prevention, and educational services for 72 years.

The department consists of highly trained and well educated emergency service professionals dedicated to providing the highest quality services to the community in the safest, most efficient and professional manner possible. The Bainbridge Township Fire Department staff takes pride in the department's rich history with a strong sense of duty towards excellent performance in the present, while preparing to meet the challenges of the future.

In 2014, the Fire Department received a grant from the Ohio Bureau of Workers Compensation to purchase three Power Load Systems and three Power Ambulance Stretchers. This will enable us to reduce employee injuries from lifting patients onto stretchers and into the ambulances and ultimately improving patient safety.

The Bainbridge Township Fire Department proudly protects 11,395 people living in a consistently developing area of 25 square miles. The department staffs at least five firefighters, including paramedics, 24 hours a day/7 days a week, and operates a fleet of three advanced life support ambulances, two engines, a 100' aerial platform, and a water tanker.

As costs increase so do the operating expenses of the Fire Department. The Fire Department has had five continuing levies that fund our operations. The last levy was in 2011 and is forecasted to last five years. Through sound fiscal management, we hope to carry these levies until the year 2020.

Moving into its 73<sup>rd</sup> year of operation the Bainbridge Township Fire Department is confident that we will be able to provide the residents and businesses of the township the best fire and rescue service available. *We're here, we care!*

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**FIRE PREVENTION BUREAU  
2014 ANNUAL REPORT  
ASST. CHIEF BILL LOVELL**

Fire Prevention may be the single most important function of the fire service. More lives and property can be saved by simply preventing a tragedy from occurring in the first place. Benjamin Franklin introduced this concept to the fire service more than a century ago and the development within the fire service has been relatively slow on a national basis until the last few decades.

The Bainbridge Township Fire Prevention Bureau prides itself on being proactive and aggressive in this important function. The purpose is not just to ensure the safety of the occupants in a structure, but also to ensure the safety of the firefighters during an emergency response. It is difficult to measure how many incidents have been avoided with these efforts as we may never know what incidents would have otherwise occurred.



**Commercial Kitchen Wet Chemical Hood Suppression System**

The Bainbridge Township Fire Prevention Bureau is the sole Authority Having Jurisdiction (AHJ) for all fire safety related issues involving commercial structures within Bainbridge Township. It is our responsibility to ensure that all schools, churches, retails, factories, restaurants, places of assembly and office spaces are compliant with the requirements of the Ohio Fire Code. This includes any testing and approval of fire alarm systems, sprinkler suppression systems, kitchen hood suppression systems, emergency egress lighting and related safety items. Often this requires involvement prior to and during any new constructions or renovations. The Fire Department is the last signature before an Occupancy Permit is issued. Otherwise, our involvement is to regularly inspect existing structures for fire safety violations and influence any corrections through either education or enforcement.

## **STATISTICS**

Fire prevention activities in 2014 were similar to the previous year as we still encountered very little commercial building. We did recognize a continuance of interior build-outs and an increase in businesses occupying previously vacant structures and suites. We also experienced several businesses re-locating to other structures, still within the Township. Occupancy Permits were increased by almost three times the previous year.

Parkside Church and the Weils of Bainbridge began work on significant additions requiring a great deal of involvement from our agency related to planning and related inspections and approval. Gordman's also began construction in the Market Place at Four Corners.

We have also noticed an increase in food related businesses, subsequently, increasing the number of hood suppression systems and fire alarms that require our attention.

Asst. Chief Wayne Burge was appointed Full-Time status with the Fire Department which increased his availability to assist with Fire Prevention activities and provide even more consistency to previously part-time efforts.

The number of inspections performed in 2014 still was on par in comparison to the previous years.

