

Volume 18, Issue 1

January 2018

Message from the President – Craig Doolittle

Happy New Year all!

I hope you enjoyed the holidays with family and friends and took some time off (if you're working). Your Executive Committee (EC) has been active planning our 2018 monthly meeting program, so please stay tuned for announcements on upcoming meetings. We are also evaluating the CIH review course we offer (in conjunction with NJASSE's CSP review course) to continue to make it relevant and attractive to those pursuing CEU's or for preparation for the CIH Exam.

What may be the most important focus area for the EC – outreach to students at the high school and college level to get them to consider Science, Technology and, engineering and mathematics related educations and careers. Of course, our efforts will also focus on encouraging students to consider IH careers as part of this outreach. And finally, our annual scholarship program will be actively launched so that we can help students pursuing IH or related degrees here in NJ.

We hope you will join us at our monthly meetings – our first one being January 18, 2018 at Snuffy's. Your active participation is what makes these meetings a great place to see colleagues, develop new ones and contribute to our profession.

I hope to see you there.

Best Regards,

Mentione

Craig R. Doolittle, PE, CSP President NJAIHA

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January 2018 – Dinner Meeting

RS	DATE:	Thursday, January 18, 2018				
olittle ironmental	PLACE:	nuffy's Pantagis Renaissance, Route 22 East, Scotch Plains, NJ 908-322-7726				
9793	AGENDA:					
- <u>Elect</u>	3:30 p.m.	AIHA, NJ Section, Inc Executive Committee Meeting				
prie rporated	5:00 p.m.	Registration/Networking/Cash Bar				
4930 <u>sident</u> Fontaine	5:50 p.m. Office.	Before Dinner Session: OSHA Update Presented by Mike Corbett, OSHA Avenel, NJ				
Consulting	6:30 p.m.	Dinner – Members \$30, Guests \$40.				
5687	Students and unemployed are free (subsidized 100% for dinner meetings). Online registration is now					
r	available at: http://www.njaiha.org/event/january-2018-dinner-meeting/					
Woodhull						
leritas 4532	7:15 p.m.	After Dinner Session: Lead in water risk analysis, Presented by David A. Vaccari,				
1552	Stevens Institute. Topic: The presentation will provide information on spatial sampling of lead in					
htwell	drinking water systems and lead risk assessment.					
nwen Environmental 4660 ::	Please register by Tuesday, January 16, 2018, by calling Ronnie Tutty at 973-300-0144 or you may email your reservation to <u>njaiha@ptd.net</u> or fax your reservation to 973-579-6202, giving the names of those who will attend. In case of inclement weather, please call Ronnie Tutty at 973-300-0144.					
<u>Services</u> Kowalewski						
Kowalewski Environmental	DIRECTIONS:					
4660	Pick up Route 22 West to sign reading "Mountain Ave. – Scotch Plains". Take Mountain Ave. thru 2nd traffic light to parking lot entrance on the right (just after intersection).					
ration	Coming from New York City - Lincoln or Holland Tunnels or George Washington Bridge - take NJ Turnpike					
ary	SOUTH to Newark Airport Exit #14 and follow common directions above.					

Coming from Staten Island - Go over the Goethels Bridge and exit to the NJ Turnpike NORTH. Take the Turnpike to Exit #14 to Route 22 WEST and follow common directions above.

Going NORTH on Garden State Parkway - Exit # 140 to Route 22 EAST. Bear to LEFT to take jug handle to Route 22 WEST and follow common directions above.

Going SOUTH on Garden State Parkway - Exit #140A to Route 22 WEST and follow directions above. Coming from New Brunswick and Points South - Pick-up Route 287 NORTH (Exit #10 at Edison from the NJ Turnpike or Exit #127 from the Garden State Pkwy.) Take 287 NORTH to Somerville, Exit to Route 22 EAST to Scotch Plains. Entrance on right, after Blue Star Shopping Center and before Park Ave. overpass.

Coming from PA or Points West - Route 78 EAST to Exit #41. Follow signs to Route 22, Scotch Plains. At 3rd traffic light turn right to go over Overpass to Park Ave. Stay in right lane of overpass and at next light turn right onto Mountain Ave. Make first right turn to enter parking lot

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Job Postings

There are many job postings on our web site. If you are looking or just curious check them out.

http://www.njaiha.org/resources/job-postings/

There are several job postings on these other organization web sites as well:

http://nj.asse.org/current-openings/

http://www.philaaiha.com/Employment.htm

https://www.aiha.org/get-involved/LocalSections/MetroNewYork/Resources/Pages/Job-Opportunities.aspx

Visit NJAIHA On-line

NJAIHA is continuously posting relevant information on industrial hygiene principles and practice on these webpages. Feel free to find out current events which may affect your business or industry and continue the conversation on a regional, national, and international level.

