**NON-COMMUNICABLE DISEASES & CONDITIONS ASSOC. W/ENVIRONMENT**

**Facts**

Major non-communicable diseases in the U.S.:

* Diseases of the heart
* Malignant neoplasms (cancer)
* Cerebrovascular diseases (stroke)
* Accidents
* Atherosclerosis
* Diabetes mellitus
* Chronic liver disease and cirrhosis

Chemical compounds:

* 2 million recognized compounds
* 60,000 chemical substances in past or present commercial use
* 600–700 new chemicals introduced each year
* 15,000 have been animal tested with published reports
* Limited resources permit testing of no more than 500 chemicals per year

Lead:

* Lead poisoning is commonly associated with children living in old and substandard housing built before 1950
* Banned from house paint in 1978
* National ambient air quality standard for airborne lead is 1.5 µg/m3 averaged over a 3‑month period
* **There is no acceptable level of lead in humans**, but CDC guideline for blood level is 10 µg/dl

Carbon monoxide:

* Motor vehicle exhausts are the principal source of carbon monoxide air pollution
* Room space heaters are a major potential hazard indoors
* Cigarette smoke is also a significant source of carbon monoxide to the smoker
* Homes in low socioeconomic areas can be expected to have the highest levels
* Concentrations of 70–100 ppm are not unusual in city traffic

Nitrates:

* Presence of >45mg/l nitrates, the standard for drinking water, appears to be the cause of methemoglobinemia (“blue baby”).