

## **1. What are the causes of a clogged dryer vent?**

Clothes dryers can be found in 81.5 million homes throughout the United States. A full load of wet clothes contains about one half gallon of water. As water is removed lint becomes detached from the clothes and is carried out through the exhaust vent. Over time this lint collects throughout the entire length of the exhaust vent decreasing the air flow from little to none at all. According to the 1997 estimates by the U.S. Consumer Product Safety Commission there were 15,600 fires, 20 deaths, 370 injuries and \$75.4 million in property damage all attributed to dryer fires.

Lack of maintenance is the leading cause of dryer fires. Clothes dryers must vent hot air to the outside of the house. If lint builds up in the exhaust vent or inside and around the dryer, it can block the flow of air causing the dryer to perform poorly, raising the operating temperature of the dryer and cause overheating. The complex construction of new homes built today tends to have dryers located away from an outside wall. This means dryers tend to be vented longer distances creating more bends in the vent run to accommodate the extended path they must take through the home. The additional length creates more places for the lint to collect or for animals and birds to build nests and block the air flow.

## **2. What consequences can a clogged dryer vent have on you and your home?**

Along with the water vapor evaporated from the wet clothes, the exhaust stream carries lint – highly flammable particles of clothing made of cotton and polyester – through the ventilation duct. Lint can accumulate in the exhaust duct, reducing the dryer's ability to expel the heated water vapor, which then accumulates as heat energy within the machine. As the dryer overheats, mechanical failures (thermostat, limit switch, damaged screen, or crushed hose) can trigger sparks which cause the lint trapped in the dryer vent to burst into flames.

A clogged dryer vent does not allow for the clothes dryer to exhaust properly. Gas clothes dryers that become clogged have the potential to cause Carbon Monoxide to back fill into your home.

A restricted dryer vent that reduces air flow and causes your dryer to run hotter and longer will substantially impact the appliances energy efficiency. Excess heat created by poor air flow can ruin your clothes, add dollars to your home's energy bill and increase the wear and tear on your appliance. Clothes dryers are one of the most expensive appliances in your home to operate. The longer it runs, the more money it costs you. If your dryer takes twice as long to dry clothes as it should, the number of loads that it will dry in its lifetime is substantially reduced as well.