Facebook: https://www.facebook.com/njaiha/.

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In Memoriam – Howard Kusnetz, IH and AIHA Pioneer

AIHA Past President Howard L. Kusnetz, CIH (Ret.), CSP (Ret.), passed away Thursday, Dec. 21, due to complications from a degenerative lung condition. Kusnetz was an expert in occupational health who helped craft the 1970 Occupational Health and Safety Act, which established OSHA and NIOSH. He served as AIHA's 47th president in 1985-86. Together with his wife, Florence, Kusnetz established an annual award in 1987 (see below) that recognizes outstanding industrial hygienists under 40 years of age who show leadership in the profession.

Kusnetz began his career with the United States Public Health Service in 1951. His work for USPHS involved monitoring conditions in the uranium mines in Colorado and tracking nuclear fallout from atomic bomb tests. Exposure to radiation from this work is what led to the lung condition that ultimately took his life. During his USPHS service he developed the "Kusnetz method" for determining exposure to alpha radiation emitted from the decay products of radon gas.

Please follow this link the AIHA website for the full details of Howard Kusnetz's career and achievements in the IH field:

https://www.aiha.org/publications-and-resources/TheSynergist/AIHANews/Pages/In-Memoriam-Howard-L.-Kusnetz.aspx

The Kusnetz Award was established by the American Industrial Hygiene Association (AIHA) in 1987. This award honors a Certified Industrial Hygienist (CIH) who has not reached his or her fortieth (40th) birthday by May 1 of the year in which the award is presented. The award is presented to the person who is currently employed in the private sector and has been so employed for a majority of his or her professional career; who by exhibiting high ethical standards and technical abilities has provided for the highest standards of health and safety protection for employees for whom he or she is responsible; and who shows promise of leadership in the industrial hygiene profession.

For a complete list of past awardees, click:

https://www.aiha.org/get-involved/AccoladesandAwardPrograms/Pages/Kusnetz-Award.aspx



The New Jersey Section of the American Industrial Hygiene Association



Industrial Hygiene and Safety Review Course

Are you looking to enhance your career? The NJ section of AIHA in collaboration with the NJ chapter

of ASSE is offering a comprehensive Industrial Hygiene and Safety Review Course. It is designed to help candidates prepare to take the CIH or CSP certification exam. Basic instruction in critical areas of industrial hygiene and safety will offer tips and exam taking strategies. For those who are just entering the field and those professionals who want to sharpen their skills will find these courses useful. CIHs can obtain as many as 6.0 Certification Maintenance (CM) points (0.167 points per contact hour) and CSPs also can earn credit for Certification Maintenance. Participants are welcome to attend <u>anv or all</u> of the lecture sessions. People who need CM points must sign an attendance sheet at each session to receive credit.



Industrial Hygiene and Safety Lecture Topics

Here is what you will learn... History of Industrial Hygiene and OSHA Act Review, IH Management, Epidemiology, Fire Protection, Emergency Response, Indoor Air Quality, Biosafety, Equipment and Facility Safety, Ionizing and Non-Ionizing Radiation, Mathematics, Statistics and Calculator review, Air Pollution, Toxicology, Regulatory and Legal Affairs, Physics & Basic Engineering, Air Sampling - IH Chemistry, Direct Reading Instrumentation, Industrial Noise Evaluation, Industrial Ventilation Design, Ethics and Professional Conduct, Respiratory Protection, PPE and much, much more!

IH classes will be held for 12 weeks beginning on the <u>first Tuesday in June</u>, from 6:00 PM to 9:00 PM at the **Rutgers Environmental Health and Safety Dept.**, **27 Road 1, Livingston Campus, Piscataway, NJ 08854.** Tel. (732) 445-2550. **Note:** Google maps may not give the correct location! Use Live Maps.

