

Hierarchy of OELs

As more toxicological and epidemiological data becomes available, we move up the hierarchy of OELs.

Quantitative Health Based OELs

Health Based OELs
• Regulatory, Authoritative, Traditional
(TLVs, MAKs, WEELs, MACs, RELs, PELs, WELs)

Most Extensive Data Requirements
(human epidemiology studies)
> quality, > certainty

Working Provisional OELs
(internal company, trade association, vendor limits)

Moderate Data Requirements
(*in vitro* and animal studies and anecdotal reports of human health effects)
> quality, > certainty

Prescriptive Process Based OELs
(REACH DNELs/DMELs)

Least Data Requirements
(*in vitro* and animal studies)

Hazard Banding Strategies
• Pharmaceutical banding
• Occupational exposure banding

Control Banding = Hazard Bands + Exposure Risk Assessment + Exposure Measurement