

## President's Message

Jim D'Arcy, PhD, CIH



In this quarterly newsletter we are including an editorial from MIHS Board Member Peggy Brady on the issue of professional board certification vs. the "course completion" certificates that are proliferating. Future editorials or letters to the editor of the newsletter are encouraged on any topic of interest to industrial hygienists.

I wish each of you a safe, and warm Winter.

Jim D'Arcy, PhD, CIH  
MIHS President

### MARK YOUR CALENDARS

CHMM-MI Annual Conference 2008  
March 18, 2008  
Yazaki Learning Center - Canton, MI.  
[www.chmm-mi.org](http://www.chmm-mi.org)

Comprehensive Industrial Hygiene Review Course  
Co-sponsored by U of M, MIHS and AIHA  
March 24 - 28, 2008  
Ann Arbor, MI  
<http://www.aiha.org/Content/CE/road/CIHReview.htm>

MIHS Past-Presidents' Breakfast Meeting  
March 25, 2008  
Schoolcraft College-VistaTek Center  
Featured Speaker: Don Hart, CIH, Ph.D.-AIHA  
President  
[www.MIHSweb.org](http://www.MIHSweb.org)

Michigan Safety Conference 2008  
April 15 - 16, 2008  
Lansing Center in Lansing, Michigan.  
[www.michsafetyconference.org](http://www.michsafetyconference.org)

American Industrial Hygiene Conference & Exposition 2008  
May 31 - June 5, 2008  
Minneapolis Convention Center  
For full program details, go to [www.aihce2008.org](http://www.aihce2008.org)

Comprehensive Industrial Hygiene Review Course  
Co-sponsored by U of M, MIHS and AIHA  
Sept. 22 - 26, 2008  
Ann Arbor, MI  
<http://www.aiha.org/Content/CE/road/CIHReview.htm>

PCIH 2008  
November 8-11, 2008  
Tampa, FL  
For full program details, go to  
<http://www.aiha.org/pcih08/default.htm>

### MIHS WELCOMES NEW MEMBERS!

#### NEW Individual Members:

- Glenn Adamus
- Aaron Bird
- Howard Brickner
- Jean Carron
- Stephanie Day
- Bernard Hennessy
- Jeanne Hoing
- Jennifer Hsu
- Mark Johnson
- Lisa Macauley
- Mark Mau
- John Meeker
- Frank Newman
- Bouthayna Saad
- Namhee Shin
- Lori Spears
- Juliane Surian
- Kristina Wilson
- Tarek Zamzam

#### NEW Organizational Members

- Brady Consulting LLP  
Peggy Brady
- Fibertec Industrial Hygiene Services, Inc.  
Phillip Peterson

## Election Candidates 2008



*By Sharkey Mingela, CIH  
MIHS Past-President*

The following contains the slate of candidates for the MIHS Election 2008-2009.

Officers: (1 year terms)

- President Elect: Terry Fisk
- Secretary: Laura Randall
- Treasurer: Aaron Jacob

Board of Directors: (four open positions: 2 year terms)

- Alan Amberg
- Peggy Brady
- William Cleary
- Thomas Martin
- Tracy Parsons
- Lynn Totsky
- Eltaneice Bolden
- Carrie Brown
- Vasu Gupte
- Sharkey Mingela
- Stephen Paul

Voting will take place in February. Graham Parr, MIHS Board, will email each eligible voter with their Voting Username and Voting Password, with link to the voting website.

## Comprehensive Industrial Hygiene Review

Comprehensive Industrial Hygiene Review is a 4.5-day that provides an intensive, high-level review of a wide range of industrial hygiene topics. This program is offered twice annually in Ann Arbor, Michigan and has gained the reputation of being one of the premier programs for people needing to broaden or refresh their industrial hygiene knowledge base or to focus their efforts on professional certification. Attendees benefit from interaction with more than a dozen experts (including University of Michigan faculty and industrial hygiene leaders from business and industry) covering the industrial hygiene topics. The next offering will be March 24-28, 2008. This program is co-sponsored by the American Industrial Hygiene Association (AIHA) and the Michigan Industrial Hygiene Society, and the University of Michigan (U of M), and registration is handled through the AIHA. For more information, refer to the following link on the AIHA web page:  
<http://www.aiha.org/Content/CE/road/CIHReview.htm>

## LIFE MEMBERSHIPS

By Laura Randall, CIH - MIHS Secretary



Will you be retiring soon?

Have you been an MIHS member for the past 10 years or more?

Then maybe you would like to be considered for Life Membership.