### Fire Alarm Components



Smoke Controlled Automatic Door



Remote Addressable Fire Alarm



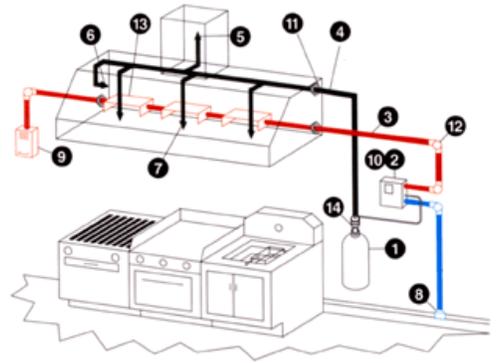
Fire Alarm Control Panel and Dials



Hose Connection, Pull Station & Panic Hardware

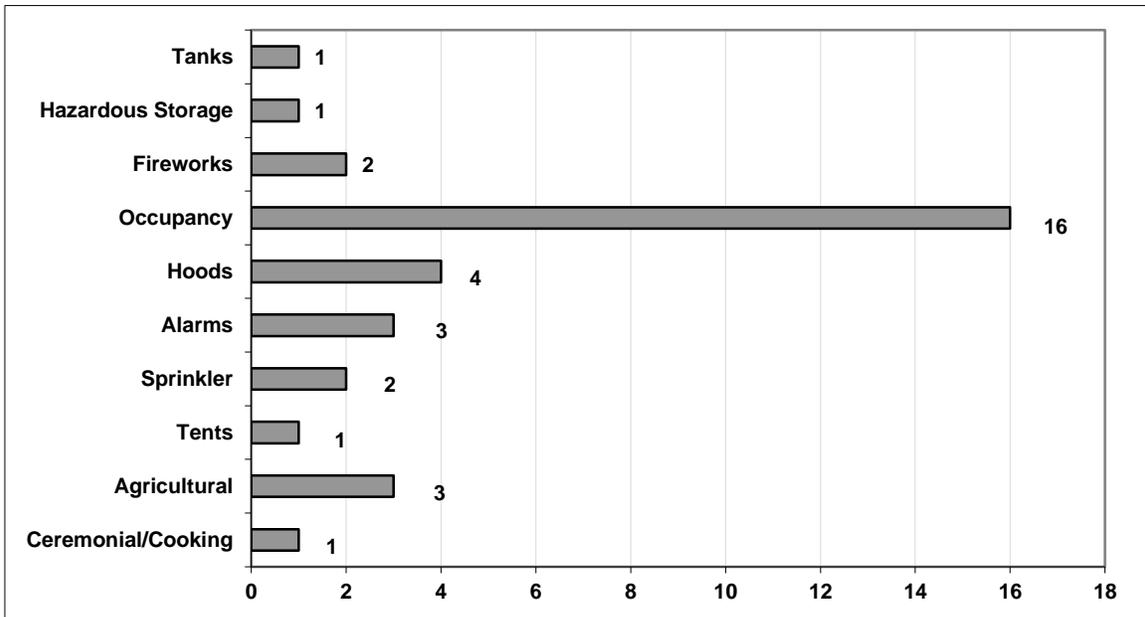
**PERMITS ISSUED:**

<b>Ceremonial or Cooking Fires</b>	<b>1</b>	
<b>Agricultural Burning</b>	<b>3</b>	
<b>Tents</b>	<b>1</b>	
<b>Sprinkler Suppression Systems</b>	<b>2</b>	
<b>Fire Alarm Systems</b>	<b>3</b>	
<b>Hood Suppression Systems</b>	<b>4</b>	
<b>Occupancy</b>	<b>16</b>	
<b>Fireworks</b>	<b>2</b>	
<b>Hazardous Storage</b>	<b>1</b>	
<b>Tanks</b>	<b>1</b>	<b>Total: 34</b>



