What is Occupational Medicine?

Occupational medicine is all about keeping workers healthy and workplaces safe. While much can be done to ensure safe working conditions, there is no complete protection against work-related injuries and illnesses. Employees injured during the course of employment, or who suffer from work-related illnesses or diseases, require specialized care and may be eligible for workers' compensation benefits. These include medical and hospital services, medically necessary equipment and prescribed drugs, partial wage replacement, and rehabilitation services.

The physicians and health specialists at the Mount Sinai Selikoff Centers for Occupational Health are experts in diagnosing and treating occupational injuries and diseases, determining the ability of an employee to perform work, and evaluating the physical, chemical, biological, and social environments of the workplace and their effects on health outcomes. Our medical team also works with employers to assess and reduce risk factors in work environments and to establish comprehensive health and safety programs designed to encourage a safe, healthful, and productive workplace.

What are occupational injuries and illnesses?
Musculoskeletal injuries are common occupational health issues and can be caused by trauma, repetitive motions, and overuse. Cuts and lacerations, injuries to the eyes, and hearing loss are also common. The construction industry has a high incident rate of injuries caused by falls or being struck by an object or equipment. Individuals in the hospitality and food service sectors share a similar risk profile, working in fast-paced, repetitive, physically demanding jobs that can also involve chemical exposure.

Some jobs are at a higher risk of exposure to infectious diseases. Health care workers, simply by the nature of their jobs, are routinely exposed to sick individuals and at risk of exposure to bloodborne pathogens such as the human immunodeficiency virus (HIV), hepatitis B virus, and hepatitis C virus.

Repeated or extended exposure to toxic substances can lead to a variety of occupational lung diseases. Occupational asthma is the most common form. While occupational lung disease is commonly associated with coal miners, workers across industries are at risk if they are exposed to hazardous chemicals and materials, cleaning agents, dusts, fibers, or air pollutions.

Cancer is a leading cause of death worldwide. The U.S. Center for Disease Control estimates that each year millions of U.S. workers are exposed to carcinogens, or cancer-causing substances. Examples of carcinogens found in the workplace are arsenic, asbestos, cadmium, chromium, nickel compounds, radon, and silica. It has been estimated that up to 10% of U.S. cancers are caused by occupational exposures.

An individual's risk of developing a cancer is influenced by a combination of personal factors and levels of exposure. For example, individuals working with paints, adhesives, pesticides, and cleaning solvents may be working with hazardous chemicals. Individuals at construction and building demolition sites may risk exposure to asbestos. Employers are required to train employees in the safe handling of hazardous materials and provide appropriate personal protective equipment.

Continued on page 5
Meet the Selikoff Team

The Selikoff Centers for Occupational Health are recognized internationally as leaders in the field of occupational medicine. Our doctors offer cutting-edge and patient-centered prevention and treatment services directly to workers as well as through unions and employers. With a focus on prevention, we strive to keep workers healthy and their workplaces safe. Our three clinical centers are located in Manhattan, Staten Island, and Yonkers, NY.

Stephanie Barnhart, MD, MPH
Assistant Professor
Department of Preventive Medicine
Specialties: Occupational Medicine, General Preventive Medicine

Laura A. Bienenfeld, MD
Assistant Professor
Departments of Preventive Medicine, Medicine, General Internal Medicine
Specialties: Occupational Medicine, Internal Medicine, General Preventive Medicine

Diana Cherezova, MD
Assistant Professor
Department of Preventive Medicine
Specialties: Occupational Medicine, Internal Medicine

Michael A. Crane, MD, MPH
Assistant Professor
Department of Preventive Medicine
Medical Director
World Trade Center
Clinical Center of Excellence
Specialty: Occupational Medicine

Clinical Occupational and Environmental Medicine
Provide evidence-based clinical evaluation and treatment for injuries and illnesses that are occupationally or environmentally related.

OEM Related Law and Regulations
Knowledge of the laws and regulations essential to workers’ compensation, accommodation of disabilities, public health, worker safety, and environmental health and safety.

Environmental Health
Recognize potential environmental causes (air, water, or ground contamination by natural or artificial pollutants) and the health effects of the physical and social environment (housing, urban development, land-use and transportation, industry, and agriculture).

Work Fitness and Disability
Determine if a worker can safely be at work and complete required job tasks and provide guidance to the employee and employer on disability accommodation.

