

ACGIH<sup>®</sup> --Setting Exposure  
Values For the Future  
California Industrial Hygiene Council  
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- ACGIH<sup>®</sup> - Overview
- Need for Occupational Exposure Values (OEVs)
- TLVs<sup>®</sup>/ BEIs<sup>®</sup> Guidelines
- Development of a Sustainable TLV/BEI Program



Membership-based organization: ***open to all IH and occupational health professionals***

*ACGIH advances worker protection by providing timely, objective scientific information to occupational and environmental health professionals.*

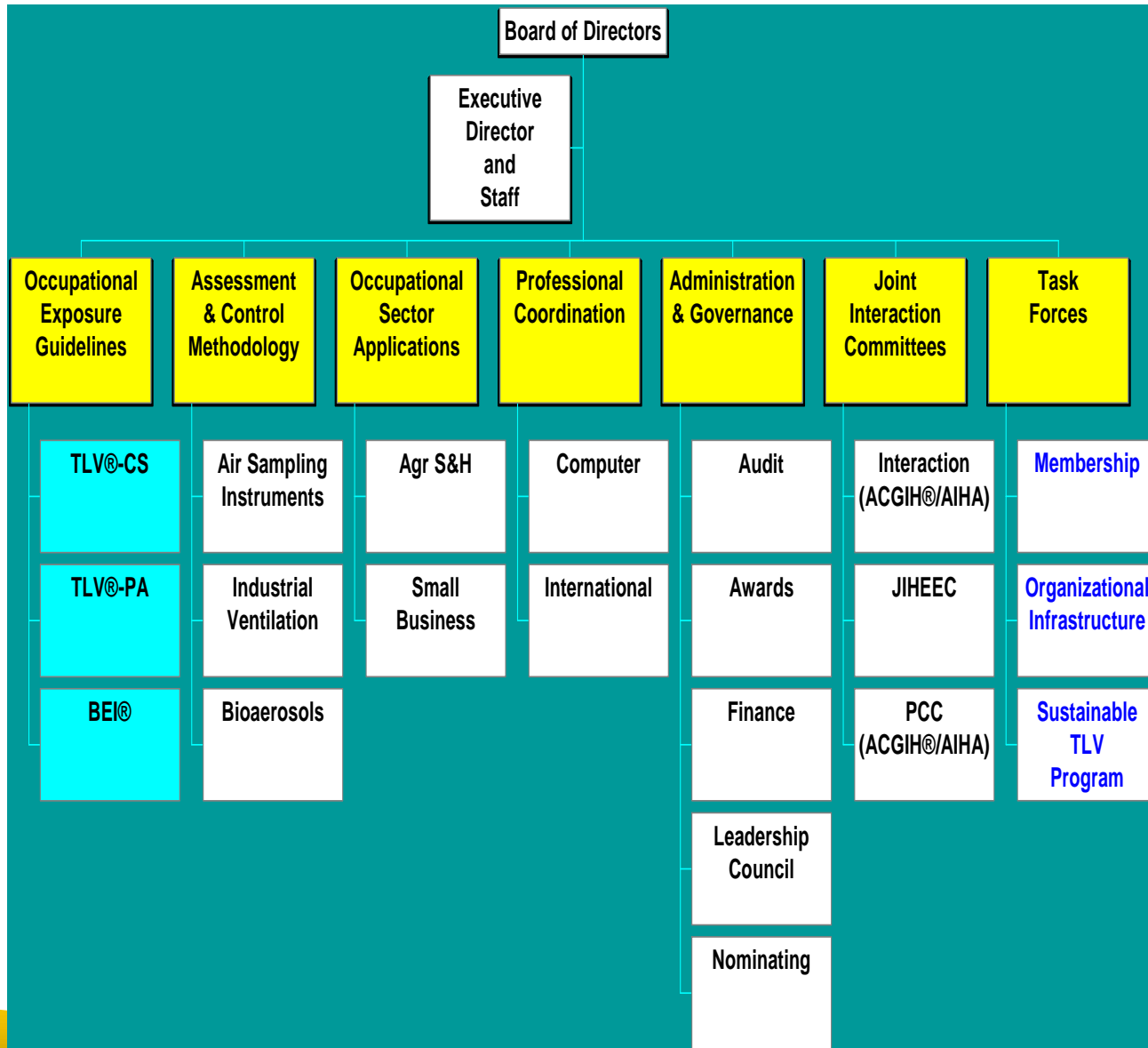
*Defining the science of occupational and environmental health*