According to the MIHS bylaws Article III, Section 6:

"Life Memberships may be conferred on persons who have been Full or Associate Members of the Michigan Section in good standing for at least ten (10) years, and who have retired from full-time employment or active practice. Life members shall be entitled to all privileges of membership except those of voting or holding elective office, and shall be exempt from payment of dues and holding elective office. Life Members may retain the privileges of Full or Associate MIHS membership status by annually paying their MIHS dues. Names of persons to be considered for Life Membership shall be presented to the Executive Committee by the Secretary at least one (1) month prior to the Section's Annual Business Meeting. Life membership shall be conferred with the consent of the awardee, by a two-thirds affirmative vote of the Executive Committee, and with such awards to be announced at the Section's Annual Business Meeting. The award of Life Membership shall not be limited in number."

Please note, if you are a Life Member, please know that you still have the option of paying your dues. If you pay your dues, then you can vote in elections and run for office, and still maintain your Life Member status.

Please contact me if you would like to be considered for Life Membership, or if you have any questions.

Thank you.

Laura Randall, M.S., CIH  
MIHS Secretary/Newsletter/Website  
[Lrandall@askenviroair.com](mailto:Lrandall@askenviroair.com)  
[www.MIHSweb.org](http://www.MIHSweb.org)  
586-840-3230 x126

## FRANK M. CLEARY

December 23, 2007. Age 78. Peacefully at home in Beverly Hills. Retired senior safety administrator for General Motors, Research and Tech Center. Proud veteran of U.S. Navy and U.S. Air Force. Devoted scout leader and executive board member, Detroit Area Council, B.S.A. Beloved husband of LaVerne for 56 years. Dear father of Carol A. Cleary, Stephen F. Cleary (Tammy) and Kathleen E. Blank (Ron). Grandfather of Ryan, Steven, David, Shawn, Chad and Shannon. Brother of Geraldine Schoen and Michael Cleary (Linda).

Here are some comments by MIHS members:

- "Frank will be sadly missed in the safety & health community. He was a good friend, a great mentor and a leader in our local community."
- "Frank was always approachable and had a ready smile and willingness to help out. He was a long and a well respected professional in the field."
- "I met him at a couple events. He was truly a nice guy."
- "I agree Frank touched many of us."

## Laser Printer Particle Emissions

By Tom Martin, CIH - MIHS Member



I read the original article on this Laser Particle Emissions, as published in the ACS Journal. From my education and background as an industrial hygienist, I'm familiar with indoor air quality issues relative to copy machines and laser printers. The article focuses on submicron particles (also called

"nanoparticles") generated by laser printers. It makes a comparison between background (ambient air) and nanoparticle concentrations generated in test chambers where various types of laser printers are used. The comparisons between the various types of printers (low, medium, high) are based on arbitrary values assigned to the emission rates of the printers above ambient background levels, and are not associated with relative health risk. Although this type of research is interesting, from an occupational health risk perspective it is not very useful (in the article's defense, it does not claim a connection between printer nanoparticles and health risk).

In my review of the article, I did not find any dose/response information, or exposure data that could readily be translated into something I could compare to OSHA and/or other recognized health standards (such as ACGIH). I am aware of research in the area of nanoparticle exposure, and there is some concern about their health implications. However, as of yet, there are no standards for to use in assessing health risks (if any) from printer-generated nanoparticulates.

Additionally, concerning air quality testing of office areas for printer-generated particulate, I am unaware of any validated methodologies to do this, outside of a laboratory (as was done in the test chambers referenced in the article).

I do stay abreast of developments in this area, and will inform management and employees of health risks associated with printer-generated nanoparticulates, if/when this information is known.

Article referenced above:

Particle Emission Characteristics of Office Printers

C O N G R O N G H E , †

L I D I A M O R A W S K A , \* , † A N D L E N T A P L I N ‡

International Laboratory for Air Quality and Health,  
Queensland University of Technology, Brisbane, QLD 4001,  
Australia, and Queensland Department of Public Works,  
Brisbane, QLD 4001, Australia

American Chemical Society

VOL. xx, NO. xx, xxxx /

ENVIRON. SCI. & TECHNOL.

Published on Web 08/01/2007 PAGE EST: 6.1

## American Industrial Hygiene Foundation (AIHF) MIHS Merit Scholarship

The Foundation's annual scholarship program awards scholarships to students studying industrial hygiene and related disciplines. Since 1982, AIHF has distributed more than \$900,000 to more than 45 different schools and universities and 356 students

The Michigan Industrial Hygiene Society Merit Scholarship was established in 2006 by MIHS. All students meeting the AIHF general scholarship criteria are eligible for this scholarship. However, preference is given to Michigan residents enrolled in an industrial hygiene program at either the University of Michigan or Wayne State University.

The MIHS was founded in 1937 by leaders of the profession such as Gordon Herrold, William Fredrick, Stuart Meek, Carey P. McCord, William T. Krebs, William Bradley, William Witheridge, L.B. Case and Vincent J. Castrop, several of whom became presidents of the American Industrial Hygiene Association (AIHA) after it

was organized in 1938. The MIHS became the AIHA's first local section. The Michigan Industrial Hygiene Society Merit Scholarship continues MIHS's legacy of support for the industrial hygiene profession.