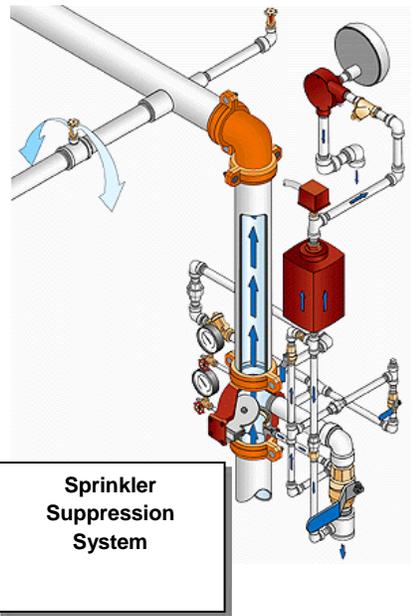
Kitchen Hood Suppression System

**PERMITS ISSUED:**



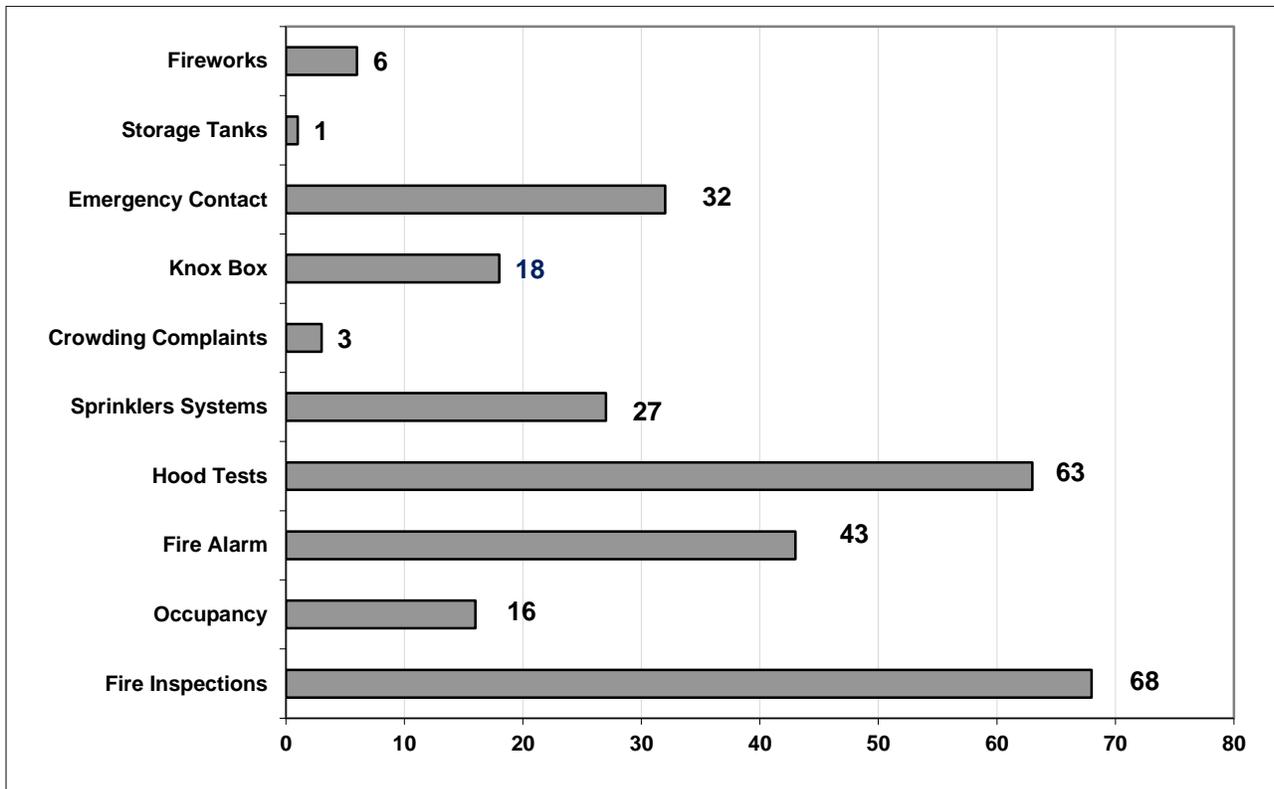
**INSPECTIONS:**

<b>Fire Safety Inspections</b>	<b>68</b>
<b>Occupancy Inspections</b>	<b>16</b>
<b>Fire Alarm Inspections</b>	<b>43</b>
<b>Hood Suppression System Tests</b>	<b>63</b>
<b>Sprinkler System Inspections</b>	<b>27</b>
<b>Overcrowding Complaints</b>	<b>3</b>
<b>Knox Box Inspections</b>	<b>18</b>
<b>Emergency Contact Inquiries</b>	<b>32</b>
<b>Storage Tank Removal</b>	<b>1</b>
<b>Fireworks Inspections</b>	<b>6</b>



**Total: 277**

**INSPECTIONS:**



## MISSION STATEMENT

*“Public relations to provide a fire safe community through involvement, awareness, education and enforcement.”*

## ORGANIZATION

Asst. Chief Bill Lovell is the Fire Prevention Coordinator for the Bainbridge Township Fire Prevention Bureau. He is responsible for all prevention and enforcement activities and reports directly to the Fire Chief. In addition, Asst. Chief Wayne Burge assists with these inspections. The Fire Prevention Bureau attempts to visit every commercial establishment at least once during a fiscal year.

