

# Everything you need to know about Isocyanate Health Monitoring

Isocyanates are a family of highly reactive hazardous chemicals and have been associated with a number of adverse health effects. Where isocyanates are used it is imperative that workers' exposures are properly controlled. There are several ways in which this can be achieved. The control strategy needed is dictated by the way that the isocyanate is used and all exposure controls require maintenance if they are to remain effective. This article provides information employers obligations on a health monitoring program for isocyanates and how KINNECT can help you to achieve this.

Isocyanates are used widely in manufacturing materials such as polyurethane foams, rubbers, plastics, varnishes, adhesives and paints. The most commonly used isocyanates in Australia are:

Name	Main Uses
Toluene diisocyanate (TDI)	Flexible polyurethane foam production
Methylene diphenyl diisocyanate (MDI)	Rigid polyurethane foam production
Hexamethylene diisocyanate (HDI)	Spray paints, lacquers and car re-finishing
Napthalene diisocyanate (NDI)	Elastomers and synthetic rubbers
Methyl isocyanate (MIC)	Intermediate in the production of some pesticides
Isophorone diisocyanate (IPDI)	Manufacture of coating and adhesive polymers and polyurethane foams

Exposure to isocyanates can have severe adverse effects on your employees' health, so it's important that both you and your employees are aware of the risks and symptoms to ensure that issues can be identified if they arise.

## How can isocyanates be harmful?

There are a number of potential adverse health effects of isocyanates including:

- Irritation of the respiratory tract – nose, mouth, throat or lungs
- Difficulty breathing
- Chest tightness, coughing, wheezing or shortness of breath
- Other asthma-like symptoms
- Headaches
- Allergic dermatitis.

## Monitoring your employees' health

Monitoring the health of your employees who are working with or around isocyanates is crucial to ensure all workers' absorbed dose of isocyanates is within a safe and acceptable level and any adverse health effects are identified quickly.

Health monitoring must be done under the supervision of a medical practitioner with specific experience in health monitoring, and the frequency of an individual's health monitoring should be determined by the practitioner.

Finding a skilled practitioner is crucial, and KINNECT has several occupational health medical practitioners who are available to help oversee your Isocyanate Health Monitoring Program.

## **What's included in your Isocyanate Health Monitoring Program?**

Your program should include:

- A baseline health assessment before the worker starts the work;
- A respiratory medical history and/or questionnaire;
- A spirometry test;
- Potentially a urine isocyanate test.

Monitoring should occur after two weeks of exposure, then six weeks of exposure and then six monthly. In addition, A final health assessment once the work has commenced

Implementing an Isocyanate Health Monitoring Program is an important step in ensuring the health and safety of your workers.

KINNECT can help you establish a program that not only keeps your employees safe but that also meets your legislative requirements.

Contact us for an obligation-free discussion on how KINNECT can help setup your Isocyanate Health Monitoring Program.