THANK YOU to the following people who contributed money directly to the AIHF for the Michigan Industrial Hygiene Merit Scholarship.



Pat Brogan



Steve Levine



Sarunas Mingela



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## Editorial: Mold Experts

By Peggy Brady, CIH



I'm a CIH and now I'm Mad

As a consultant, I get involved in my share of mold cases. Lately it has amazed me how the "Three Day Experts" (if you were at the Mini Conference in October you heard a lot about them) and their sponsoring organizations are out to discredit the CIH. In the past few days I have been told more than once, in more than one way, that a CIE (Certified Indoor Environmentalist) is so much more qualified than any of us because they are trained on water intrusion and none of us have that training. If I just took a few minutes, I was told, I could find all kinds of terrible things on the internet about CIHs. Well that did it, I had to look. It took exactly one minute to find the following on the home page of a Three Day Expert mold remediator:

*THE "CIH" MYTH - A "Certified Industrial Hygienist" (CIH) is indeed a prestigious and revered designation, an accomplished status requiring college degrees and extreme certification requirements and testing. However, the mere "CIH" acronym does not mean that one is educated in the area of "residential" MOLD which can be very misleading. The CIH designation may specialize in many other areas. The "I" stands for "Industrial" not "residential". A "MOLD" qualified CIH mold inspection is certainly, in most cases, considered a level above today's typical "certified" mold inspector. However a CIH inspection from a "non-mold" qualified inspector, and without structural knowledge of residential or light commercial construction, may be of even less quality than today's "Certified" Inspectors. BUT THAT ISN'T ALL!...*

*As over-inflated egos would have it; unfortunately many CIHs strongly criticize and literally make fun of the new "certified" mold inspector as "unqualified" etc.*

*The best mold inspectors are those who not only have learned to perform a professional mold inspection, but those who truly understand why mold problems occur in the first place. An advanced knowledge of water intrusions and their causes and origins are basic essentials. Most good home inspectors are water intrusion experts...Is the CIH educated in this area? In many cases...NO, THEY ARE NOT!*

*THE BOTTOM LINE...a well certified and knowledgeable mold inspector with extensive construction defect/home inspection background is the best bet."*

What was this expert's standard for hiring a qualified mold inspector? According to the web site, you only need to 'belong' to the IAQA (Indoor Air Quality Association).

The intention here is not to discredit another organization and they

did not write these statements. I simply want to compare apples to apples so I did some checking. According to the IAQA website, the requirement to be a member is "an interest in the subject of indoor air quality". They provide a number of certifications, many based on a three day class and the passing of a short exam at the end. The requirements to obtain your CIE were not found on the IAQA website but were found on several other sites, all listing the same requirements:

"A high school diploma or GED, plus either 5 years experience in a field related to the IAQ industry (such as cleaning, restoration, or Indoor Air Quality Experience); or 2 years of college, plus 3 years experience in a field related to the mold remediation industry. Up to 4 years total of college may be substituted for the work experience on a 1 to 1 basis. In no case will a CIE have less than 1 year work experience in a field related to indoor environments."

Again, there is nothing wrong with this. However, as a CIH and a licensed civil engineer, I cannot believe anyone can teach, or learn, enough about but structural engineering and mold, in a less than three day course, allowing time for an exam, to be an expert.

There was yet another interesting website that appeared from my search on disqualifying CIHs. In this case the company's owner simply believed his experience was far better than any certification. His home page states:

"The best education, as in most industries, comes from field experience, not from the classroom."

They go on to say that until any education or experience is mandated, they claim it is just a 'mold muck' out there. They do however assure us that:

"... certification requirements are being developed and will soon be implemented by the International Mold Detection Dog Association (IMDDA)." (Yes, you read that correctly.)

Though this person was obviously not taking much seriously, I did find one article in our favor. The article was related to the insurance industry. That particular article suggested that every mold investigation and remediation be signed off by a CIH.

As CIHs, we take our jobs seriously. We should be upset by the fact that our Certification is taken so lightly, and not understood by many. As we discussed at the Mini Conference, it is our job to promote ourselves and look for opportunities to make the CIH better understood and to make this Certification stand out, and above, the others.

Of course, this is just my opinion.