Carbon Dioxide, Dry Chemical & Wet Chemical Fire Extinguishers



## FUTURE

There are several construction projects continuing into 2015 that will require the Fire Prevention Bureau's involvement including the Weils of Bainbridge Memory Care expansion, Parkside Church additions and the Gordman's Department Store. Additionally, we are aware of two additional structures that are expected to start in the Market Place at Four Corners area. Both of these will have Fire Alarms and Sprinkler Suppression Systems. It is also possible in 2015 that we could be involved with planning for a potential development on the former Geauga Lake property.



Various Sprinkler Heads

## **EMERGENCY MEDICAL SERVICES 2014 ANNUAL REPORT**

### **REVIEW**

Request for the Emergency Medical Services (EMS) of the Bainbridge Township Fire Department have kept our personnel busy again this year. The Bainbridge Township EMS responded to a variety of medical as well as traumatic challenges. The final EMS activity total for 2014 was 1146.



### **PURCHASES & IMPROVEMENTS**

The Bainbridge Township Fire Department continues to utilize a third Advanced Life Support equipped rescue squad. This is necessary for several reasons. The first is the number of times we experience multiple calls back to back. The second was allowing a regular fleet maintenance schedule

without depleting the fire department's resources of rescue squads. Another is that it addresses the need projected for the services provided by the fire department.

## **TRAINING**

EMS training is conducted on the fourth Monday of every month. Increased participation from Hillcrest Hospital included lectures, in-services and procedural reviews by their staff and our medical control doctor, Dr. Keary. Additional training involved "hands-on" experience in the form of scenarios.

We currently have forty paramedics participating in our organization. This is the result of successful continuing education by several of our current members. The number of paramedics on our personnel roster is greater than the number of emergency medical technicians.

## **FUTURE**

Like 2014, our emphasis for 2015 will need to be focused on preparation for the future of Emergency Medical Services. Health care reforms and cost effective measures are rapidly changing the level of care provided and the facilities that can offer this care. Hospitals will become uniquely specialized, influencing transport destinations, which may also have to be specific to health insurance provider affiliations as well. We are already experiencing some of these changes. The Bainbridge Township Fire Department is also complying with the State of Ohio Trauma Legislation. Additionally, the department has adopted the new S.T.E.M.I (ST Elevated Myocardial Infarction) and Brain Attack protocols. This will require the Bainbridge Township Fire Department to expand the number of facilities and locations that we would ordinarily transport to in order to accommodate our community's emergency medical and trauma needs. In order for the BTFD to answer this increased demand, additional staffing could very well be necessary.

## **EMERGENCY VEHICLE MAINTENANCE 2014 ANNUAL REPORT**

*“A gleaming fire truck is the pride of every fire department. But many lives, including your own, depend on what you don’t see under that fabulous body!”*

Year two thousand and fourteen saw the completion of the fire station addition. The Emergency Vehicle Maintenance Division moved into a new maintenance area. A large room, office and storage area is now located right off of the apparatus bay, providing quick access to tools and parts. The three-deep apparatus bays provide ample room for multiple vehicles to be worked on without affecting daily operations.

One new vehicle was purchased in 2014. A Freightliner chassis with a Horton ambulance body was purchased this year. This ambulance will replace Squad 3153, which was purchased in 1995. Delivery of the new ambulance is expected early in 2015.

The majority of the Fire Department’s calls are EMS. As a result, the ambulances continue to acquire mileage faster than the other apparatus. Many EMS patients request to be transported to Hillcrest Hospital in Mayfield Heights, Ahuja Hospital in Beachwood or Geauga Hospital in Munson. Every transport to Hillcrest or Geauga results in approximately one hour of engine-on time and 35 miles being added to the odometer. In 2014, Squad 3151 traveled 19,118 miles and accrued 917 hours. Squad 3152 traveled 11,716 miles and accrued 576 hrs.

The apparatus service intervals continued to be modified in 2014. Historically, service intervals were based on calendar days. Twice a year, the lubricants and filters were changed, certain chassis components serviced and an in-depth operational check performed. One of the biggest factors that have caused the service intervals to change is cost. In 2014, oil approached ten dollars a gallon and some of our apparatus engines need ten gallons of oil. There also has been a marked increase in the cost of filters with some engine oil filters costing fifty dollars. Fortunately, the manufacturers provide other parameters to base replacement on.

