ASSP

GRANITE STATE CHAPTER

OCTOBER 2022

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UPCOMING MEETINGS AND EVENTS

Dan Wells -MA State Police Topic: Situational Awareness

Date: TBD Location: TBD

Adam Henderson -Chemical Safety Hazard Investigation Board

Topic: Process Safety Management Date: TBD Location: TBD

CHECK OUT OUR WEBSITE FOR UPDATES!

https://granitestate.assp.org/

President's Message

Hello Granite State Members!

Hello Granite State ASSP Members. My name is Joe Orazio and I'm happy to be serving as the 2022-2023 Granite State Chapter President this term. I have been heavily involved in ASSP serving on the Chapter's Executive Board since 2014 and over the last eight years I have held most of the position on the board including President for the 2018-2019 term.

Look for us on **Social Media!**

Facebook:

American Society of Safety Professionals Granite State Chapter

Twitter: @gscASSP

Instagram:

@granitestateassp

LinkedIn: **ASSP Granite State Chapter**

With that being said, I am very excited about this year as the Granite State Chapter has a full board without vacancies. While the Delegates position were eliminated through a vote last year, we have added two new positions to the Granite State Executive Board with the hope of providing you all with a better membership experience.

First is the Programs Chair which is held by Justin Deflumeri. As we come out of the pandemic we are trying to get more in-person technical meetings scheduled and his primary goal is to help facilitate technical events, work with the speakers to ensure logistics are arranged and line up future session. If you are interested in hosting or presenting at one of this year's technical sessions, please feel free to reach out to him or I at our emails on the Granite State Chapter Webpage.

Additionally, we have added a Job Line Chair Position which is held by Ryan Emerson. If you or someone you know is looking for an engaged, technical OSH professional you can provide it to Ryan and I. We will get this posted on our webpage, social media pages as well as in our newsletters. With over 300 members in the Granite State alone and the network of other chapters which we are in constant contact with this is a good way to promote your opportunities to a wider audience who is actively working to continue to grow the OSH domain through ASSP.

Thank you, Joe Orazio

Granite State Welcomes our New Members Since June!

Aisling McCarthy Alexis Lukeman Augustus Murdy Benjamin Altomonte **Cade Williams** Caleb Royce Danielson De Andrade David Knight Dominic Buccheri Eli Stein

Eric Parnell Ethan Treadwell Evan Merwede Gina Nunziata Hanna Loftes Hannah Olmstead Jack Maguire Jaeson Gentile Jermiah Barry Jordan Robichaud

Justin Deflumeri Justin Tkaczek Kack Keenan Kathleen Rosenbaum Mark Griffon Mason Lane **Matthew Prior** Nicholas Hunter Parker Root Peter Apgar

Robert Strycharz Ron Cartwright Scott Pezza Smriti Gurung **Stephanie Stiles Taylor Letourneau** William Krenicky Witold Tatkowski Yuri Lucena

ASSP Granite State Membership Anniversaries!

5 Years **Kimberly Walker**

10 Years **Colleen Able** Alan Goulet

Jacub Henley

15 Years Adam Lomartire Bradley Agostion **Christine Allen**

20 Years Chad Letendre

25 Years Peter Noddin

Michael Campbell Kerry Fears







Total violations cited: 1,113

OSHA requires employers to identify workplace machinery that can cause injury to an employee. Machine injuries can occur at the point of operation, from rotating and/or moving parts, or from flying chips or sparks.



Total violations cited: 1,420

Failure to properly train, certify, and re-certify forklift drivers is typically the most common reason employers are cited under OSHA's 29 CFR 1910.178 Standard for Powered Industrial Trucks.

Eye/Face Protection

Total violations cited: 1,452

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Under OSHA's Personal Protective Equipment (PPE) Standard for the construction industry at 29 CFR 1926.102, employers must ensure that employees use eve and face protection to protect them against flying objects. splashes or drops of hazardous chemicals, and other workplace hazards that can injure the eyes and face.