Peggy Brady

*The views expressed here do not necessarily reflect the views of MIHS, or its Membership, Officers or Board Members.*

## MIHS Newsletter Editorials

Ground rules:

- 1) The use of names, groups and companies is allowed but the Newsletter Editorials cannot be used as a forum for personal, group or company defamation.
- 2) The final content, length and publication approval is under discretion of the Newsletter Editor. The Newsletter Editor may consult the MIHS Board, and/or person(s) designated by the MIHS President.
- 3) Content must be relative to the field of Industrial Hygiene or closely-related field.
- 4) The right to write editorials is limited to an MIHS member in good standing. Guest Editorials will be allowed at the discretion of the MIHS President or their designee.
- 5) The mention of products and/or services (favorable or unfavorable performance) is allowed but the content cannot be used as an advertisement, promotion or marketing for a company where there is a conflict of interest. Additionally, the content cannot be used as a forum for personal profit or gain.
- 6) The editorial will be accompanied by the disclaimer: "The views expressed here do not necessarily reflect the views of MIHS, or its Membership, Officers or Board Members."



## Michigan Safety Conference 2008

Mark your calendars! The Michigan Safety Conference in 2008 will be held on April 15 - 16, 2008 at the Lansing Center in Lansing, Michigan.

Center in Lansing, Michigan.

You can earn up to 2.0 CIH CM points in the IH Rubric Area.

Would you like to volunteer a few hours of your time to helping out in the MIHS booth?

Please contact Tracy Parsons, MIHS Board Member and MIHS MSC Chairperson.

Tparsons@dow.com  
989-636-1644

For more information on the Michigan Safety Conference, please go to: [www.michsafetyconference.org](http://www.michsafetyconference.org)

## PCIH 2008

**November 8-11, 2008 - Tampa, FL**

Note especially the very strong and complete focus on manganese (amongst other important issues).

Website = <http://www.ahia.org/pcih08/default.htm>



## MIFACE (Michigan Fatality Assessment and Control Evaluation) PROGRAM

by Debra Chester, M.S.

Traumatic occupational deaths are not random events. Prevention of work-related fatalities can be accomplished if information about the settings and circumstances in which the work-related death occurred and root causes are identified, and if practical and implementable prevention information is shared with stakeholders who can effect work practice changes in their workplaces.

Surveillance and prevention activities of traumatic work-related deaths by the Michigan Fatality Assessment and Control Evaluation (MIFACE) research program began January 1, 2001. MIFACE, funded by the National Institute for Occupational Safety and Health (NIOSH), is a joint research project of Michigan State University College of Human Medicine's Occupational and Environmental Medicine Division and the Michigan Department of Labor and Economic Growth.

The purpose of the MIFACE surveillance project is threefold:

- 1) Identify types of industries and work situations where workers are dying from acute traumatic incidents
- 2) Identify the underlying causes of the work-related fatality
- 3) Formulate and disseminate prevention strategies to reduce work-related fatalities

With the voluntary cooperation of the employer, MIFACE conducts a site visit to identify the underlying cause(s) of the work-related fatality. After each site visit, MIFACE issues a narrative report, which includes a summary statement, detailed narrative of the investigation, cause of death, and recommendations (with discussion) to prevent future fatalities. Here are some reports that have been recently issued:

- Worker Dies As A Result of Being Struck and Pinned Between Two Vehicles While Repairing Potholes (#03MI005)
- Ground Man For Milling Operation Dies When Struck by a Dump Truck Backing Into Work Zone (#06MI096)
- Tow Truck Operator Pinned Under Sport Utility Vehicle When Working Under It (#05MI026)
- Race Car Fuel Dispenser Operator Killed When Methanol Tank Exploded (#05MI077)
- Hispanic Landscape Laborer Dies When Nine Foot Deep Trench Collapses (06MI004)
- Heavy Equipment Operator Dies After Being Pinned Between the Boom and Cab of an Excavator (06MI209)
- Female Firefighter Dies When Struck by an Out-of-Control Pickup Truck on an Icy Interstate Highway (06MI001)
- Security Guard Died as a Result of Carbon Monoxide Poisoning (#06MI204)

Most of the resources and reports are listed on the MIFACE website, are free, and can be downloaded:  
<http://www.oem.msu.edu/miface.asp>

There is also a link to the MIFACE website on the Home page of the MIHS website.

If you have any questions, please feel free to contact Deb Chester at 517-432-1008 or [Debra.chester@ht.msu.edu](mailto:Debra.chester@ht.msu.edu)

## OSHA AND NIOSH 2009 BUDGET REQUEST

By Aaron Trippler, AIHA Governmental Affairs



Here's a first look at the President's 2009 fiscal budget. Overall, the President is requesting an increase in defense spending and a cut in discretionary funding. So how did OSHA and NIOSH fare? - Depends on how you look at it. By the way, don't expect this to be the final budget when all is said and done. I wouldn't be surprised if Congress doesn't even adopt a budget until the next President takes office. While we haven't reviewed the details as yet, here is a quick look - - OSHA The president's proposed fiscal 2009 budget for OSHA is \$501.7 million, compared to \$486 million this year. The President once again proposes to remove the training grants, but Congress has restored these grants each year in the final budget. Occupational Safety and Health Administration

