Figure 1: Timeline of events that shaped Occupational Health & Safety – for additional information see Appendix A

- 470-410 BC: Hippocrates
- 1494-1555 AD: Georgius Agricola
- 1540 AD: "Law of Deodand"
- 1633-1714 AD: Bernardino Ramazzini
- 1713-1788 AD: Percival Pott
- 1789-1788 AD: Alice Hamilton
- 1895 AD: Ada Mayo Stewart
- 1911 AD: Worker Compensation Legislation
- 1970 AD: Occupational Health and Safety Act
- 2013 AD: Approx. 22,000 Nurses Employed in Industry
In general, the term – occupational health – refers to caring for and protecting the workforce you serve. This broad definition integrates traditional occupational safety and health protection efforts with health promotion and other workplace activities to prevent illness and injury, regardless of cause, so that all workers have opportunities to achieve optimal levels of health and well-being.

The occupational health nursing field has a long history but started an evolutionary change in the 1970’s when the United States Congress passed the Occupational Safety and Health Act of 1970 (OSH Act). The law requires employers to provide their employees with working conditions that are free of known hazards. The Act created the Occupational Safety and Health Administration (OSHA), which sets and enforces protective workplace safety and health standards.

After passage of the OSH Act, the scope of the field significantly changed as new and improved local, state and federal regulations passed which protect both the employee and the employer.


Occupational health and protecting the workforce are an important part of these costs.

Changes in the median age of the workforce, changes in laws and regulations and changes in health costs all have a great impact on the bottom-line decisions of executives.

Occupational health initiatives can be found in a multitude of environments and industries. Businesses from mining and construction to finance and real estate all have an occupational health element. Integrating workplace wellness and occupational health and safety supports a holistic approach to health.

The occupational health professional can be the guiding force to keep workers healthy, maintain company compliance with regulations, curb medical costs and assess the environmental factors that affect the workplace and the community which it serves.

Whether your goal is to work for a Fortune 100 company or use your skills as a consultant, the occupational health industry offers a range of opportunities. The information found on the next few pages will explain the occupational health nursing (OHN) profession and what is needed to become a competent, capable voice for worker health in the 21st century.
OSHA classifies Occupational Health Nurses (OHNs) “as registered nurses who independently observe and assess the worker’s health status with respect to job tasks and hazards. Using their specialized experience and education, these registered nurses recognize and prevent health effects from hazardous exposures and treat workers’ injuries and illnesses.”

(http://www.osha.gov/dts/oohn/ohn.html)

Many industries and work environments require occupational health initiatives. Nurses that care for the worker population in hospital settings are usually known as Employee Health Nurses. This title is interchangeable with the Occupational Health Nurse.

The American Association of Occupational Health Nurses (AAOHN), the professional society devoted to occupational health nursing practice, further defines occupational health nursing as follows: “Occupational and specialty practice that provides for and delivers health and safety programs and services to workers, worker populations and community groups. The practice focuses on promotion and restoration of health, prevention of illness and injury, and protection from work-related and environmental hazards. Occupational and environmental health nurses (OHNs) have a combined knowledge of healthcare and business expertise to balance the requirement for a safe environment with a “healthy” bottom line. (http://www.aaohn.org/about-us/aaohn-vision-and-mission/aaohn-fact-sheet.html)

A state license as a registered nurse (RN) assumes competency in general nursing practice. The occupational health nursing designation constitutes a broader understanding in the specialty of worker care.

Table 1 (next page) lists nine categories of competencies which AAOHN defines as required for effective occupational health nursing practice:
AAOHN has adopted Dr. Patricia Benner’s (R.N., Ph.D., FAAN) stages of clinical competency for an occupational health nurse. The information listed above is for the most basic level, or *Competent* occupational health nurse. The other levels, *Proficient* and *Expert*, have additional scopes of responsibility, education and years in practice. The American Board for Occupational Health Nurses (ABOHN) certifies occupational health nurses at the **proficient level of practice**, using Dr. Benner’s framework, which was published in 1984, for addressing nurses at various stages of professional growth.