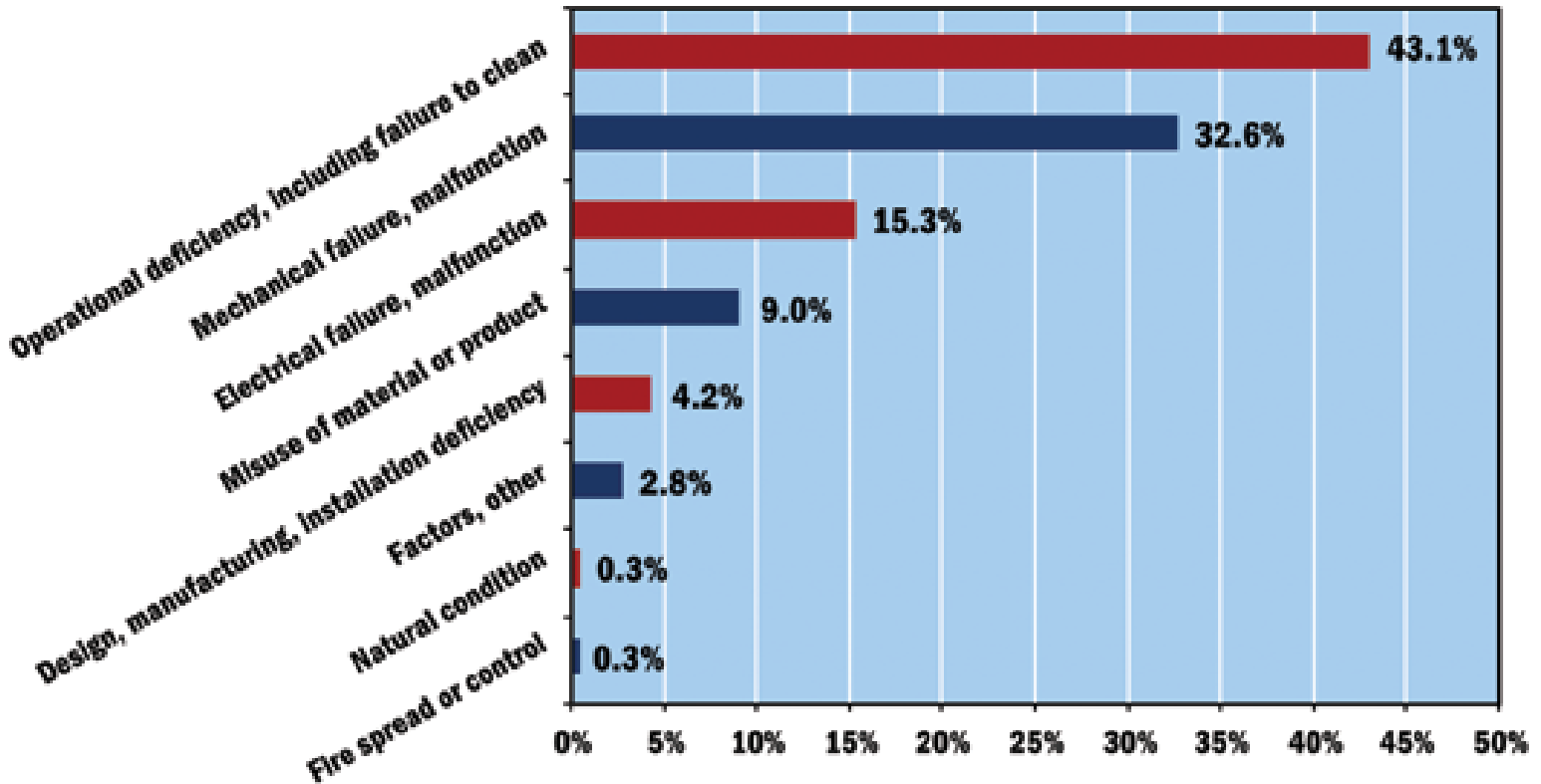
### **3. What can you do to prevent these consequences?**

1. Having your dryer vent cleaned by a professional on an annual agenda.
2. Replace plastic or foil, accordion-type ducting material with a rigid metal duct. Most manufacturers specify the use of a rigid or corrugated semi-rigid metal duct, which provides maximum airflow. The flexible plastic or foil type duct can more easily trap lint and is more susceptible to kinks or crushing, which can greatly reduce the airflow. This material can become highly flammable over time and is not capable of meeting California building code.
3. Having your dryer appliance cleaned as well as the exhaust vent. Lint that is built up inside the appliance is even more susceptible to ignite and cause a household fire. As a rule, a fire starts from a spark in the machine. However, improper clothes dryer venting practices outside the dryer can play a key role in this process as well.

### **4. What benefits will come from having a dryer vent and/or appliance cleaned?**

1. Less energy consumption, translating into lower monthly utility bills
2. Longer appliance life, having to run the appliance through only one drying cycle substantially increases the number of loads that it will dry in its lifetime.
3. Eliminating the chance of having gas clothes dryers becoming clogged and causing Carbon Monoxide to back fill into your home.
4. Shorter drying times, not having to deal with the frustration of ruining your clothes by running multiple drying cycles.
5. Most importantly, eliminating the inevitable threat of having a household fire due to a clogged dryer vent and/or lint-filled appliance.

**Factors Contributing to Ignition in Residential Building  
Clothes Dryer Fires 2002-2004**



**Dollar Loss per Clothes Dryer Fire by Fire Spread [Residential  
Buildings, 3-year average (2002-2004)]**

Flame Spread Confined to:					
Measure:	Confined to object of origin	Confined to room of origin	Confined to floor of origin	Confined to building of origin	Beyond building of origin
Clothes dryer loss per fire	\$2,420	\$4,742	\$28,971	\$63,822	\$65,665
Percent of fires	61.8%	26.5%	3.8%	7.4%	.5%