The only way to accurately measure the amount of work an apparatus does is through the amount of time the engine is running, or “engine hours.” Emergency apparatus is not driven to the emergency scene and shut off; many of the tools used on the emergency scene are powered by the diesel engine or the electrical system of the chassis. At night, scene illumination is critical to the safety of all involved. All of the emergency apparatus are designed to provide scene illumination through a multitude of

mounted and portable lights that receive electricity from the apparatus. The diesel engine also powers the heating and air conditioning systems on the ambulance, thus providing the proper environment to deliver patient care. The same holds true for the fire apparatus. The diesel engine not only provides power to drive the fire truck to the emergency scene, it also drives the fire pump, which allows water to be sprayed onto a fire.

Although lubricant and filter replacement schedules have changed, the maintenance division still maintains an aggressive inspection schedule. The program is divided into four parts. The first part of the program is the daily inspection. Each morning, firefighters ensure the apparatus is ready to respond by inspecting the vehicles. Daily check sheets are provided to aid the firefighters in inspecting the vehicles. The second part of the maintenance program is the "Apparatus of the Day" program. First implemented in 2004, this program dedicates an entire day to the inspection and training of an apparatus. This program consists of the standard morning check, a complete inventory inspection and a thorough cleaning of the vehicle. The firefighters then start the vehicle and exercise all the various accessories, including the fire pump, if equipped, and any small power tools. Any defects in equipment are immediately reported to the Maintenance Division. This program has allowed many deficiencies to be found at the fire station instead of the emergency scene. Another benefit is firefighter equipment familiarity. Since the firefighters are constantly reviewing the operation of the equipment, they become more efficient on the fire ground.

The Maintenance Division divides its activities into the following areas; inspection, testing, repair and required maintenance, otherwise known as preventative maintenance. The key to maintenance is predicting how often the apparatus is being used and determine an interval to inspect and maintain the equipment. Every January, a report is generated that calculates how many miles and hours of operation a vehicle acquired the previous year. Using this information, a maintenance schedule was created for each apparatus based on the manufacturer's recommendations, knowledge gained from maintenance training symposiums and experience. Squads 3151 and 3152 are inspected at the beginning of every month. This inspection covers items that tend to wear out quickly or require frequent evaluation. Also during this inspection, the chassis is greased. The next area to address is engine oil changes. Both GMC ambulances have Engine Oil Life Systems that calculate when the oil should be changed based on engine usage and workload. When this light illuminates, the unit is brought in for an oil and filter change. During every other oil change, the tires are removed and rotated. While the tires are removed, the brakes are inspected for wear and replaced if necessary.

The pumping apparatus in our fleet do not acquire the hours and miles that the ambulances do. Therefore, the maintenance schedules for these rigs are based on calendar days. Originally, the engine oil

and filters were changed every six months. After speaking to the oil and engine manufacturing representatives, a decision was made to change the oil only once a year. This interval fell well within the recommended “hours” interval stated by the engine manufacturers. A sample of oil is collected at this time and sent to a lab for evaluation. This not only allows us to evaluate the internal state of the engine but tells us if the oil change interval is too long. Each pumping apparatus is on a three month inspection cycle termed an “A” service. This means a bumper to bumper inspection is performed and all components on the apparatus are checked for proper function. This inspection is similar to the monthly service performed on the ambulance. Any deficiencies are corrected immediately or repairs are scheduled. The next biggest component that requires maintenance is the fire pump. Per NFPA 1911, the fire pump must pass a series of tests once a year or when a major engine or transmission repair is performed. We typically perform this test in-house but occasionally use a third party.

The beauty of our maintenance program is that it can be modified to address concerns or track potential problems. The effectiveness of the maintenance schedule is also reviewed throughout the year. By tracking mileage and hours, frequency for the replacement of wearable items can be determined. These findings are then added to the vehicle specific schedule and used to anticipate repairs.

The Ford SUVs and the 2014 Tahoe have a unique maintenance schedule. These vehicles are equipped with an oil life monitoring system. The oil life system monitors the drive characteristics of the vehicle and predicts when the engine oil will degrade. When an oil change is needed, a message appears in the information display and a service is scheduled.

As always, the plans for the year 2015 will be to maintain the safety and dependability of the emergency vehicle fleet. The Maintenance Division always strives to meet the requirements of NFPA 1911 and the Insurance Services Organization Standards.