<table>
<thead>
<tr>
<th>Clinical Practice</th>
<th>Work Force, Workplace, and the Environment</th>
<th>Health and Safety Education and Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document the nursing process in care management via assessment, diagnoses and treatments consistent with appropriate standards and laws.</td>
<td>Coordinate client health screening and surveillance programs and services and monitor the work environment to protect the health and safety of workers.</td>
<td>Implement occupational and environmental health and safety education and training.</td>
</tr>
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<tr>
<th>Case Management</th>
<th>Management, Business and Leadership</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify the need for case management intervention and be able to conduct a thorough and objective assessment of the client’s current status and case management needs.</td>
<td>Responsible for coordinating cost-effective occupational health services and programs and continuous monitoring for the best quality, most cost effective vendor products and services.</td>
<td>Identify and share resources and applications that help support relevant evidence-based practices.</td>
</tr>
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<tr>
<th>Regulator/Legislative</th>
<th>Health Promotion and Disease Prevention</th>
<th>Professionalism</th>
</tr>
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<tbody>
<tr>
<td>Bring awareness of current legislative activities that may impact nursing practices, workers, workplaces and the environment.</td>
<td>Assess the health needs of workers and worker populations.</td>
<td>Maintain scientific, regulatory and business knowledge appropriate to the nursing profession.</td>
</tr>
</tbody>
</table>

Table 1: Retrieved from www.aaohn.org
The Occupational Health Nursing industry has been cultivated in the United States since the 1890’s. Ada Mayo Stewart, one of the first known occupational health nurse in the U.S., was employed by the Vermont Marble Company in 1895. Her job as clinician was to provide the care for work related injuries. Her practice also included health education for the employees and their families. Ms. Stewart was probably the first Case Manager as we know it today.

Nowadays, occupational health nursing is a varied and specialized nursing practice in which occupational health nurses (OHNs) use their wide base of knowledge and skills to care for individuals in the workplace. No two practices are alike.

According to AAOHN, occupational health nurses collaborate with workers, employers, members of the occupational health and safety team, and other professionals to identify health and safety needs. The occupational health nurse is the center of coordinated care for individual employee needs and has the responsibility for delivering comprehensive and qualified service and programs that meet or exceed OSHA requirements and reduce medical benefits from a company’s bottom line. The major roles and responsibilities associated with occupational health nursing practice include:

**Clinician**
- Clinical and Primary Care

**Educator/Coordinator**
- Training
- Disease Prevention

**Manager/Advisor**
- Research
- Health Promotion

**Consultant**
- Workforce Issues
- Workplace Issues
- Environmental Issues

**Case Manager**
- Regulatory responsibilities
- Legislative management

Each role is used while performing basic occupational health activities. These workplace activities include health and wellness, case management, ergonomics, workplace safety, infection control, disaster preparedness and others such as travel health. Within these broad categories, a recent survey conducted by ABOHN (American Board for Occupational Health Nurses, Inc.) found that practicing occupational health nurses have recognized the following top ten tasks, shown in Table 2, associated with their practice:
Top Ten Tasks Reported by Currently Practicing Occupational Health Nurses

1. Evaluate the interactions between employees work and health in the workplace.

2. Assure confidentiality of personal health information and comply with established codes of ethics and legal or regulatory requirements.

3. Provide treatment of work related injuries or illnesses.


5. Use and maintain employee health recordkeeping system.

6. Manage workers’ compensation cases.

7. Assess employees with work restrictions or limitations and make appropriate job placement recommendations (i.e. fitness for duty).

8. Perform audiometry.

9. Implement policies and procedures for maintenance of confidentiality.

10. Conduct health surveillance of individuals/groups for specific hazards.

Table 2 – Information retrieved from ABOHN’s 2011 Practice Analysis and can be found at http://www.abohn.org/documents/ABOHN2011PracticeAnalysisReport.pdf

Since the 1970’s, local, state and federal governments passed regulations to protect both the employee and the employer and have increased the scope of occupational health and safety practices in every industry. Now, in the 21st century, occupational health care continues to change rapidly. Economic pressures, globalization, new products and services all affect business and therefore their workers. As the workplace evolves, so will the practice of occupational healthcare.