Cost: \$150.00 (includes registration and admission to ALL IH AND SAFETY CLASSES)

Safety classes are sponsored by the NJ Chapter of ASSE



NJ Chapter of American Society of Safety Engineers

Safety topics have been added to the schedule and included in the price). NJASSE will have guest speakers on certain safety topics to help prepare people for the CSP exam. Safety classes will be held for seven (7) evenings on <u>Thursdays</u> (6:00-9:00 PM) beginning June 14, 2018.

For enrollment forms, directions, and schedule, please find the information posted on the NJAIHA web page. <u>www.njaiha.org</u>





Recent NJAIHA Activities in Pictures Tim Rice, NJAIHA Historian

NJAIHA Fall Professional Development Courses (PDCs) - November 30, 2017 PSEG Hadley Road Facility, South Plainfield, NJ



(right) One thing that everybody attending the PDCs always looks forward to is the delicious catered deli luncheon that is provided. Here hungry attendees dig in. (left) <u>Barbara Woodhull</u>, NJAIHA Treasurer, and <u>Jack Zybura</u>, NJAIHA Web Master, once again donated their services for the day to work the registration table. Also on hand to help coordinate the day's activities was <u>Bernie Fontaine</u>, PDCs Coordinator and NJAIHA Past-President.





Nancy Orr, CIH, CSP, FAIHA, once again served as the instructor for morning Course #1, "Ethical Fitness: A Method for Resolving Complex Dilemmas". Thanks again, Nancy, for helping out with NJAIHA's annual PDCs.

NJAIHA Fall Professional Development Courses (PDCs) - November 30, 2017 (continued)



The instructor for morning Course #2, "Value Strategy: Making the Business Case" was <u>Bernard Silverstein</u>, CIH, FAIHA, President, TVS Associates, LLC. Here, Bernie is shown describing Step 1 of the AIHA Value Strategy to a full house of EHS professionals.



Martha Polovich, PhD, RN, AOCN, Assistant Professor, Georgia State University, fields questions from attendees during her afternoon Course #3 presentation, "Hazardous Drug Safety Act & USP <800> - Impact in Hospitals, Healthcare, Compounding and Manufacture".

NJAIHA Fall Professional Development Courses (PDCs) - November 30, 2017 (continued)





The second afternoon Course #3 instructor was <u>Bernard Fontaine, Jr.</u> CIH, CSP, FAIHA, Managing Partner, The Windsor Consulting Group, Inc. Here, Bernie, also PDCs Coordinator, begins his presentation, "*NJ Hazardous Drug Safe Handling Act*". Bernie reviewed the Act signed into NJ state law on May, 11, 2017.

<u>Michael Berg</u>, PhD, Regional Director, EMLab P&K, concluded afternoon Course #3 with his presentation, "USP <797> and Environmental Sampling".



Instructor <u>Bob Vigdor</u>, Regional Vice President, Premier Safety & Service, Inc., is shown here demonstrating gas detection instrumentation to attendees during afternoon Course #4, "Overview of Common Gas Detection Technology". It was nice to see a great turnout of EHS professionals for Course #4.

November 2017 NJAIHA Dinner Meeting - 11/16/17 at Snuffy's

Joint Meeting with Mid-Atlantic Biological Safety Association (MABSA)

(Photos Courtesy of NJAIHA President-Elect Doug Glorie. Thanks, Doug!)



Before-dinner speaker <u>Dr. Iris Udasin</u>, MD, Professor, Medical Director EOHSI Clinical Center, Rutgers University-School of Public Health, reviews the learning objectives for her presentation, "Health Effects of World Trade Center Exposure".



Craig Doolittle, NJAIHA President, presents Dr. Udasin with a token of appreciation from NJAIHA and thanks her for taking time out of her schedule to share important information on this topic with us.



Martha Figueroa, MABSA President-Elect, addresses attendees and introduces after-dinner speaker, <u>Brendan McCluskey</u>.



After-dinner speaker, <u>Brendan McCluskey</u>, Director, Emergency Preparedness and Operations, New Jersey Department of Health, makes a point during his presentation, "Public Health Emergencies: Threats and Responses".

The 71st annual Northeast Industrial Hygiene Conference and Exposition, held on December 1, 2017, was coordinated and presented by the Metropolitan New York AIHA Local Section, with co-sponsorship from the New Jersey and Philadelphia AIHA Local Sections. A gallery of photos from the event will be posted on the <u>NJAIHA website</u>.