The mechanic will continue to improve his vehicle maintenance skills by attending training classes, reading educational articles on vehicle maintenance and participating in the Emergency Vehicle Technicians Certification Program and attending a variety of schools and symposiums.

The biggest project planned for 2015 is the training and outfitting of the new Freightliner-Horton Ambulance, Squad 3153. A training manual will be developed and equipment purchased to outfit the vehicle. Each member of the department will be required to learn the functions of the vehicle and complete a driver’s training course.

2015 will also mark the start of a new ambulance replacement schedule. With an increase in the number of ambulance runs, the dependability of a reserve ambulance is essential. When 3153 is placed in

service, it will spend its first three years as the “first-out” squad. At the end of these three years, it should have approximately 60,000 miles on it. A new ambulance would arrive and 3153 would move to “second-out” status. This would reduce the number of miles and hours being accrued allowing dependability to remain high. After spending three years in this position, it would then move to “third-out.” After nine years of service, the squad would be replaced.

In closing, the Maintenance Division continues to play a major role in the day-to-day operations of the department. With the amount of calls, addition of new on duty personnel, fire prevention activities and special projects, the amount of equipment and apparatus usage has also increased. This, in turn, has increased the frequency of required maintenance and needed repairs. Keeping apparatus and equipment in-service without sacrificing safety continues to be the goal of the Maintenance Division. This is done with an aggressive periodic maintenance and inspection program, keeping a large amount of critical replacement parts on hand and making repairs as quickly as possible. The Maintenance Division will continue to implement new maintenance procedures, attend educational opportunities and network with others to provide this vital service.

## **EMERGENCY APPARATUS ROSTER**



3100 – 2014 Chevy Tahoe  
Chief's Vehicle



Engine 3124 – 2002 Emergency One



Tanker 3135 – 2006 Emergency One  
2500 Gallon Pumper/Tanker



Truck 3146 – 2002 Emergency One  
100ft. Articulated Aerial Device



SQUAD 3153 – 2015 Freightliner / Horton Ambulance



Squad 3151 – 2009 GMC / Horton Ambulance



3177 – 2012 Rosenbauer  
Rescue Pumper



3183/85 – 2013 Ford Interceptor Police SUVs



3184 – 2014 Ford Interceptor Police SUV



Squad 3152 – 2006 GMC/Horton Ambulance



2000 - Surrey Fire Safety Trailer



3191 -- 2007 Ford F-250 Utility  
Pickup

**Youth Education Program  
2014 Annual Report  
Asst. Chief Wayne Burge**

The Youth Education Program was extremely busy as it is every year. Along with teaching children about fire safety, we also taught many CPR and First Aid classes.

Fire Safety discussions were given at all levels of the Kenston School District, except for the High School where CPR/AED was taught to every 10<sup>th</sup> grade student in their health class.



When teaching children about fire safety, we start off teaching them in the day care centers which we have a large number of in the township. There they are taught that firefighters are your friends and not to be afraid of them. We visit each daycare center with our trucks and squads and encourage field trips to the station.

The next step is safety town. This group consists of the children who will be entering kindergarten, which is a large portion of Bainbridge/Auburn area and some outside the area. Safety Town is a 2 week program consisting of approximately 40-50 children in three different classes every day.

From Safety Town, we move on to Timmons Elementary School. The 1<sup>st</sup> grade class is shown the trucks and rescue squad and shown the equipment we use, and why we use it. The 2<sup>nd</sup> grade class is given a tour through the safety trailer. Finally, in the 3<sup>rd</sup> grade we review whatever the theme is that year for fire prevention week.

We had a large number of station tours this year because a large number of groups wanted to see the new addition of the fire station. We tour everyone from the daycare centers, cub scouts, boy scouts, and Girl Scout groups. We also had several adult groups tour the station. For the first time the Men's Civic Club had their meeting in the training room and a station tour after. The night was one of the largest turn outs for their meeting.

In the year 2014, we provided 25 CPR classes, 12 First Aid classes, and 20 station tours.

**FIRE DEPARTMENT TRAINING  
2014 ANNUAL REPORT  
CAPTAIN CHRIS CALO**

Many years ago, the Bainbridge Township Fire Department started a tradition of providing the best possible training for our members. That tradition continues today as we take seriously the task of keeping our fire fighters up to date on all aspects of fire, rescue and EMS.

Our goal in 2014 was to provide training in all areas specified in NFPA 1001, and to maintain certification for all members in National Incident Management System (NIMS) training at the appropriate level.



