HOW CADMIUM AFFECTS THE BODY

Transcript of Interview with from Dr. Peter Orris, MD, MPH, FACP, FACOEM, Professor and Director, Occupational Health Service Institute, University of Illinois Chicago. Animation by GO Studios, Inc. Translation by Professor Jianhsin Wu and Professor Allan Barr.

Cadmium is a heavy metal. It is used in a variety of industrial processes. If it is not well controlled and workers are not well protected, workers suffer the health effects of this toxic and irritating chemical.

镉是重金属与刺激性很强的物质。镉这种有很大毒性与刺激性的化学制品会造成对工人健康的损害。

When workers breathe it in, it irritates upper airways, causes bronchitis and other problems. If it gets to the lower airways it will cause pneumonitis, and in fact chronic scarring of the lungs. When it is incorporated into body through lungs into the blood stream, it will deposit in bones, liver, and a variety of other organ systems. Eventually it is excreted though urine and causes damage to the kidneys. Chronically, over a long period of time, cadmium is a known carcinogen.

当工人吸入镉时,会刺激上呼吸道,引起支气管炎与其它问题。如果镉进入呼吸道下部,会造成肺炎,从而在肺部留下长久的疤痕。当镉由肺部进入身体的血液循环系统而到达全身时,会蓄积于骨骼,肝脏等其他不同的器官组织中。镉最后通过尿排出体内时,会引起对肾的损害。经过一段长的时间,镉会逐渐成为致癌物质。

The general public understands a good deal about lead. Cadmium is very similar, but on top of lead toxicity, it is extraordinarily irritating, so it is more toxic than lead.

我们对铅很了解,铅的性质也一般大众所熟知。镉与铅很相似,可是镉除了毒性之外,也极具刺激性,所以镉比铅的毒性更强。