2007	Compliance Assistance-Training Grants
2008	10,116
2009	9,443
Request	0
Safety and Health Standards	Safety and Health Statistics
16,892	32,274
16,597	31,523
17,204	34,128
Federal Enforcement	Executive Direction
176,973	11,169
182,631	10,809
194,000	11,545
State Programs	Total Budget Authority
91,093	486,925
89,502	486,000
91,093	501,674
Technical Support	Total FTE
22,392	2,055
21,681	2,118
22,632	2,165
Compliance Assistance-Federal	NIOSH would get approximately \$326 million under the President's proposal, \$110 million less than what the agency got in fiscal 2008. However, most of this cut comes in the World Trade Center Treatment and Screening fund, cut back \$83 million from \$108 to \$25. Still, it is a substantial cut for NIOSH.
72,659	
71,389	
76,541	
Compliance Assistance-State Consultations	
53,357	
52,425	
54,531	



### The MIHS Website: An Excellent IH Resource

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

As an MIHS member, our Web site is at your disposal 24/7 with News, Views and more. Features include Job Postings and Links to IH related Events and Activities.

## Meet Your Colleague: **Eltaneice Bolden**



In 1980, Eltaneice Bolden started out as an Environmental Scientist while still in College at Johns Hopkins University in Baltimore. Her initial assignments involved doing Phase 1 Site Assessments and EPA Risk Assessments for Superfund sites. The company she worked for also employed some top notch Industrial

Hygienists. They impressed her greatly. After she married, and moved to Michigan, she went back to school and pursue a Masters degree in Occupational and Environmental Health at Wayne State University.

Along the way, she worked as the Safety Manager for Gelman Sciences, a small high tech manufacturer near Ann Arbor. Twelve years ago, she started at General Motors as an Industrial Hygienist, and soon after received her CIH. "I can still remember how thrilled I was when I got that letter."

Over the past 12 years, she has worked in Industrial Hygiene and Safety. In her most recent assignment in Global Safety, she travels the to GM facilities, helping to ensure a common Health and safety process in GM operations globally.

Eltaneice has been married to Tony, a GM Engineer, for almost 17 years. Together they have two great kids; Claire age 10, and Geordan age 5. When she's not working, she spends her time with her family.

Eltaneice has been a member of the MIHS and AIHA since 1990, and has been on the MIHS board since 2006. "Its been really great to be more involved in the local section, and to get better idea of how hard it is to keep an organization like this moving forward."

## PESTICIDE INJURY & ILLNESS REPORT

Abby works at the Michigan Department of Community Health (MDCH), on pesticide illness and injury surveillance. The annual report may be of interest to industrial hygienists. It is available and linked from the MIHS Home Page, as well as on the MDCH website by going to [www.michigan.gov/mdch-toxics](http://www.michigan.gov/mdch-toxics); click on \*Pesticide >> Information.\*

Paper copies of the report can be requested by contacting Abby Schwartz [schwartz@michigan.gov](mailto:schwartz@michigan.gov) or 517-335-9684.

The report might be of interest to industrial hygienists because most of the cases reported to us are not related to pesticide applicators, either structural or agricultural, but have more to do with general workplace practices.

I think some of the stories could be informative and of interest.

Thank you for any assistance you can provide in distributing this information.

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## What's in the Synergist?

By Andy Crause, CIH - MIHS Board



### AIHA in China

IH in China was highlighted in the "Message from the President" article by our very own Don Hart in the December 2007 Synergist, and an article by Melissa Hurley on the

September 2007 visit by a delegation from AIHA to the Sino-US Occupational Health Workshop in Beijing. From the tone of both articles, it appears that the occupational safety and health climate in China is on the road to significant improvement. Though there are significant improvements to be made, it sounds like things are coming around. China is committed to attaining AIHA laboratory accreditation for one of the

mainland laboratories, which is a start. Considering the size of the country and the hugeness of the Chinese population/workforce, the fact that there is not yet an AIHA-accredited laboratory in the country gives you an idea that AIHA has a lot of ground to cover in helping China along.....if they want our help. Based on Don Hart's message, it sounds like the Chinese IH professionals are very committed to improving the occupational safety and health conditions, and in its own way, AIHA is trying to help this along. We (the AIHA/American IH community in general) are just scratching the surface, but of course, a journey of a thousand miles begins with a single step.

*The Synergist - December 2007, Volume 18, No 11.*

## Health & Safety Training Benchmarking Survey

By Rich McLonis, CIH - MIHS Board



### Introduction

In November of 2007, at the request of a client, a benchmarking survey of training methods and challenges was conducted. The goals of the survey were to assist the client in determining where they stood in terms of their health and safety training system, including training delivery methods, length and frequency, documentation and tracking, and language barriers. This was done to assist the client in making decisions on the best ways to improve and update their training system.