*Provide technical expertise and knowledge fundamental to professional practice and industrial health strategies*

*Major producer of Occupational Exposure Guidelines*



# ORGANIZATION



# Occupational Exposure Values dilemma

- USA – per TSCA reporting (1990, 1994 & 1998)
  - ✓ ~70,000 chemicals in commerce
  - ✓ ~2,800 are considered High Production Volume (HPV) Chemicals (>1 million pounds/year) - excluding polymers
- Organization for Economic Co-operation and Development (OECD)
  - ✓ 5,235 HPV chemicals compiled in 2000 (Includes chemicals with annual production volume >1,000 metric tons (>2.2 million pounds) in more than one economically developed country)

# Occupational Exposure Limits

List of countries with an Internet link to a table or database containing regulatory exposure limit values

[Argentina](#)                      [Hungary](#)  
[Australia](#)                    [Ireland](#)  
[Austria](#)                        [Japan](#)  
[Belgium](#)                       [Luxembourg](#)  
[Brazil](#)                         [Netherlands](#)  
[Bulgaria](#)                      [New Zealand](#)  
[Canada](#)                        [Norway](#)  
[Chile](#)                         [Slovakia](#)  
[Cyprus](#)                        [South Africa](#)  
[Denmark](#)                      [Spain](#)  
[Estonia](#)                       [Sweden](#)  
[European Union](#)            [Switzerland](#)  
[Finland](#)                      [UK](#)  
[France](#)                        [USA](#)  
[Germany](#)

<http://www.ilo.org/public/english/protection/safework/cis/products/explim.htm>

# U.S. Based Exposure Standards / Guidelines

- Standards
  - ✓ OSHA PELs - 447
  - ✓ State specific PELs
    - California - 747
    - Minnesota -
    - Michigan -
    - Washington -
    - Other?
- Guidelines
  - ✓ 2008 TLVs<sup>®</sup>/BEIs<sup>®</sup> – 696
  - ✓ 2007 WEELs - 109
- Other
  - ✓ Foreign standards
  - ✓ Company guidelines / standards

# Need for Science-based OEVs is Evident

- Number of HPV chemicals increasing
- Development of occupational exposure guidelines is progressing at a much slower rate
- Need for an increase in the rate at which science-based occupational health guidelines are produced
- New and developing requirements default chemicals without OEV information into higher risk categories

# TLVs<sup>®</sup> and BEIs<sup>®</sup>

***ACGIH<sup>®</sup> is not a standard setting body***

**TLVs<sup>®</sup> and BEIs<sup>®</sup> —**

- Are an expression of scientific opinion.
- Are not consensus standards, but science-based guidelines to be used by a knowledgeable professional
- Are based solely on health-related factors; without consideration of economic or technical feasibility.
- Regulatory and other agencies should not automatically assume that it is economically or technically feasible for an industry or employer to meet TLVs<sup>®</sup> or BEIs<sup>®</sup> limits.

