Omaha, Nebraska, December 20, 1992: the Sunday World-Herald reports a fire at Boardwalk Home-style Laundromat started by "spontaneous combustion". Sacramento California, January 11, 1993: a coin laundry owner reports that a spontaneous fire erupted in a laundry cart inside his store. San Francisco, California, September 1996: a fire totals Brain Wash Laundromat, probable cause is spontaneous combustion of bundled garments left under a counter.

There are hundreds of fires in coin laundries each year that were found to have started under counters, in laundry carts, or even in dryers, all that may have been triggered by spontaneous combustion.

So what is spontaneous combustion?

Spontaneous combustion is the occurrence of fire without application of an external heat source. In laundries, heat from the dryer initiates the chemical reaction culminating in ignition. Cotton seems to be more susceptible to spontaneous combustion than most fabrics. Being a natural fiber, cotton starts to decompose around 200 degrees F and generates its own heat. The decaying process is accelerated when fabric is tightly folded and placed within a confined area. Because it is hot, moist, and has no possible way to dissipate heat, the decaying procedure continues to build upon itself, until it reaches the ignition point and bursts into flames.

Here is an all to familiar scenario: Your coin laundry provides a wash and fold service and your attendant is trying to finish a customers bundle before closing time after a hectic day. She is in such a hurry that she doesn't wait for the dryer cycle to finish; she removes the clothes and towels before they are completely dry and before the cool down cycle begins. The hot moist garments are neatly folded, stuffed into the customers bag and placed under the counter. With her work finally down for the day, the attendant closes the laundromat and goes home. About four hours later you receive a phone call that your coin laundry has been totaled due to a fire. The probable cause is spontaneous combustion from a bundle of clothes stored under the counter.

Another scenario: On a very busy day, your attendant is helping customers in your coin laundry that are waiting in line to use the dryers. She removes a customers clothes from a dryer, stuffs them into a laundry cart, and sets it aside to wait for the customer to return from the drug store next store. The customer returns to find her bundle of clothes still in the laundry cart charred and smoldering from the fire that was just extinguished by an alert attendant. Fortunately, this spontaneous fire happened during the day, preventing a more serious fire.

There are several things that may add to the increased possibility of this type of fire occurring in your store. Besides heat, moisture, and combustible material, you may have oils such as vegetable oil and grease still imbedded in the towels,

rags, and garments. Due to lack of proper detergent, low temperature settings, and faster wash cycles, these oils are becoming increasingly difficult to remove in a normal wash.

What can we do to prevent spontaneous combustion?

1. Inform all employees about the phenomenon of spontaneous combustion and causes
2. Make sure all the dryers have a cool down cycle long enough to properly lower the temperature of the dryer load. check the temperature settings of each dryer on a regular basis.
3. Wash items with oily stains in the hottest water available and use proper heavy duty liquid laundry detergent.
4. Allow enough time for all heat to dissipate before folding and bundling.
5. Never store bundled or folded garments in boiler rooms, next to water heaters or room heaters, behind dryers, or in any areas where ambient heat is greater than normal room temperature.
6. Install smoke detectors in areas where bundled garments are stored.
7. Never allow large loads to remain in dryers after the drying cycle ends.

Keep in mind, however, that while this procedure can occur after laundering, it is just as likely to happen under other circumstances. For example, oil stained items left in a car parked in a sunny spot or a load of oil stained fabrics stored in a garage or attic can also burst into flames.

Employee education and proper training are important factors in preventing many instances of spontaneous combustion claims in our laundries.