The survey was submitted to the membership of MIHS and to some other Marsh client organizations. Twenty four surveys were received. The types of responding organizations were varied both in their size and in their type of businesses:

- Appliance manufacturing
- Broadband communications
- Insulation manufacturing
- Healthcare
- Energy/Utility
- Government
- Automotive manufacturing
- Health, Safety & Environmental consulting
- Chemical manufacturing
- Specialty chemical manufacturing
- Office furniture manufacturing
- Cement manufacturing
- Construction contracting

The following report shows the written and graphic results of the survey.

## Survey Responses and Results

### Health & Safety Training Benchmarking Survey

	Participants	24	
	No response	1	
<b>Methods of training</b>			
Q1	Training Method	Responses	Response %
	Classroom	23	96%
	Computer-based	13	54%
	Video	22	92%
	Written/hand-out	21	88%
	Internet/Intranet	10	42%
	Other	13	54%
<b>Frequency of Training</b>			
Q2	Do you train employees on the hazards of the work environment prior to (orientation) employee starting work?	Responses	Response %
	Yes	22	92%
	No	1	4%
Q3	If yes, how is the orientation training conducted? Check all that apply.		Response %
	Classroom	17	71%
	Video	13	54%
	Lecture	17	71%
	Hands-on	12	50%
	Internet/Intranet	6	25%
	Other	6	25%
Q4	Do you conduct refresher training?	Responses	Response %
	Yes	23	96%
	No	0	0%
Q5	If yes, at what frequency is refresher training conducted?	Responses	Response %
	Annual	17	71%
	Biannual	3	13%
	Biennial	0	0%
	Other	10	42%
<b>Language Barriers</b>			
Q6	Do you employ people who do not proficiently read, speak or understand English?	Responses	Response %
	Yes	16	67%
	No	7	29%

Q7	How many languages, other than English, do your employees speak?		
		Responses	Response %
	1	7	29%
	2	3	13%
	3	2	8%
	4	1	4%
	5	1	4%
	Other	2	8%
Q8	Do you conduct training in these other languages?		
		Responses	Response %
	Yes	9	38%
	No	10	42%
	No answer	5	21%
Q9	If Yes, how is the alternative-language safety training conducted?		
		Responses	Response %
	Classroom	6	25%
	Video	6	25%
	Lecture	5	21%
	Hands-on	4	17%
	Internet/Intranet	1	4%
	Other	1	4%
Q10	Who conducts the alternative language training?		
		Responses	Response %
	Non-bilingual company employees	1	4%
	Bi-lingual company employees	10	42%
	Bi-lingual contractors/vendors	2	8%
	Other	2	8%
Q11	In your opinion, how effective are your methods of training non-English speaking employees?		
		Responses	Response %
	Very effective	4	17%
	Somewhat effective	2	8%
	Average effectiveness	5	21%
	Questionable effectiveness	2	8%
	Ineffective		0%
	Don't know/can't say	3	13%
	<b>Methods of measuring retention by employees of training material</b>		
Q12	Does your company test or measure the level of retention of material presented in the health and safety training?		
		Responses	Response %
	Yes	21	88%
	No	2	8%
Q13	If yes, how is retention measured?		
		Responses	Response %
	Hand-written test and scoring	20	83%
	Computer-generated test and grading	9	38%

Paper filing	5	21%
Computer filing and test results	2	8%
Hand-on testing and scoring	9	38%
Other	3	13%

#### Methods of document training

Q14 How are records kept to document that training was conducted, topic trained on, who attended the sessions, when, where, training syllabus/subject matter, instructor information, etc. (please check all that apply)

	Responses	Response %
Handwritten	17	71%
Computer-generated	16	67%
Paper filing	11	46%
Other	4	17%

#### Methods of delivering/conducting training

Q15 Who trains your employees? (please check all that apply)

	Responses	Response %
Company employees; general	17	71%
Company employees who are professional trainers	11	46%
Contract employees/trainers	15	63%
Hazard-specific specialty trainers (e.g.; forlift vendors, PPE suppliers, etc.)	17	71%
Other	3	13%

Q16 Where is health and safety training conducted: (please check all that apply)

	Responses	Response %
Conference or training room	22	92%
Lunch or break room	11	46%
At a computer	12	50%
On the production or shop floor	12	50%
Other	6	25%

#### Time allotted for training

Q17 How much time is allotted for training?	Range:
per session	15 - 120 mins
per topic	15 mins - 360 mins
per year	3 hrs - 400 hrs
per employee	1 hr - 40 hrs
other	

## 2 Comments to Survey Questions

#### Methods of Training:

1. Awareness poster placed in areas such as lunch rooms and near time clocks.
2. Five minute daily safety talks which include training and awareness.
3. Instructor-lead live meeting, LearnLinc.
4. We utilize signs and posters throughout the workplace to reinforce safety.
5. Limited posters.
6. Peer to peer.
7. Posted posters, postings in restrooms, computer log-on screens, weekly safety bulletins by computer.