With members recertifying under Ohio's continuing education requirements for fire fighters, all training in 2014 covered topics addressed in the NFPA 1001 standard. We found this to be an effective way to keep members up to date in all areas, and to provide them with ample opportunities to stay compliant with State requirements. We also attempted to make training sessions as true to life as possible with as much hands on activity as we could.

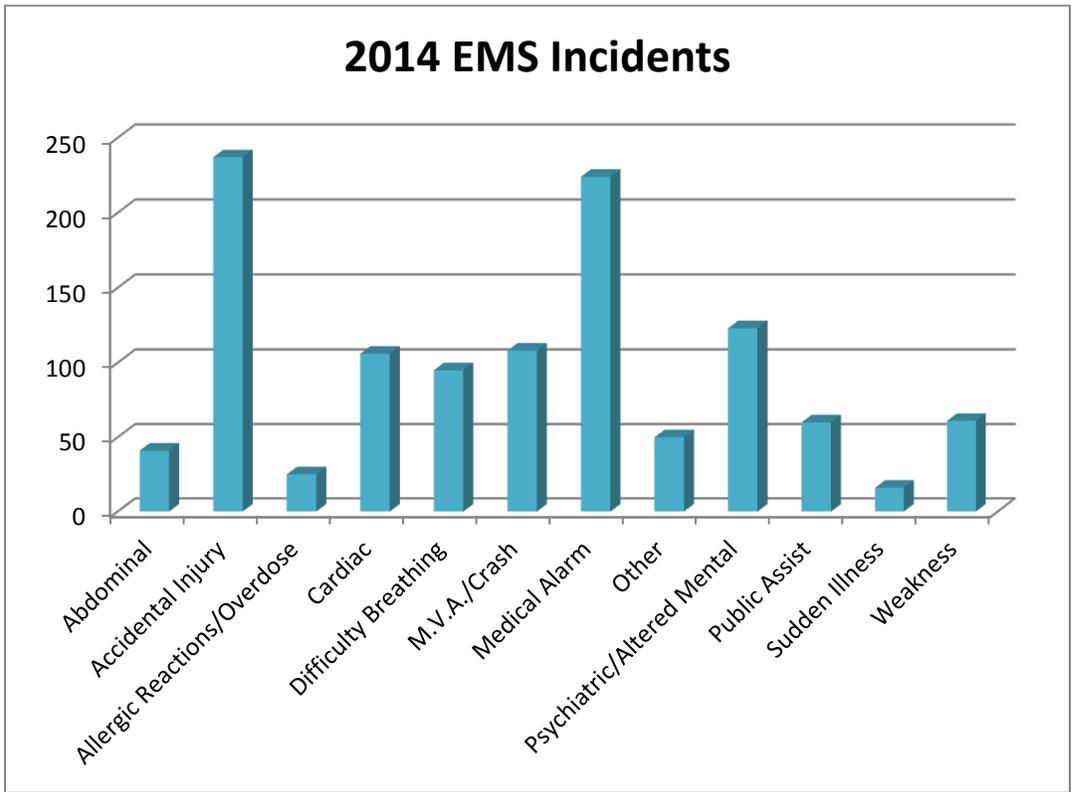
During the first half of 2014, all members reviewed our department SOG's and were educated on recent changes. This SOG update is repeated on an annual basis to keep members fully up to date on our operations. We also recertified everyone in SCBA use as we require of each member every year. In the spring, conducted our annual hazardous material refresher, as well as emergency vehicle driver training and review of all fire apparatus.

The warmer months allowed for hands on training, including engine, aerial and tanker operations as the on duty crews completed various training evolutions with all of our new members.