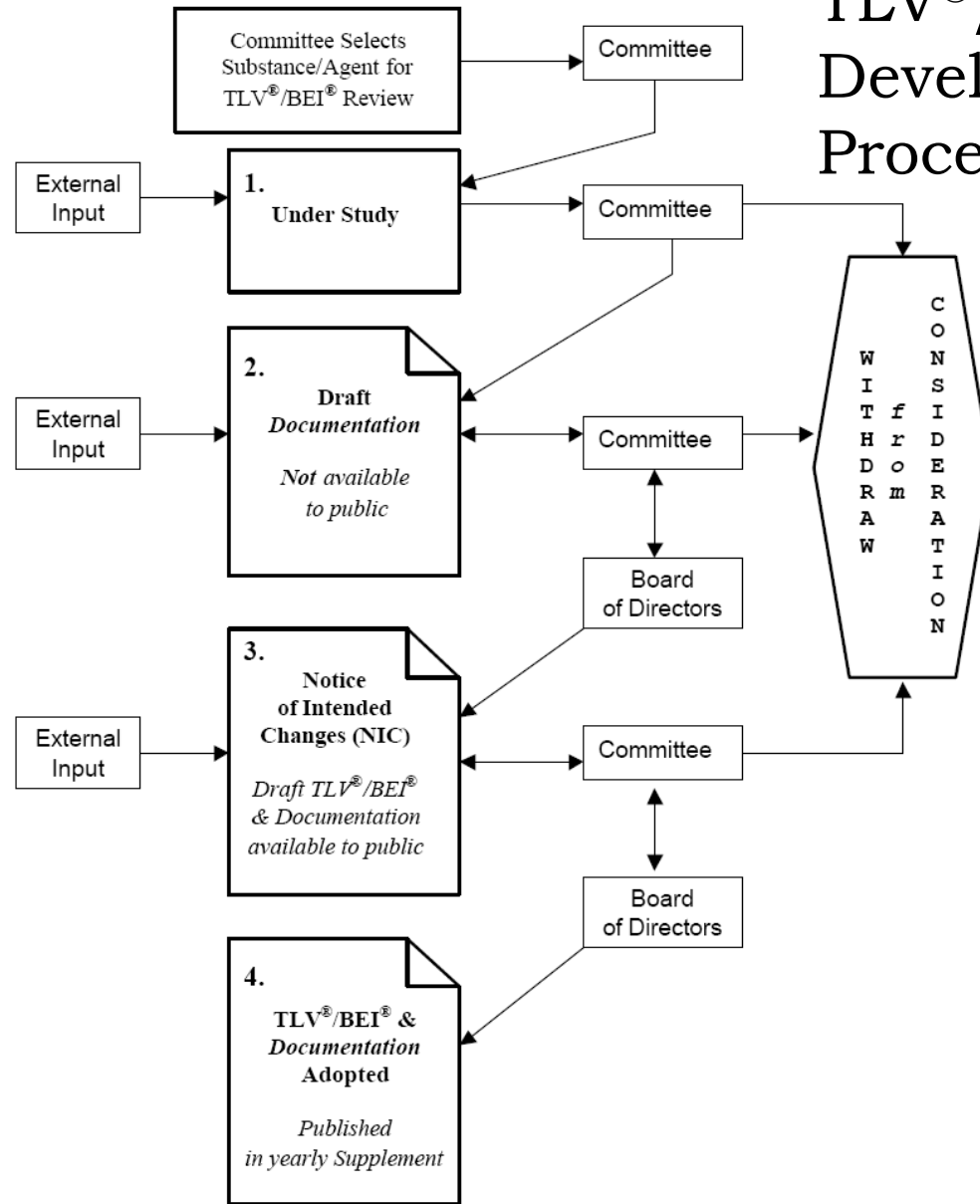
# Basis of TLVs<sup>®</sup> / BEIs<sup>®</sup>

## *Scientific Literature*

- Published/Peer Reviewed Science (Principal Source)
- Reviewed Articles (Secondary)
- Unpublished Science (Secondary)
  - ✓ Before Use: Owner must provide ACGIH<sup>®</sup> permission to use and cite the report, and release the report to a third party
  - ✓ Consideration of TLVs<sup>®</sup> are not deferred pending completion of on-going or planned research
- Emphasis on peer-reviewed literature and on literature directly pertinent to the science and health-basis of the issue

# TLV<sup>®</sup>/BEI<sup>®</sup> Development Process

Opportunities for interaction and input into the TLV/BEI review and development process.



