

A Canary in a Coal Mine?

By the early nineteenth century, Europe and the United States had moved into what is now referred to as the Industrial Revolution. Inventions of the past few decades had replaced workers. Factories now consisted of machinery driven by the fossil fuel of that time – coal. With more machinery and engines requiring more and more fuel, the coal mining industry was experiencing a boom, a rapid increase in demand for the product, coal. Coal miners were usually the factory workers who had been replaced by the new machines. They now toiled in dark tunnels deep inside the earth to bring this new precious fuel to the surface and on to the factories and machines that needed it.

The owners of the coalmines knew the coal miners needed their jobs desperately. Therefore, not much attention was paid to worker safety. At this time, during the Industrial Revolution, there were no safety regulations and no unions to represent the rights of the workers. The workers were at the mercy of the owners of the coalmines who wanted to maximize their profits.

While chipping away at a vein of coal, quite often the miners would hit a pocket of gas, carbon monoxide (CO), which had developed with the coal over million of years. This trapped gas was colorless, odorless, and deadly.

When miners hit these pockets of carbon monoxide, they would become drowsy and tired, and would then pass out. They would continue breathing the odorless deadly gas until they died. Often no one would even be aware that a pocket of this gas had killed a team of miners until someone noticed that no carts full of coal had come up from that section of the mine in a while. Someone would investigate and immediately run out of the mine upon finding the dead miners, knowing that the gas was still in that vein of the mine.

The Poor Canary

Someone suggested putting a canary in a cage in each spot there was a team of miners working. The canary was used as a signal if the miners had hit a pocket of carbon monoxide. When the canary stopped singing or died, the miners dropped their tools and headed for the surface.

It may have been an odd sight to see a pretty yellow bird in a cage down in a deep, dirty mine singing to a bunch of burly, soot-covered miners, but the miners knew that the canary would save their lives.

Today, the expression “canary in a coal mine” is used to refer to something that indicates a warning, a sign to take notice of a negative change that has taken place.