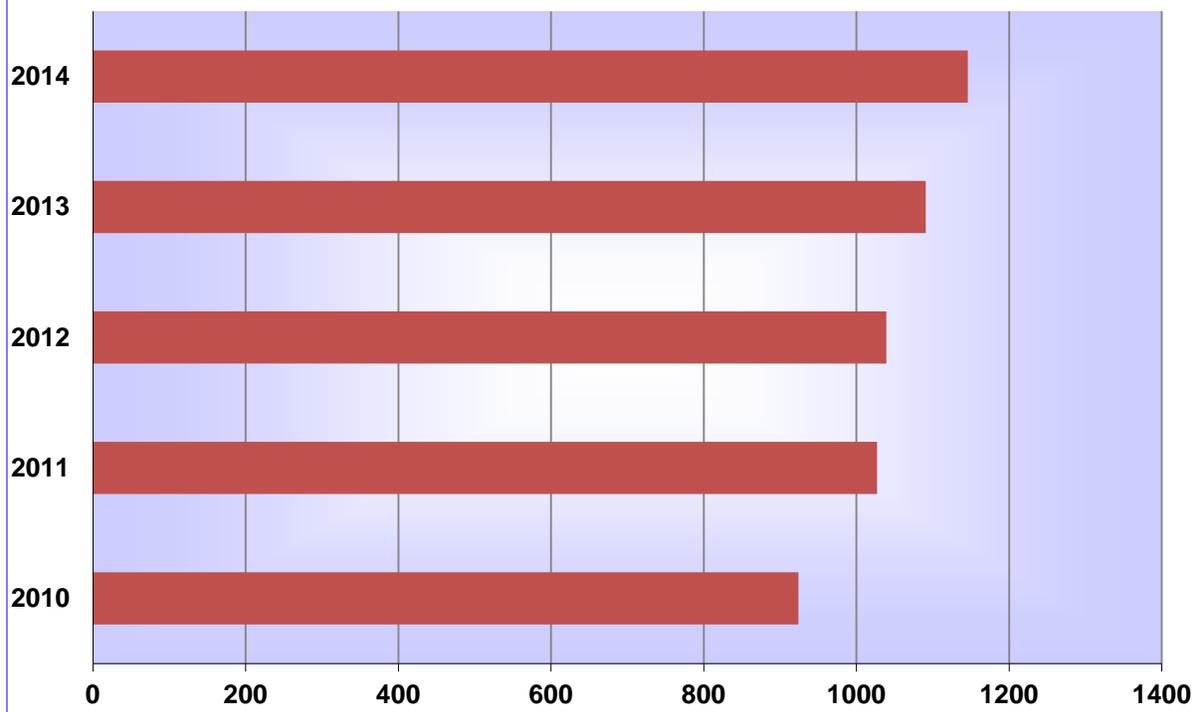
As always, we look forward in the coming year to providing the best possible training for our members, and providing the best possible service to our community.

## 2014 EMS Incidents

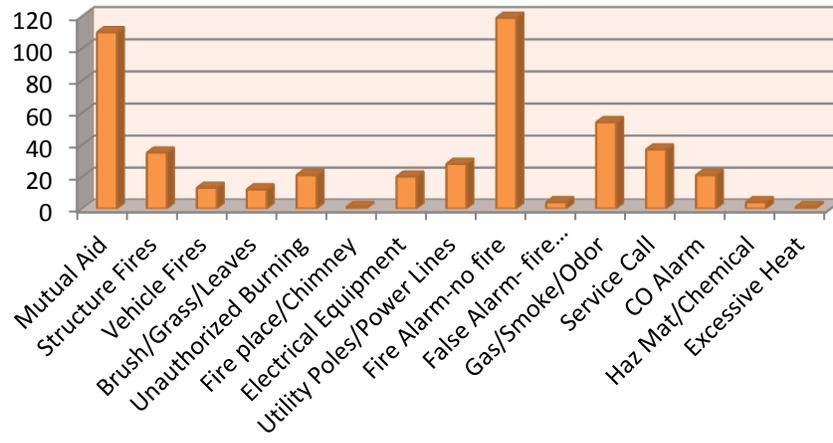


Abdominal	41
Accidental Injury	237
Allergic Reactions/Overdose	25
Cardiac	106
Difficulty Breathing	95
M.V.A./Crash	108
Medical Alarm	224
Other	50
Psychiatric/Altered Mental	123
Public Assist	60
Sudden Illness	16
Weakness	61

### Year to Year RESCUE Trends



## 2014 Fire Incidents



Mutual Aid	110
Structure Fires	35
Vehicle Fires	13
Brush/Grass/Leaves	12
Unauthorized Burning	21
Fire place/Chimney	1
Electrical Equipment	20
Utility Poles/Power Lines	28
Fire Alarm-no fire	119
False Alarm- fire reported	4
Gas/Smoke/Odor	54
Service Call	37
CO Alarm	21
Haz Mat/Chemical	4
Excessive Heat	1

480

### Year to Year FIRE Trends