Toxicology
Recognize, evaluate, and treat exposures to toxins at work or in the general environment.

Hazard Recognition, Evaluation, and Control
Assess risk of an adverse event from exposure to physical, biological, chemical, ergonomic, and psychological hazards in the workplace or environment.

Disaster Preparedness and Emergency Management
Collaborate with employers to plan for mitigation of, response to, and recovery from disasters at worksites, as well as for the community at large. Emergency management includes resource mobilization, risk communication, and collaboration with local, state, or federal agencies.

Health and Productivity
Identify and address individual and organizational factors, such as absenteeism and population health management in the workplace in order to optimize the health of the worker and enhance productivity.

Public Health, Surveillance, and Disease Prevention
Develop, evaluate, and manage medical surveillance programs for the workplace, as well as the general public.

OEM Related Management and Administration
Design, implement, and evaluate comprehensive occupational and environmental health programs and projects.

Delivering occupational health in the context of integrated primary health care is essential to maintaining and restoring the working capacity of patients. If you would like to discuss a case, or refer your patient, our team of doctors, mental health providers, social workers, industrial hygienists, and ergonomists can advise on occupational medicine matters. The 10 core competencies in occupational and environmental medicine outlined by the American College of Occupational and Environmental Medicine (ACOEM) are:
### Meet the Selikoff Team

#### Mount Sinai Selikoff Centers for Occupational Health

**Hours of Operation:** Monday-Friday 9 a.m. - 5 p.m.

**Manhattan Clinical Center**
1468 Madison Avenue, 3rd Floor, New York, NY 10029

**Staten Island Clinical Center**
690 Castleton Avenue, 2nd Floor, Staten Island, NY 10310

**Hudson Valley Clinical Center**
1020 Warburton Avenue, Yonkers, NY 10701

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department(s)</th>
<th>Specialties</th>
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<tbody>
<tr>
<td><strong>Roberto Lucchini, MD</strong></td>
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<td><strong>Madelynn Azar-Cavanagh, MD, MPH</strong></td>
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<td>Department of Preventive Medicine, Selikoff Centers for Occupational Health</td>
<td>Occupational Medicine, Employee Health, Safety and Wellness</td>
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*Not pictured: Rafael E. de la Hoz, MD, MSc, MPH, Associate Professor*  
Departments of Preventive Medicine, Medicine, General Internal Medicine

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[www.mountsinai.org/selikoff](http://www.mountsinai.org/selikoff)
International Collaboration

USA-Italy Researchers Share Best Practices

On June 2, Italy’s national holiday known as the Festa della Repubblica, the Honorable Beatrice Lorenzin, the Italian Minister of Health, met with Icahn School of Medicine faculty and students to promote the international exchange of ideas across medical disciplines. Philip J. Landrigan, MD, MSc, Dean for Global Health and Chairman of the Department of Preventive Medicine, and Roberto Lucchini, MD, Director of the Division of Occupational and Environmental Medicine, led a tour of Mount Sinai. Dr. Landrigan and Dr. Lucchini have long been leaders in encouraging international collaboration to advance the study of occupational and environmental medicine. Both are members, and Dr. Landrigan currently is chairman of the Collegium Ramazzini, an independent, international academy based in Italy dedicated to advancing the study of occupational and environmental health issues. The Icahn School of Medicine at Mount Sinai and Italy’s University of Brescia signed a Memorandum of Understanding in 2012 to facilitate international, scientific collaboration with special emphasis on the prevention of acute and chronic diseases.

While every disaster presents unique challenges, the key to protecting the safety and health of response and cleanup workers is to develop a pre-disaster strategy that involves training response and cleanup workers on the hazards of specific tasks (such as managing safety around downed power lines, remediation of mold-contaminated building materials, and debris removal) and providing them the necessary personal protective equipment.

Other speakers included Richard Mendelson, MS, Occupational Safety and Health Administration; William Haskell, MS, National Personal Protective Technology Laboratory, NIOSH; Christopher D’Andrea, MS, CIH, New York City Department of Health and Mental Hygiene; Roy J. Rando, ScD, CIH, Tulane University School of Public Health and Tropical Medicine; Matthew Perzanowski, PhD, Columbia University Mailman School of Public Health; William Sothern, MS, CIH, Microecologies, Inc.; Steven Markowitz, MD, DrPH, Queens College, City University of New York; Diego Palaguachi, Make the Road; and Lisa Orloff, World Cares Center.