December 20, 2004

## When/How Interested Parties Can Most Effectively Provide Input to the TLV<sup>®</sup>/BEI<sup>®</sup> Development Process

- Under Study stage
- NIC/NIE Stage
- Submit published, peer-reviewed science
- Unpublished works: Write an article and get it published
- Relevant unpublished studies: Submit to ACGIH<sup>®</sup> with permission to use, cite and release study

# Information Related to ACGIH TLV<sup>®</sup>/BEI<sup>®</sup> Process

[www.acgih.org](http://www.acgih.org)

- Conflict of Interest Policy
- TLV<sup>®</sup>/BEI<sup>®</sup> Policy Statement
- TLV<sup>®</sup>/BEI<sup>®</sup> Position Statement
- TLV<sup>®</sup>/BEI<sup>®</sup> Development Process
- Under Study List
- Notice of Intended Changes (NIC) List
- TLV<sup>®</sup>/BEI<sup>®</sup> Committees' Operations Manuals

<http://www.acgih.org/TLV/OpsManual.htm>

# Attack on the OHS Profession

- Professional Occupational Exposure Guidelines benefit the profession and the protection of worker health worldwide.
- Legal attacks on the TLV<sup>®</sup>s, PELs and other OEVs impede continued development and dissemination of professional occupational health guidelines.
- ACGIH plan is to carry out our core purpose – ***“To advance occupational and environmental health”*** and will do so through continued development of TLV<sup>®</sup>s/BEI<sup>®</sup>s

# ACGIH<sup>®</sup> Path Forward...

- Continue to develop and disseminate occupational health guidelines
- Goal is to increase the number of **new** occupational health guidelines available to professionals (possible use of scientific product groups)
- Develop an independent, sustainable TLV<sup>®</sup>/BEI<sup>®</sup> program economic support base

# Foundation for Occupational Health and Safety (FOHS): [www.FOHS.org](http://www.FOHS.org)

## **Mission**

- To sponsor research, education, and the publication of scientific information
- To provide a vehicle for financial support for improvement and enhancement of occupational and environmental health and safety and the general public health
- To disseminate the results of valuable research findings and assure a heightened quality of continuing education in occupational safety and health

# FOHS Sustainable TLV/BEI Program Fund

- Establish an endowed program within the Foundation for Occupational Health and Safety (FOHS) specifically to help support the TLV<sup>®</sup>/BEI<sup>®</sup> development programs
- Will provide on-going and increased support to the TLV<sup>®</sup>/BEI<sup>®</sup> process
- Will help to increase the number of substances that can be reviewed, documented, and TLV<sup>®</sup>/BEI<sup>®</sup> created
- Goal is to support continued development of the knowledge base of chemical health risk information and increase the information available for professional use

# Summary

- Substantial need for closing gap between # of workplace chemicals and # of available Occupational Exposure Values (OEVs)
- Science-based health information should serve as the basis for OEVs
- ACGIH will continue to play an important role in developing TLVs<sup>®</sup>/BEIs<sup>®</sup> for the IH professional
- Application of TLVs<sup>®</sup>/BEIs<sup>®</sup> should be done by professionals with understanding of all relevant issues -- need to understand not solely the “number” but the reason(s) for the number, which is contained in the associated Documentation of the TLV
- Sustainable TLV<sup>®</sup>/BEI<sup>®</sup> Program Fund is critical to increasing rate of development of OEVs

# ACGIH<sup>®</sup>

If you're interested in receiving more information about ACGIH<sup>®</sup>, or in becoming a member, please visit the website:

[www.acgih.org](http://www.acgih.org)

# FOHS

If you are interested in contributing to the FOHS Sustainable TLV/BEI Program Fund, please visit:

[www.FOHS.org](http://www.FOHS.org)