Fall Protection Training Requirements

Total violations cited: 1,666

Construction industry employers are required to provide fall protection training to each employee who might be exposed to fall hazards-and required re-training when necessary.



Total violations cited: 1.698

Lockout/tagout is crucial in facilities where machine maintenance and servicing occur. The unexpected release of hazardous energy-"Control of Hazardous Energy" is the 29 CFR 1910.147 Standard's proper title-can result in severe injuries, amputations, crushing, and death.

Again in this case, employee training is a stumbling block for employers. Failure to train employees on proper lockout/tagout procedures is one of the most common reasons OSHA issues citations-and why lockout/tagout appears on this list year after year.



Hazard Communication (HazCom)

Total violations cited: 1,947

Hazard Communication fell from 2nd to 5th place in 2021. OSHA's HazCom Standard requires all employers to provide workers with information about hazardous chemicals in the workplace. Chemical hazards-from toxic gases to everyday cleaning products-are communicated using written HazCom programs, hazard labels/ warnings, Safety Data Sheets (SDS), and HazCom training.

Scaffolding

Total violations cited: 1,948

OSHA requirements for scaffolds in the construction industry are found at 29 CFR 1926.451 and include specific weight limitations, construction requirements, and rules for planking and decking scaffold platforms correctly.



Total violations cited: 2.026

OSHA issued more citations under its Ladder Standard than the previous year. Ladders rose on the Top 10 List from 5th to 3rd place. Frequent violations of OSHA's Ladder Safety Standard for the construction industry include broken or poorly maintained ladders and standing on the top step of a ladder (prohibited by §1926.1053(b)(13)).



Respiratory Protection

Total violations cited: 2,527

Under OSHA's Respiratory Protection Standard for general industry, employers must complete medical evaluations, perform fit-testing to ensure respirators function properly, and train employees on proper use and maintenance.

While respiratory protection rose from #3 on last year's list to #2 for 2021, OSHA issued fewer total citations for violations of this Standard (2,527) than they did during the previous fiscal year (2,649).

Fall Protection General Requirements

Total violations cited: 5.295

Topping the list once again this year is OSHA's Fall Protection Standard. Common violations of this safety standard include failure to provide proper PPE and fall arrest systems for employees.

Sources:

Scott, Lauren. (2021, October 13). "Top 10 OSHA Violations of 2021". Lion Technology, Inc.. https://www.lion. com/Lion-News/October-2021/Top-10-0SHA-Violations-of-2021. Accessed 23 October 2022.

Nanoparticles: A lack of lineage

Joe Orazio, MBA - ASSP Granite State President

Nanotechnology has been around as an industry since the 1960s. In fact, Richard Feynman, American Nobel Prize winning physicist for the development of quantum electrodynamics in 1965, spoke about it at the California Institute of Technology in 1959. But in the last two decades there has been a significant bump in the global market due to newly adopted uses in more and more industries. According to the National Nanotechnology Initiative between 2001 and 2013 there was more than 18 billion dollars invested in just the United States (IBERDROLA, 2022).

Nanotechnology has been utilized across almost every sector of our society. The electronics industry has been able to make handheld devices smaller, our computers to become faster and lighter while simultaneously increasing their memories storage capacities. It has helped the energy industry by increasing the efficiency of solar panels and allowing for batteries to last longer on a single charge. In the pharmaceutical industry it has been used in cancer treatment methods. However, while nanotechnology is closer to having been around for a century than it is to when it was initially discovered, little is still known about the implications of occupational health and safety exposures and the impacts on the environment.

Who's doing what?