Perspectives on Opioid Epidemic Affecting the Health and Safety of Worker and Jobs in America

Prepared by: Bernard L. Fontaine, Jr., CIH, CSP, FAIHA

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For many Americans, it was the prescription of a well-meaning physician that sent them down the dark road. Aggressive marketing and over-prescribing of painkillers touched off a scourge of opiate addiction and Congress, pushed by the destruction it had wrought, introduced a new law to reform painkiller prescribing.

It was 1915 and Congress was considering what would become the first law to criminalize drug use, the Harrison Narcotic Act. By this time, addiction had already touched middle-class housewives, immigrants, veterans and even physicians hoping to soothe their aches and pains. Between the 1870s and 1880s, America's per capita consumption of opiates had tripled. Now more than a century later, Americans are fighting some of the same demons.

While opioids are most often prescribed to manage pain they also affect the central nervous system. People respond differently to these drugs but they can cause drowsiness, poor memory and confusion, decreased higher cognitive functioning, and impairment of neuromuscular coordination. The effects of opioids are increased when used in combination with alcohol or other psychiatric medication. Abuse of opioids, even with a single large dose, can cause severe respiratory depression, which could be fatal.

Clearly the above-mentioned side effects could lead to altered judgement as well as slower movement and reaction time in the workplace. Based on current research evidence, the American College of Occupational and Environmental Medicine recently issued practice guidelines that persons who are on opioids for an acute or chronic condition should not perform safety-sensitive work in order to prevent potential accidents and injuries to themselves, coworkers, and the public.

Many critics agree the current opioid epidemic has crippled many communities across the United States, spurred a public health crisis, and is responsible for nearly 100 overdose deaths each day. Opioid abuse is also hurting America's job market and the prospect for employers to achieve sustainable productivity and profitability.

The use of opioids has become a key factor in why "prime age" workers, mostly men, are unable or unwilling to find work, according to a recent report by Goldman Sachs (GS). Also, there is a declining share of adult Americans who are either working or looking for work, according to Labor Department data. The trend has been a persistent weak spot for American jobs.

A shrinking labor force -- compared to the overall adult population -- tends to hold back growth for the economy and wages, both of which have grown anemically in recent years. The labor market participation rate for American men between the ages of 25 and 54 has fallen 10% since its peak in 1954. It currently stands at 88.4%, slightly higher than an all-time low of 87.9% in 2014.

At the moment, 57% of employers say they perform drug tests, according to the National Safety Council. Out of those, more than 40% don't screen for synthetic opioids like oxycodone -- among the most widely abused narcotics, and one of the substances that new federal rules are targeting.

Starting in October 2017, many federal government employees who take drug tests will have to submit to a more extensive screening -- one response to a spiraling crisis. Opioids killed about 33,000 Americans in 2015, more than any other year on record. Private companies aren't obliged to follow Washington's lead, but in such areas, they often do because it makes business sense.

With the estimated yearly economic impact of \$193 billion for illicit drug use, employers must have strong policies in place to address drug abuse while ensuring they comply with legal requirements. In addition, educating workers and treating substance abuse problems as a disease is crucial to a positive work environment.

There are five key components to an effective substance abuse program: written policy, effective and accurate drug testing, employee education, supervisor training and an employee assistance program. A strong written policy should come with a clear, written verbiage on expectations and behaviors that violate the policy, what substances are included in testing and the consequences of abuse.

In addition to opioid abuse, factors such as technology, an aging population and globalization, have also contributed to the declining participation of working age adults in the labor market. But the ballooning use of opioids -- whether as a prescription drug or heroin -- is preventing many workers from coming back into the job market, economists argue.

About 1.8 million workers were out of the labor force for "other" reasons at the beginning of this year, meaning they were not retired, in school, disabled or taking care of a loved one, according to Atlanta Federal Reserve data. Of those people, nearly half -- roughly 881,000 workers -- said in a survey that they had taken an opioid the day before, according to a study published last year by former White House economist Alan Krueger.

The concern is that technology and globalization, which have led to the elimination of jobs for millions of low-skill workers, is creating a snowball effect of unemployment. Workers turn to drugs and then find themselves unemployable, or unable to maintain work, because of their substance abuse.

