



# LESSONS LEARNED / BEST PRACTICE

<b>Title:</b>	<b>2019/09 - Tumble Dryer Fire</b>
<b>What Happened / Impact?</b>	
<p>On arriving home from work, an individual noticed smoke coming from their detached garage, which is located to the rear of their property. On investigation, the source of the smoke was a tumble dryer.</p> <p>The individual reacted by using a dry powder fire extinguisher to extinguish flames coming from the dryer. An extinguisher was stored in their property and it proved successful in dousing the flames; however, thick black smoke persisted. The power running to the garage was isolated at the breaker unit inside the house and water was used to ensure the fire would not re-ignite.</p> <p>The fire brigade was called and arrived on the scene after approximately 20 minutes. A fire hose was used on the tumble dryer and it was removed from the garage.</p>	
<p><b>Rear of Tumble Dryer</b></p> 	<p><b>Front of Tumble Dryer</b></p> 
<b>Why it Happened?</b>	
<p>Dublin Fire Brigade explained that the source of the fire emanated from the drum of the dryer and confirmed that an electrical fault was <u>not</u> to blame. A forensics team is to be dispatched by the machine manufacturer to further investigate possible sources of ignition.</p>	
<b>Immediate Learnings / Recommendations</b>	
<ol style="list-style-type: none"> <li>1. Ensure that electrical appliances are regularly serviced.</li> <li>2. Ensure smoke detectors are present in all areas of your home, including garages and sheds. WIFI systems are available for buildings separate to the home.</li> <li>3. In the event of an electrical fire, always ensure that the power has been isolated before attempting to tackle appliance. Never use water or water-based extinguishers on an electrical fire unless you are <u>certain</u> that the power has been appropriately isolated!</li> <li>4. It is your responsibility to ensure that a tumble dryers' filter and water tank (where applicable) are cleaned / emptied, preferably after every use.</li> </ol>	

5. Where possible, do not operate washers or dryers when no persons are in the property.
6. It is recommended to check the operation of your electrical breaker to ensure it trips as intended every six months.
7. It is essential to have a fire extinguisher available for use in your home. Please observe the type of extinguishers and their application, as displayed below. Further advice on fire is available on the webpage of the Health and Safety Authority at: <https://www.hsa.ie/eng/Topics/Fire/>

Type Extinguisher	Fire						Comments
	CLASS A Combustible materials (e.g. paper & wood)	CLASS B Flammable liquids (e.g. paint & petrol)	CLASS C Flammable gases (e.g. butane and methane)	CLASS D Flammable metals (e.g. lithium & potassium)	Electrical Electrical equipment (e.g. computers & generators)	CLASS F Deep fat fryers (e.g. chip pans)	
Water	✓	✗	✗	✗	✗	✗	Do not use on liquid or electric fires
Foam	✓	✓	✗	✗	✗	✗	Not suited to domestic use
Dry Powder	✓	✓	✓	✓	✓	✗	Can be used safely up to 1000 volts
CO2	✗	✓	✗	✗	✓	✗	Safe on both high and low voltage
Wet Chemical	✓	✗	✗	✗	✗	✓	Use on extremely high temperatures