

Dryer Safety – Questions and Answers

By Michael Laskowski

Have you ever wondered what causes dryer fires or, more importantly, what can be done to prevent them? The goal of this article is to provide valuable information about how and why dryer fires occur and what steps can be taken to help prevent them. According to the National Fire Protection Association (NFPA), in 2010 an estimated 16,800 reported U.S. home structure fires involving clothes dryer or washing machines resulted in an estimated 51 civilian deaths, 380 civilian injuries and \$236 million in direct property damage. Most of these home fires, an astounding 92 percent, involved the clothes dryer.

QUESTION 1: What causes the majority of the dryer fires to occur?

ANSWER 1: The primary fuel source for the dryer fires, according to the NFPA, is LINT! Therefore, most dryer safety tips that you will read revolve around the safe removal and management of this potential fuel source.

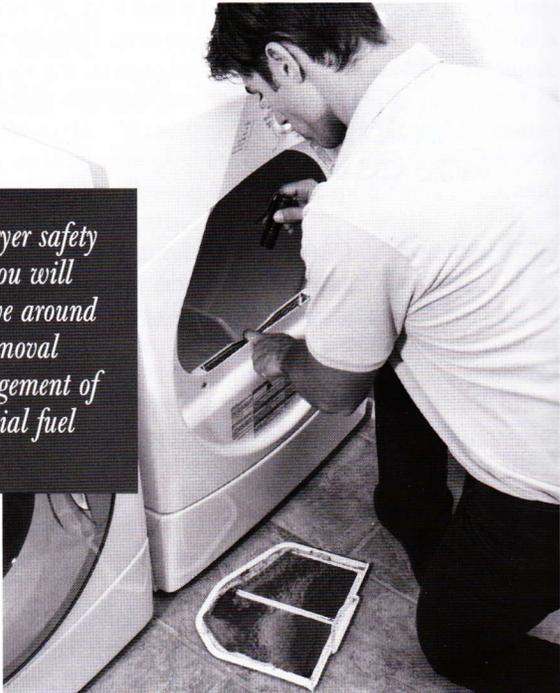
QUESTION 2: How does lint become a problem in typical clothes dryer?

ANSWER 2: A typical clothes dryer works by forcing hot air through a tumbling drum. This causes the clothes to dry. The bi-products of this process are heat, moisture and lint. These bi-products are sent through a lint filter and the remaining exhaust is pushed through a dryer vent. Over time, the lint that escapes the initial lint filter will build up in the dryer vent reducing the air flow. This further increases the lint buildup within the exhaust conduit as well as heat buildup in the dryer itself. The build up of heat in the dryer will cause the dryer's high limit thermostat to turn off during the drying cycle. Eventually, this thermostat can fail causing temperatures to rise and a highly combustible and readily available fuel source, lint, to ignite. This is why an important indicator of a restricted dryer vent is if there are wet clothes in your dryer.

QUESTION 3: How can I improve dryer safety and reduce the chances of a dryer vent fire from occurring?

ANSWER 3: According to the NFPA, the leading cause of dryer and washer fires was "failure to clean." There are three "trouble" areas that require proper cleaning. These areas are: the lint traps, areas surrounding the dryer and finally, the dryer vents. Therefore, regular cleaning maintenance must be done in order to reduce the chances of a dryer fire from occurring. The frequency of cleaning maintenance includes:

- 1) Cleaning the lint trap before every use.
- 2) Removal of nearby combustibles around the dryer to include any loose articles of clothing or lint.
- 3) Finally, your dryer vent should be professionally cleaned on an annual basis, at the very least. It is crucial that your dryer vent cleaning service be performed by a licensed and certified professional. This individual has been specially trained and can observe any potential issues. Furthermore, they can ensure that



"...most dryer safety tips that you will read revolve around the safe removal and management of this potential fuel source."

your dryer vent has been properly and thoroughly cleaned. The Chimney Safety Institute of America (CSIA) has a listing of professional cleaners in each state that have received the certification of "Certified Dryer Exhaust Technician" (CDET). Although it is recommended that your dryer vents be cleaned annually, there are other factors that should influence the determination of dryer vent cleaning frequency.

QUESTION 4: What are the factors that influence dryer vent cleaning frequency?

ANSWER 4: Factors to determine if a dryer vent should be cleaned more often than the general annual recommendation include but are not limited to:

- *Frequency and Type of Use* – The types of material and frequency of use will affect the amount of bi-products exhausted through the dryer vent and therefore, affect how often they should be cleaned. For example, a family of 4 will produce more lint than a family of 2 on average. However, someone who dries a lot of towels (or other heavy lint producing material) will produce more lint compared to someone who has the same frequency but dries less lint producing material.
- *Physical Dryer Proximity to Exterior Walls* – Dryers that are located near exterior walls that have vents that are typically shorter in run length and have a more direct pathway for the dryer's exhaust to escape. Dryer vents located farther away from the dryer exhaust vent typically have more potential to clog.
- *Properly Constructed Dryer Vents* – Dryer vents that sag, have crushed vents or have extremely large and complicated runs have, inher-

ently, more risk associated with them by design. This risk is often due to a concept known as "back pressure." This means that the risk can increase the dryer's bi-products being safely exhausted.

In summary, ensuring that you follow a regular cleaning maintenance program, pay attention to any early warning signs and ensure you have a properly designed dryer vent system will help reduce your risks of a dryer fire from occurring. Be proactive and ensure the safety and well being of your treasures by following these simple, yet life saving tips! ■

Michael Laskowski is the owner of American Safe Wash, a residential and commercial cleaning company, performing cleaning services Connecticut Statewide. Michael has a "Certified Dryer Exhaust Technician" certification from the Chimney Safety Institute of America For any additional information or questions please feel free to contact him at info@americansafewash.