8. Use posters and signs for various health and safety issues; they are posted by coffee pot, equipment services area, in the lab etc.
9. In the plants, could be in a room or right on the plant floor.
10. Reminders posted and instructions. Misc articles posted.
11. Newsletters, flyers.

**Frequency of Training:**

1. Training should occur prior to working the field and/or working in areas w/known hazards. Orientation might occur. Methods will vary by topic and/or trainer.
2. Refresher courses are done 1-2 weeks after hire. In such cases, the supervisor often orients the employee to facilities, policies, practices, etc, before starting w/any field work. Can't say this is always true as some employees have received PPE w/o being trained and/or said training is not documented anywhere.
3. Whenever an employee is not knowledgeable or when changes in PPE or the workplace occur that make previous training outdated.
4. Initial training often provided individually during new-hire orientation & often takes place in Human Resources office or small conference room.
5. Refresher training is typically done as required by OSHA/EPA/DOT regs, HazCom every three years. (Not required)
6. Refresher training is conducted every 3 years - Employees tend to forget info if training is less frequent.
7. Orientation training is conducted on line.
8. Frequency of refresher training depends on the course.
9. Refresher training conducted as identified by external or internal drivers.
10. Orientation training conducted by reading w/quiz.
11. Refresher training conducted every 3 years.
12. Frequency of refresher training is dependent on regulatory requirements.
13. I didn't train employees on the hazards of the work environment prior to orientation, but I think the direct supervisor did, I did the annual training.
14. Refresher training conducted if there was a new process or product that would affect everyone in the area.
15. Periodic
16. Refresher training conducted annually or as specified by regulation or need.

**Language Barriers:**

1. It wasn't other languages that was the problem. We had people that could not read or write; I did suspect at times it was that they could not read or write English but could speak it.
2. Alternative-language safety training conducted by lecture (interpreter) and translated written materials.
3. Training to be conducted in other languages when Mexican plant opens next year.
4. Alternative language training conducted often with assistance of employee translator.

**Methods of Measuring Retention:**

1. Observation/use of skill.
2. The testing or measuring the level of retention of material presented in the health and safety training is not conducted for every course. In most instances, a simple test.
3. Observation.
4. Hands on testing, but not necessarily with scoring.
5. Verbal for those that could not read or write.

**Methods of documenting training:**

1. Vendor.
2. Internal spreadsheet
3. TrainerSoft training software.

**Methods of delivering/conducting training:**

1. Co employees and general employees trains employees, depending on complexity of topic.
2. Contract employees/trainers train employees on bloodborne pathogens.
3. Hazard-specific specialty trainers train employees, typically for forklift training.
4. Suppliers.
5. Health and Safety training conducted offsite.
6. Who trains your employees? Other - IH.
7. Actually there were specific people in the company that would travel to do the training at various facilities and the general presentation was also videotaped so that if someone was absent that day, they had to watch the general video and the specifics would be covered by the immediate supervisor.

**Training locations/facilities:**

1. Temp Service office

**Time allotted for training:**

1. There is no set minimum or maximums w/exception to the 8, 24, and 40 hr HAZWOPER classes. Instead, time allotted will vary by employee and/or the type (s) of known hazards likely to be encountered while on the job.
2. Varies with type and scope of training and regulatory requirements.
3. It's difficult to answer the question above, because different subjects demand different time for teaching. It also depends on the entry level of training, whether initial or refresher, specific or general. Our average refresher class is approximately one-hour.
4. Training done for all employees weekly and annually plus hazard specific training for mobile equipment, I.H. exposures, high voltage, emergency procedures, 1st aid/cpr.
5. Dependent upon requirements.
6. Training would be done by job category. Time would vary depending on the background of the job and the duties of the job. For example - the janitors always took longer, tended to be less educated (where many of the illiterate people were) and they dealt with the liquid cleaners, could be in confined spaces, collected waste..(usually 4 hours). Assembly people had assembly people had a higher education and dealt very little with liquid chemicals, did not deal with confined spaces so this training tended to be quick and basic (about 1 1/2 hours); Waste treatment plant (WTP) operators were on the level with skilled trades in educational background but the WTP operators deals with chemicals, confined spaces, sludge, mixing of chemicals...so training could be 3 to 4 hours but very different that the janitors. Skilled trades had very little chemicals and did have confined spaces but not much else. - 2 hours was plenty. The times also depended on the type of plant, the size of the plan (and therefore the size of the group to be trained). Some plants used very little liquid products and had almost no confined spaces but then had inter-locks on presses. It was never just a canned training session.
7. This is not a question that can really be answered. There are so many different kinds of training conducted.
8. As needed.

