For 30 years, I repaired washers and dryers while in the commercial coin operated laundry business. When I entered the corporate world (after selling my route) I landed with Underwriters laboratories, where I saw the potential high risk for fire that dryers have. The lint accumulates over time clogging the dryer vent which over time can increase the risk of fire!  
  
Lint travels with the hot moist air exhausted outside from the wet clothes in the dryer.  
  
This is then carried thru the dryer and its vent system and the accumulation process is ON ITS WAY. Vent obstructions which include vent crushing (moving dryers too close to the wall) and another is small insects and animals nesting in the vent. You may not see them, but they are there!  
  
Today's dryers have safety sensors to determine if a dryer is properly venting, but even mechanical safety factors can fail. It is improper ventilation that tends to cause a fuel/carbon monoxide hazard. This is much higher risk in gas dryers over electric.  
  
I have been using the K-Thermocouple thermometer for testing home dryers that has been the best way to do this. We can get the temperature sensitivity needed for the range of 120-300 degrees Fahrenheit. The one obstacle to this sure-fire test is that the equipment cost around $100. Our aim is to create an affordable prototype allowing the homeowner to test the appliance on his or her own.  
  
The prototype must be able to test the heat by running for 10-15 minutes (3-4 cycles). One heated cycle has a low reading of 110 and the optimal reading 200-230 degrees. In the video, we can see that the sensor failed. It went over the 200 mark and in fact hit the 330-degree mark, making it a fire hazard.  
  
It is important to check the dissipation rate as well. Collection of this data will allow tech to show the homeowner know what to look for. Vent clogging is what we are looking for and if we know what to look for, we prevent fire, as vent clogging is the main culprit.  
  
Because a homeowner could easily forget the prototype IN the dryer, an electronics item in the drum could also be a liability. It could also cause overheating and thus a fire possibility.  
  
Our goal is to create the data with blue tooth technology. This would simplify the ability for the home owner to know his or her dryer's health. We can connect the K-Thermocouple wire to a smartphone to calculate the temperature. TO DATE-THERE IS NO PRODUCT LIKE THIS AVAILABLE!!!  
  
By building the prototype mounted on the outside of the door we would get a more accurate reading. We can insert in the lint trap area. The unit can be placed on the outside of the dryer using a magnetic device and the wire could be coiled up for storage.  
  
In order to consumers to WANT the item, we must make the prototype easy to operate, safe to use and affordable so it will be used.  
  
I am in hopes that this helps you to fully understand the importance of saving lives and property for those who own a home or property and want the convenience of having their own washer/dryer on their premises.

Forensic testing shows that cotton and wool clothing will ignite at temperatures of 250°F.

Therefore, a dryer fire is virtually imminent if lint from these clothing materials comes in contact with the dryer heating element. A controlled test conducted by Intertek Testing Services (ITS), showed that small lint fires regularly occur within the dryer cavity and may extinguish as the lint burns off. However, if there is a substantial amount of lint within the dryer cavity a much larger fire can occur and spread throughout the dryer and surrounding area.

This has been my desire from day one and I am in hopes that with your assistance and aid, we will be able to reach the impossible dream and save some lives!