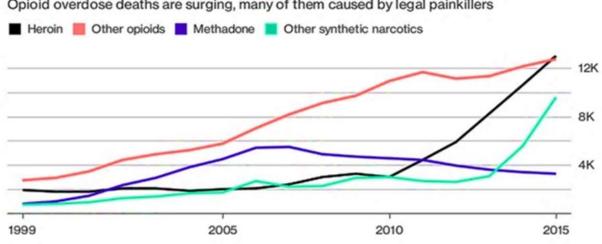
Rising deaths due to opioid overdoses among middle-age Americans may be a result of "a long-term process of decline ... rooted in the steady deterioration in well paid job opportunities for people with low education," Princeton economists Anne Case and Angus Deaton reported in another published study.

Even for unemployed Americans actively looking for a job, opioid use has become a barrier. The Federal Reserve found in its survey of businesses (May 2017) that employers were having a tough

time filling low-skill positions. One reason: the applicants didn't have the minimum job skills but more important; they couldn't pass a drug test.

Hiring is becoming tougher in any case. While the economy has steadily added jobs in last several years, the available pool of skilled workers hasn't expanded to match. The share of working-age Americans in the labor market is stuck at about 63 percent, down more than four percentage points since 2000 -- the same period in which the opioid epidemic took off. In short, there's an extreme shortage of skilled workers who are not affected by prescription or illegal drugs.

A National Safety Council survey found that 29 percent of employers reported workers with impaired job performance due to prescription-painkiller use, while 15 percent cited an injury or near miss that they attributed to the drugs. As many as 70 percent said their workforce had been affected in some way. In some cases, the growing drug problem puts employers in the position of having to fire employees who'd been doing their jobs perfectly well. The problem is not limited to either white-collar or blue-collar jobs.



A Lethal Record

Opioid overdose deaths are surging, many of them caused by legal painkillers

Source: Centers for Disease Control and Prevention. Categories are not mutually exclusive as some deaths occur from multiple drugs.

As awareness grows, prescription of such painkillers has been leveling off, and deaths from prescription drugs have stabilized. But in some cases, users are switching to more addictive drugs like heroin or illegal synthetics - fentanyl. Not only are those drugs more dangerous, they can also be difficult to catch. Heroin metabolizes very quickly. Fentanyl isn't usually one of the chemical substances routinely screened for in industry.

Bloomberg

A recent report provided some startling information on the opioid crisis in the American workforce. According to American Society Addiction Medicine (ASAM), opioid abuse costs employers approximately \$10B from absenteeism and presenteeism alone. Despite the breadth and seriousness of this crisis, America's employers lack a true understanding of how it impacts individuals in the workforce and their families. Castlight Health conducted research on opioid abuse based on aggregated reporting from medical and pharmacy based claims. These findings are inclusive of de-

identified and anonymous health data reporting covering nearly 1 million Americans who use their health benefits platform, a subset of a broader user population. The study leveraged medical and pharmacy reporting over the five-year period from 2011-2015 to provide employers with a more accurate picture of opioid painkiller abuse in the workplace.

In summary, this is what they found:

- (1) One out of every three (32%) opioid prescriptions are being abused. Moreover, 4.5% of individuals who have received an opioid prescription are opioid abusers, accounting for 32% of total opioid prescriptions and 40% of opioid prescription spending. This finding indicates that a disproportionate percentage of prescriptions for opioids are being prescribed to patients who abuse these medications. Furthermore, the evidence illustrates that a relatively small number of individuals account for a large share of spending on opioid prescriptions
- (2) Opioid abusers cost employers nearly twice as much (\$19,450) in healthcare expenses on average annually as non-abusers (\$10,853). Individuals who abused opioids had total 2015 medical costs that were, on average, \$8,597 higher than those who did not. Based on their estimate, opioid abuse could be costing employers as much as \$8B per year. Considering that absenteeism and presenteeism tied to opioid misuse and abuse is costing employers an additional estimated \$10B, this crisis represents a significant drain on America's employers
- (3) Baby boomers are four times more likely to abuse opioids than Millennials. The study reported 7.4% of Baby Boomers (aged 50 and over) with an opioid prescription were classified as opioid abusers whereas only 2.0% of Millennials (aged 20 to 34) with an opioid prescription were classified as opioid abusers.
- (4) States with medical marijuana laws have a lower opioid abuse rate than those that don't. The study reported that 5.4% of individuals with an opioid prescription who live in states prohibiting medical marijuana were opioid abusers. In contrast, 2.8% of individuals with an opioid prescription who live in states permitting medical marijuana were opioid abusers.
- (5) Patients with a behavioral health diagnosis of any kind are three times more likely to abuse opioids than those without one. About 8.6% of individuals with at least one behavioral health diagnosis, such as anxiety or depression, abused opioids compared to 3.0% of individuals without a behavioral health diagnosis. This finding is striking given the prevalence of behavioral health issues in the workforce. Nearly 25% of employees have a diagnosable behavioral health condition; yet, 70% of impacted employees go untreated.
- (6) Opioid abusers have twice as many pain related conditions as non-abusers. Opioid abusers have 3.99 pain-related co-morbidities on average versus 1.78 co-morbidities for non-abusers. The three pain-related conditions most associated with opioid abuse are joint, neck, and abdominal pain. Individuals diagnosed with joint, neck, or abdominal pain-related conditions are more likely to abuse opioids, compared to other pain related diagnoses, such as pelvic, dental/jaw, or non-fracture injury pain. Notably, back pain ranks fourth among these pain-related conditions, right below abdominal pain.
- (7) Individuals living in America's lowest income areas are twice as likely to abuse opioids as those living in the highest income areas. An estimated 6.3% of individuals with an opioid prescription living in the lowest income areas (with an average per capita income of \$40,000 or less) abused opioids, compared to 2.7% of individuals with an opioid prescription living in the