# PCIH 2008 • November 8-11 • Tampa, Florida Tentative Program

PCIH 2008 • November 8-11 • Tampa, Florida Tentative Program • www.pch2008.org										
Thursday, November 8-Friday, November 7		8:00 a.m.-5:00 p.m. Pre-Conference Symposium Risk Assessment: Tools for Taming Uncertainty								
Saturday November 8		8:00 a.m.-5:00 p.m. Professional Development Courses								
		Management Course 1: Improving Communication Effectiveness for the IH Manager and OEHS Professional (2-day)								
		PDC 1 Industrial Hygienists as Experts in Trial and Depositions								
		PDC 2 TBD								
		PDC 3 Life Safety Engineering								
		PDC 4 Introduction to Risk Assessment for the Industrial Hygienist								
Sunday November 9		8:00 a.m.-5:00 p.m. Professional Development Courses								
		Management Course 1: Improving Communication Effectiveness for the IH Manager and OEHS Professional (2-day)								
		PDC 5 Moisture Control, Mold, and the Science Within the Building Envelope								
		PDC 6 Bayesian Statistics: Overview and Applications in Industrial Hygiene Data Interpretation and Exposure Risk Assessment								
		PDC 7 Applied Industrial Ergonomics								
		PDC 8 Vapor Intrusion Assessment and Management: A Fast Emerging IAQ Issue for the Industrial Hygienist								
		PDC 9 Anticipation, Recognition, Evaluation and Control of Welding Health Hazards								
		PDC 10 Adjustment of TLVs to Accommodate Specific Conditions in the Workplace								
Monday November 10	7:00 a.m.-8:30 a.m.	8:45 a.m.-10:05 a.m.	10:05 a.m.-10:35 a.m.	10:35 a.m.-11:30 a.m.	11:45 a.m.-1:15 p.m.	1:30 p.m.-5:30 p.m.				5:30 p.m.-6:30 p.m.
	Breakfast Discussion 1: Value of the Profession	Opening Session: American Imports-Asian Deaths	Exhibit Hall Break	General Session: Genuine Worker Participation — An Indispensable Key to Effective Global OHS	Luncheon Discussion 1: American Imports-Asian Deaths	Solutions Workshop 1: Heat Stress				Welcome Reception
	Breakfast Discussion 2: IH in the Courtroom				Luncheon Discussion 2: Social Responsibility and Business Continuity	Solutions Workshop 2: Improving Professional Judgment				
	Breakfast Discussion 3: TBD				Solutions Workshop 3: Wellness: What Every Industrial Hygienist Should Know About Health Promotion in the Workplace					
						Solutions Workshop 4: Global OHSMS				
						Solutions Workshop 5: Values of the Profession Study				
						Solutions Workshop 6: Ethical Fitness: Choosing Between Right vs. Right				
						Thinkshop 7: Old Hazards and New Concerns: Silica/Benzene				
						Thinkshop 8: Flavorings: An Important But Complicated Occupational Health Issue, A Look at the Challenges of Sampling and Controlling Exposures				
						Technical Tour				
Tuesday November 11	7:00 a.m.-8:30 a.m.	8:45 a.m.-9:30 a.m.	9:30 a.m.-10:00 a.m.	10:00 a.m.-10:45 a.m.	11:00 a.m.-11:45 a.m.	Noon-1:30 p.m.	1:45 p.m.-2:35 p.m.	2:50 p.m.-3:40 p.m.	3:55 p.m.-4:45 p.m.	4:45 p.m.-5:00 p.m.
Concurrent Sessions Technical Track	Breakfast Discussion 4: Manganese	Henry F. Smyth Jr. Award Lecture	Exhibit Hall Break	Concurrent 1A: An Update on Nanotechnology	Concurrent 2A: Nanotechnology Applications	Luncheon Discussion 3: Nanotechnology	Concurrent 3A: Manganese: Questions, Context and Controversy Introduction	Concurrent 4A: Manganese: Questions, Context and Controversy: Legal Aspects	Concurrent 5A: Manganese: Questions, Context and Controversy: Practical Controls	Academy Business Meeting
Concurrent Sessions Strategic Track	Breakfast Discussion 5: Metal Fluids			Concurrent 1B: Corporate Social Responsibility	Concurrent 2B: Global Supply Chain	Luncheon Discussion 4: Manganese	Concurrent 3B: Sustainability-Aligning EHS Concerns with Business Objectives	Concurrent 4B: A New Way to Do Business in China	Concurrent 5B: Stewardship and Sustainability: A Case Study and How It Was Handled	
						Luncheon Discussion 5: Global Contractor Pre-Qualifications				

## 2007-2008 Officers and Executive Boards

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*For questions or comments on the newsletter or website, please contact Laura Randall, MIHS Secretary and Newsletter Editor, at [lrandall@askenviroair.com](mailto:lrandall@askenviroair.com) or 586-840-3230 x126*

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