The lack of knowledge isn't because OSH professionals don't want to know. It's actually because many of these materials are novel, meaning they are distinctly unique in both their shape, size, physical and chemical properties. It's because of these significant differences from previously understood materials that we aren't able to pull, trend or compare much from historical data sets and draw conclusions as new studies on the materials are required to develop a data trend. To achieve this NIOSH established the Nanotechnology Research Center (NTRC) in 2004 with five major goals:

- 2. Evaluate workplace exposures using various measurement techniques,
- 3. Evaluate exposure control techniques and measures,
- 4. Evaluate and recommend safe worker practices,
- 5. Evaluate the use of personal protective equipment in use, if any, including respirator protection

The NTRC works by partnering with organizations that are using engineered nanomaterial or advanced materials or using the most advanced manufacturing techniques to produce nanomaterials. This collaboration between the NTRC and the industry is currently done on a voluntary basis. So far, the NTRC has performed 65 of these field studies with different organizations working in the manufacturing of or manufacturing with nano or advanced materials (Glassford, 2018).

What's currently known?

Findings from these joint efforts between the NTRC and organizations in the nanotechnology industry are interesting and have produced some information to help us understand basics about the materials being used and produced. The first and most fundamental finding is how people can be exposed and it

1. Characterize processes and identify potential emissions that could result in worker exposures,

was found that there are three major routes of exposure as with more "traditional" chemistries inhalation, dermal contact, and ingestion. Another finding that is particularly notable is it was found that material with lower solubility appear to be more toxic than larger particles when comparing based on the different nanomaterials reviewed and compared in a mass-to-mass comparison scope. These finding were substantiated through animal tests in rats, dogs, and fish as well as cell cultures which focused on surface area and surface chemistry (Glassford, 2018).

Given this solubility trend we can apply the existing knowledge of the relationship between water solubility and bioaccumulation and make the connection that nanomaterials may have the potential to result in health hazards through chronic occupational exposure resulting in bioaccumulation within target organs. However, the long-term effects and target organs specifically are not exactly known, a few findings have been noted that may provide insight as the data matures and more is collected. This is substantiated when we look at the findings that showed when nano material is inhaled it can move from the lungs and respiratory system to other organs. This may result in what are known as "free radicals" which can cause damage to cells or the host's DNA. Additionally, some nanomaterials can breach the blood brain barrier. As stated previously, given there is less than two decades of occupational health data to work from the potential impact both, acute and chronic, on these organs is tough to quantify at this time given there is less than two decades of data to trend and potential external factors which may cause similar health impacts such as PCB's and petrochemicals (Hilakari, 2018).

Sources:

Nanotechnology: a small solution to big problems (2022). In IBERDROLA. Retrieved from https://www.iberdrola.com/innovation/nanotechnology-applications

Glassford, E. (2018, March 29). Nanotechnology: Field Study Effort. In CDC. Retrieved from https://www.cdc.gov/niosh/topics/nanotech/field.html

Hilakari, L. (2018, October). Nanotechnology- a new hazard. In We Are Union OHS Reps. Retrieved from https://www.ohsrep.org.au/nanotechnology_-

_a_new_hazard#:~:text=Nanoparticles%20can%20get%20into%20the,cross%20the%20 blood%2Dbrain%20barrier.

Job Openings Near You!

Rvan Emerson - ASSP Granite State Job Chair

Company:	Job Title:	Location:	Apply Here:
Lindt & Sprüngli (USA) Inc.	EHS Engineer	Stratham, NH	Apply Here
Velcro	EHS Specialist	Somersworth, NH	Apply Here
UNH	Res EHS Manager	Durham, NH	Apply Here
Zendesk	Global EHS Program Manager	Concord, NH	Apply Here
PCI Pharma Services	EHS Specialist	Bedford, NH	Apply Here
Hussmann	Health and Safety Specialist II	Salem, NH	Apply Here
PIC Group, Inc.	EHS Engineer	Bow Lake Village, NH	Apply Here
Marmon Utility LLC	EHS Specialist	Milford, NH	Apply Here
Terrasmart	Field Safety Coordinator	Concord, NH	Apply Here
Souther NH Medical Center	Environmental Compliance & Safety Officer	Nahsua, NH	Apply Here
Weston Solutions Inc.	Senior Safety Officer	Concord, NH	Apply Here



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Jeff Slark

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Training Opportunities:

Offered by ASSP

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