The NYNJERC is a regional consortium of institutions offering graduate and continuing education in occupational medicine, occupational safety, industrial hygiene, ergonomics, and occupational health nursing. Participating institutions are the Icahn School of Medicine at Mount Sinai, Hunter College, the New Jersey Institute of Technology, New York University, and Rutgers University.
Heat-related illnesses can be deadly. Thousands become sick every year and many die due to preventable heat-related illnesses. With summer temperatures rising, now is the best time to prepare for working outdoors in excessive heat. The U.S. Department of Labor’s Occupational Safety and Health Administration (OSHA) has launched its annual Campaign to Prevent Heat Illness in Outdoor Workers. The campaign aims to raise awareness and educate workers and employers about the dangers of working in hot weather and provide guidance to address these hazards.

HEAT-RELATED ILLNESS: KNOW THE SIGNS

It’s important to know the signs of heat-related illness—acting quickly can prevent more serious medical conditions and may even save lives.

- Heat stroke is the most serious heat-related illness and requires immediate medical attention. Symptoms may include: confusion, fainting, seizures, very high body temperature, hot, dry skin, or profuse sweating. CALL 911 if a coworker shows signs of heat stroke.
- Heat exhaustion is also serious. Symptoms may include: headache, nausea, dizziness, weakness, thirst, and heavy sweating. Heat fatigue and heat rash are less serious, but they still are signs of too much heat exposure.

If you or a coworker has symptoms of heat-related illness, tell your supervisor right away. If you can, move the person to a shaded area, loosen his/her clothing, give him/her water (a little at a time), and cool him/her down with ice packs or cool water.

TO PREVENT HEAT ILLNESS:

WATER.REST.SHADE.

- Drink water frequently, even if you are not thirsty.
- Rest in the shade to cool down.
- Wear a hat and light-colored clothing.
- Learn the signs of heat-related illness and what to do in an emergency.
- Keep an eye on fellow workers.
- Acclimate – “easy does it” on your first days of work; be sure to get used to the heat and allow yourself to build up a tolerance. Not being used to the heat is a big problem. Many of the people who died from heat stress were either new to working in the heat or returning from a break. If a worker has not worked in hot weather for a week or more, their body needs time to adjust.

For more resources and to download an app to your phone to calculate the heat index and get recommendations based on your risk level, visit www.osha.gov/heat.

What is Occupational Medicine?

Continued from front page

A lot of jobs are stressful. Stress can lead to anxiety, depression, or post-traumatic stress disorder (PTSD). High-intensity jobs that require extended or unusual work shifts, such as in law enforcement, can lead to fatigue, stress, and depression that should be treated by mental health professionals. Nearly 2 million Americans each year report that they are victims of violence in the workplace. Particularly vulnerable are individuals who exchange money with the public such as store clerks and cashiers, delivery drivers, protective service officers, and individuals who work alone or in small groups. Threat assessment teams can help employers to identify risk factors and implement violence prevention strategies.

Why seek an occupational medicine physician?

Physicians at the Mount Sinai Selikoff Centers for Occupational Health are experts in the prevention, diagnosis, and treatment of work-related injuries and illnesses. Selikoff Centers’ industrial hygienists use environmental monitoring and analytical methods to detect the extent of worker exposure to potential health hazards. Social workers and benefit counselors assist patients to understand their rights and responsibilities and to adhere to notification requirements with their employers and the New York State Workers’ Compensation Board.

I was hurt on the job, what do I do now?

- For medical emergencies, seek treatment at the nearest emergency room or urgent care facility.
- Notify your employer in writing as soon as possible to document your injury.
- Make an appointment at the Selikoff Centers for Occupational Health by calling 888-702-0630.
- File a C-3 Form with the New York State Workers’ Compensation Board. The Selikoff Centers can help with this process.
- Not all workers will qualify for workers’ compensation. We can help you understand your rights and benefits.
Effective February 18, 2014, four specific cancers — malignant neoplasms of the brain, cervix uteri (invasive cervical cancer), pancreas, and testis — are newly eligible for certification as WTC-related health conditions. These four cancers are considered covered under the “rare cancer” category and are not specifically named on the List of WTC-Related Health Conditions. The full list of covered cancers can be accessed on the WTC Health Program’s website at www.cdc.gov/wtc/coveredcancers.html.

