

## Regal Home Inspections, LLC

### Find of the Week 7/6/2019

This week's find of the week is another recipe for death. Carbon monoxide is a colorless, odorless gas that is a byproduct of combustion. Regardless if it's your car's combustion engine, a water heater, furnace or kerosene heater, they all exhaust carbon monoxide. This week's find of the week is a water heater that has a substandard exhaust but the telltale signs are very subtle. It was seen once before about a month ago in another home.

Some water heater manufacturers have small, plastic things on the top of the water heater. As seen below, which is customary, one is blue to identify the pipe connection for the cold water and one is red to identify the pipe connection for the hot water. In this week's case, there was also a black, plastic cap.

This, and many water heaters, have what's called a, "Natural draft hood". The hot exhaust naturally rises and draws in air at the opening on top of the water heater. **Heat and combustion gasses should not (MUST NOT) exit at this location.** The partially melted plastic components around the draft hood indicates that heat and combustion gasses, INCLUDING carbon monoxide, ARE leaking into the living space around the water heater. In this week's instance, the water heater was in a closet adjacent to a bedroom.



Anyway, the problem was identified. It was classified as a material defect in accordance with NJ home inspection standards of practice. To the definition of a, "Material defect", this effected the "safety" of the occupants. The first three photos are from this week's home. The last 2 are from a home inspected in early June.



Melted blue, red and black plastic elements at the top of two different water heaters due to poor exhaust drafting.

If you see this atop your water heater, you should call a licensed plumber immediately. You may also have carbon monoxide leaking into your home too.