

Gasoline Safety

Gasoline, when ignited in a controlled manner to power engines, serves a very useful purpose. Because it is so commonplace, however, we sometimes take its presence for granted without realizing how dangerous it can be. The same quality of explosive ignition that makes gasoline valuable as a fuel can cause terrible injuries when it is handled carelessly or used for a purpose for which it is not intended. Gasoline and other flammable liquid-related burns, however, are a preventable problem.

These accidents are often associated with careless use (misuse) of gasoline. Most accidents occur in the summer months due to an increased use of gasoline for farming or recreational purposes (i.e. bonfires, burning leaves, boating, yard work, etc.). A lack of understanding of the explosive nature of gasoline by the general public seems to contribute to both its improper storage and misuse as a solvent, engine primer or fire starter. Gasoline burns decrease markedly in winter months except burns associated with carburetor priming to start cars.

Although anyone can be injured in a gasoline or flammable liquid related incident, the highest rate of gasoline-related injuries occurs among those whose use gasoline in their work, such as mechanics, yard maintenance, heavy duty and light power equipment operators. Gasoline associated with recreational activities such as boating, camping and barbecue grilling can cause burn injuries.

Most injuries associated with these products occur in the home, however, where the improper use and storage of gasoline and other flammable liquids can result in the both body and property damage. Knowing how to prevent these injuries can protect you and those you love from a devastating burn injury. The first step to ensure a safer home environment is to increase your awareness and identify potential hazards. The next step is to make the necessary changes in behavior and your environment. Change in the environment and modifying high-risk behaviors involves eliminating the cause of the problem, thereby reducing the risk.

Gasoline-related injury statistics

Accidents with gasoline are a major cause of thermal burns in the U.S. It has been reported that gasoline-related burns account for 13,000 – 15,000 ED visits per year. According to the United States Fire Administration, there were an estimated 463 burn injuries caused by the misuse of gasoline in 1998. However, since USFA data are based on reports of incidents to which fire departments responded, they do not include injuries where those sustaining burns from gasoline were transported directly to hospitals by other means. Since injury statistics are organized according to numerical code sets which lack a separate code for gasoline as a cause of burn injury, the total number of such injuries is unknown. However, such injuries can be very severe, as is evident in their frequent transfer for treatment at one the nation's 125 specialized burn care facilities. In the USFA report, about 80% of the victims were males and the incidence was remarkably well distributed by age (with a spike at age 30) from birth until about age 45. At that age, incidence drops off considerably and remains low through older age.

American Burn Association – Gasoline Safety

<http://www.ameriburn.org/Preven/GasolineSafetyEducator'sGuide.pdf>