

## **Industrial Hygiene 101**

By T.A. Rowland III, CIH

As we all know, attorneys often retain the services of Industrial Hygienists. What is their role exactly? What do Industrial Hygienists do for their clients?

First, let's break down the terms. The word *industrial* is an adjective describing the noun *hygiene*. *Hygiene* is the "what," and *industrial* is the "what kind."

Let's look at the etymology and definition for each term.

Hygiene	
Etymology:	From the Greek word <i>hygies</i> , which means healthy, sound, or hearty.
Definition:	The conditions and practices that help to maintain health and prevent the spread of diseases.

From this background information, we can see that the word *hygiene* refers to the establishment and preservation of human health.

Industrial	
Etymology:	From the Latin word <i>industrias</i> , which means diligence or activity. As the Industrial Revolution progressed into the 19 <sup>th</sup> century, the term was commonly used to refer specifically to work within the manufacturing sector.
Definition:	Of or relating to the workers in industries.

From this background information, we can see that the word *industrial* refers to work or workers in the occupational setting.

Now, if we put the terms back together, we can see that *Industrial Hygiene* refers to the preservation of health for workers in their occupational settings. So, let us compare this understanding to the modern definition of *Industrial Hygiene*.

"The art and science dedicated to the anticipation, recognition, evaluation, communication, and control of environmental stressors in, or arising from, the workplace that may result in injury, illness, impairment, or affect the well-being of workers and members of the community." The American Industrial Hygiene Association

If you have been dutifully following along, the definition above probably makes sense. Well, at least until you get to the last phrase – "...and members of the community."



Traditionally, Industrial Hygiene was always about health and safety within the workplace, but over the course of the last 30 or 40 years, things have changed. Clients from other walks of life began to call upon industrial hygienists for help. School districts called upon industrial hygienists to assist with protecting students from asbestos exposure. Public housing authorities called upon industrial hygienists to assist with protecting their residents from lead-based paint. Churches began to call upon industrial hygienists to protect their congregants from guano produced by bats in their belfries. Property owners began to call upon industrial hygienists to work through indoor air quality issues. While the name has not changed, the scope of industrial hygiene work has expanded considerably. Today, we seek to preserve human health within occupational and non-occupational settings.

Here is a **partial** list of services that Industrial Hygienist routinely provide:

- Occupational exposure assessments (e.g. silica, chromium, asbestos, cadmium, solvents, etc.)
- Air monitoring and sampling
- Noise surveys and hearing conservation
- Heat and cold stress evaluations
- Personal protective equipment evaluations
- Respirator fit testing and training
- Ergonomic assessments
- Industrial and building ventilation evaluation
- Indoor air quality investigations
- Healthcare infection control and risk management (e.g., Legionella)
- Mold assessment and remediation design
- Laboratory health and safety consulting
- Lighting surveys
- Hazardous building materials surveys (e.g., asbestos, polychlorinated biphenyls (PCBs), lead (Pb), mercury, ozone depleters, etc.)
- Asbestos surveys, abatement design, and abatement management
- Lead-based paint surveys, risk assessment, remediation design, and remediation management
- Environmental health and safety (EHS) compliance audits
- Industrial hygiene program development for construction and general industry
- Hazardous waste operations oversight
- Industrial and regulatory toxicology consulting
- Accident/incident investigation (root cause analyses)
- Radiation investigations (ionizing and non-ionizing)
- Combustible/explosive dust investigations (e.g., grain silos)
- Radon testing and remediation design
- EHS training
- And, of course Industrial Hygiene litigation support and expert witness services



So, here's the deal. If you have a client who has something that is icky, yucky, smelly, irritating, or poisonous, they probably need the help of an Industrial Hygienist.

Thanks for taking the time to read this, and thanks for advocating on behalf your clients.

Sincerely,

ANDY ROWLAND, CIH

PRINCIPAL AT IMPRIMIS FORENSIC HEALTH & SAFETY

At Imprimis, Andy provides litigation consulting and expert witness services for employers and law firms on a wide variety of Environmental Health & Safety Topics.

- Airborne & Chemical Contaminants (Occupational, Lead (Pb), Asbestos, Indoor Air Quality, etc.)
- Biological Contaminants (Infection Control, Fungi Exposure, Bacteria, etc.)
- Physical Hazards (Noise, Thermal Stress, Ergonomics, etc.)
- General Safety