highest income areas (with an average per capita income of \$85,000 or higher). Analysis was based on U.S. Census income data by zip code, and

(8) Opioid abusers are more likely to live in the rural South than in other regions of the country. Opioid abuse rates range from 11.6% of individuals in Wilmington, NC to 7.5% of individuals in Fort Smith, AR who received an opioid prescription. Alabama, Florida, North Carolina, Oklahoma, Tennessee, and Texas have multiple cities that are in the top 25 for opioid abuse rate. The three non-Southern cities in the top 25 are: Terre Haute, IN; Elmira, NY; and Jackson, MI.

Michael Abcarian suggests four important lessons for employers. First, create an atmosphere where employees feel comfortable disclosing opioid-related issues. Encourage employees to tell their supervisor or manager if they have a problem or suspect that another employee may have an issue with prescription painkillers. If employer becomes aware of possible opioid abuse in the workplace, attempt to approach the employee in a cordial, non-confrontational manner and offer help and support. Make sure to pay special attention to employees returning to work following injury.

Secondly, reexamine zero-tolerance drug testing failure policies. An employee who loses a job because of a failed drug test may descend further into the depression that intensifies opioid use and abuse, leading to more drastic outcomes for the employee, including intentional or accidental overdose. To reduce the likelihood of such tragedies, revisit your zero-tolerance drug testing policy. Many employers recently modified their drug testing policies as a result of a new rule by the Occupational Safety and Health Administration (OSHA). Effective December 1, 2016, OSHA took the position that employers should perform compulsory drug tests after workplace accidents only when there is a reasonable basis to believe the incident or injury was caused by substance impairment and when the drug test will likely determine whether the employee was impaired at the time of the incident or injury (versus a test that shows mere historical drug use)

Third, consider heightened monitoring of workers' compensation claims. Many workers' compensation carriers (and even employers) seek to minimize the potential impact of injury and illness claims by finding the most inexpensive treatment option available. Indeed, under the guise of "conservative" treatment, insurance carriers might be inclined to pay for opioid prescriptions rather than more aggressive treatment options such as steroid injections or surgery.

Finally, reevaluate and enhance drug counseling programs. Questions to address include whether your insurance provider offers substance abuse counseling to employees, whether there are extra costs for this service, and whether your employees are really aware of this important benefit. Providing employees with meaningful counseling about opioid use and addiction may prevent further abuse, and it may save someone's life.

While there is no perfect approach or plan, working with legal counsel to take proactive steps and avoid risks to your employees is a good place to start. The opioid crisis has touched every community across America and has a devastating impact on families, neighborhoods, and the workforce at large. While policymakers, public health officials, healthcare industry, and many other stakeholders are engaged on this critical issue, occupational health professionals should be aware of the potential for chronic opioid use among workers to assess job safety and appropriate treatment of work-related injuries. Employers can also help address this crisis by harnessing the power of big data and analytics to better understand their employees' needs as they relate to opioid use and abuse, and guide them to the right care at the right time. With all stakeholders working together, Americans can get back work and employers can improve their metrics on human performance, productivity, profitability, and prosperity.