The Selikoff Centers for Occupational Health encourage all WTC Responders to report any and all conditions to their health care providers. For further information, visit www.cdc.gov/wtc or speak with the medical staff at the Selikoff Centers for Occupational Health, Clinical Centers of Excellence of the WTC Health Program.

September 11th Victim Compensation Fund (VCF)
The September 11th Victim Compensation Fund provides compensation for economic and non-economic loss to individuals or relatives of deceased individuals who were killed or physically injured as a result of 9/11. The initial Fund operated until 2004 and was reopened in 2011 with the passage of the James Zadroga 9/11 Health and Compensation Act of 2010.

The Selikoff Centers for Occupational Health encourage all WTC Responders to become familiar with the VCF to determine eligibility and learn about important filing deadlines (see upcoming filing deadline at left). For more information, visit www.vcf.gov or call 1.855.885.1555.

UPCOMING VCF FILING DEADLINE
OCTOBER 12, 2014:
Deadline for registering with the VCF if claimant is diagnosed on or before October 12, 2012, with certain cancers on the list of qualified WTC-related health conditions. The full list of VCF registration deadlines is available at www.vcf.gov/pdf/RegisterChart.pdf.

WTC Health Program—Clinical Center of Excellence at Mount Sinai
www.facebook.com/MountSinaiWTC
Asbestos Exposure Research

Asbestos continues to be an occupational and environmental hazard of catastrophic proportion. The World Health Organization estimates that globally more than 125 million people are exposed annually to asbestos in the workplace. Asbestos-related deaths and illnesses, including lung cancer, mesothelioma, and asbestosis, are entirely preventable, making them all the more tragic.

The Mount Sinai Selikoff Centers for Occupational Health, in collaboration with the newly-created Mount Sinai-National Jewish Health Respiratory Institute, hosted a workshop on April 3 during National Asbestos Awareness Week that brought together international occupational and environmental health experts.

Roberto Lucchini, MD, welcomed participants. He said, “Dr. Irving J. Selikoff, for which the Selikoff Centers are named, discovered the linkages between occupational disease and asbestos exposure. Today, we continue to build on his efforts and are delighted to join the international scientific community in its call for a ban on asbestos globally.”

There is overwhelming scientific evidence that there is no safe level of asbestos exposure. Clinical and epidemiologic studies in the 1970s, many of them initiated at Mount Sinai by Dr. Selikoff, established that asbestos is a human carcinogen. Asbestos encompasses six highly durable fibrous minerals that have been used in construction materials and manufactured products, including insulation, fireproofing materials, automotive brakes, and textile products.

Although its use in the United States has decreased in recent years, there is no general ban on the toxic substance. Asbestos continues to pose a health risk, especially for workers in the construction industry and for individuals exposed during the manufacturing or handling of asbestos-containing products.

The occupational and environmental health specialists at the Selikoff Centers conduct regular medical screenings for groups of workers that may have been exposed to asbestos and can assess potential hazards at worksites. Any individual concerned that they may have been exposed to asbestos at their workplace are encouraged to seek a confidential medical examination at one of the Selikoff Centers for Occupational Health.

Materials that May Contain Asbestos

Asbestos-containing material is defined as any material containing more than 1% asbestos.

Examples of materials that may contain asbestos:

- Attic, wall, and pipe insulation
- Fireproofing panels
- Vinyl floor tile
- Roofing and siding shingles
- Asbestos paper, millboard, and cement sheets
- Hot water and steam pipes
- Oil and coal furnaces
- Heat-resistant fabrics
- Automobile clutches, brakes, and transmission parts
- Coatings for walls, ceilings, and beams
Community Engagement

The Mount Sinai Selikoff Centers for Occupational Health are committed to building community awareness about occupational health issues and promoting safe and healthy practices in the workplace. Physicians, industrial hygienists, ergonomists and other occupational medicine specialists also can lead trainings on a variety of workplace health and safety topics. Outreach team members visit hundreds of community organizations, labor unions, and employers each year to bring quality education programs to the communities serviced by the Manhattan, Staten Island, and Yonkers clinical centers.

To arrange for an outreach team visit, email us at: selikoffoutreach@mssm.edu or call us at 888.702.0630.

Outreach staff member Jeannie Kelly meets with members of the Detectives’ Endowment Association during its annual summer picnic, June 2014.