The field of occupational health nursing is exciting and diverse. It challenges the occupational health nurse to design programs for maintaining healthy, happy and productive employees, continued strengthening of the company’s adherence to OSHA regulations, and reducing medical and benefits costs to an employer’s bottom line.
Occupational health nurses can practice wherever there are employees. Employment opportunities may involve work in the field assisting workers directly or in a board room involving collaboration with other safety, health professionals and decision makers. Each individual area in occupational health has its own special characteristics.

To have a successful occupational health nursing practice, the RN’s would need to build on their clinical practice knowledge. Depending on the industry, this knowledge might incorporate chemical hazards, ergonomics, biological hazards, psychophysiological (stress), safety and industrial issues, standards and regulations, disease management, health education, records keeping, and business management concepts.

The information in Figure 3, based on ABOHN’s 2011 study of practice, shows where occupational health nurses work. Hospitals, medical centers and manufacturing plants are the most prevalent industries which employ occupational health nurses.

Under Manufacturing and Production, the occupational health nurses may work in challenging locations such as textile mills and oil refineries. Other workplace areas include food, apparel and concrete products. Occupational Health Nurses are also making a difference in agriculture, forestry, fisheries, mining, construction, transportation and aerospace industries.

Work in the Government sector may comprise research and writing rules and regulations for the occupational health field in the federal, state or local arenas, as well as working directly with military and support personnel.

The knowledgeable occupational health nurse can effectively reduce insurance related costs and recommend health plans that fit into a company’s budget by understanding the company’s industry and financial and insurance needs.
Occupational Health Nursing Pay

2013 AAOHN Salary Study

While the majority of occupational health nurses work in full time positions, some work in consulting or part time roles.

The complete AAOHN Salary 2013 Survey can be downloaded for free for AAOHN members or purchased by non-members at their website, aaohn.org under their marketplace tab.

The pay scale for the occupational health nursing field is broad. The most recent survey conducted by AAOHN, see Figure 4, reports that salaries for occupational health nurses ranged from $30,000 to $150,000 or more.

Pay rates directly correlate with years in position, region of the country, company size, exempt vs. non-exempt positions, education level, full-time vs. part-time employment and voluntary certification/credential holdings.

Per AAOHN, the estimated average salary is $82,070 and the estimated median salary is $75,000. The average starting salary is $67,023 with the median starting salary being $65,000. By comparison, the Bureau of Labor Statistics reports that the median pay for Registered Nurses is $64,690 per year. Nursing pay varies by specialty practice. Occupational health nursing pay on average is higher than average nursing pay for Registered Nurses.

Those occupational health nurses that go the extra mile and become certified by the American Board for Occupational Health Nurses, Inc. (ABOHN), typically earn more than non-credentialed occupational health nurses. Employers value those nurses that continue to grow within their chosen field.

The type of occupational health nursing certification impacts salary. Discussed in the AAOHN Salary 2013 Survey, occupational health nurses who hold a COHN-S/CM certification designation earn on average $88,392. This is significantly more than an occupational health nurse who holds the COHN certification designation in which the pay averages $76,228.
Health and wellness in the workplace is a hot topic which makes this field attractive for future growth. Figure 5 details the latest data from the Bureau of Labor Statistics. The field of occupational health nursing is considered a part of the mix in the category of occupational health and safety specialties which started increasing in 2010 and is expected to increase by nine percent (9%) by 2020.

Areas of impact, such as healthcare reform, will improve access to and the delivery of healthcare services for all individuals. Reform should also boost the demand for specialty practitioners.

Economic issues in the workplace, including rising insurance costs and worker compensation cases, create a need in the boardroom for qualified occupational health nurses who understand the healthcare market. Many corporations include wellness in the workplace as a program to help minimize their employees risks for illness or injury.

Opportunities for occupational health nursing include U.S. and foreign based corporations. Globalization has increased the public awareness of occupational health and safety concerns. U.S. companies must comply with federal OSHA standards, but operations outside the U.S. may also involve standards of other countries.

Occupational health clinics are sprouting up over the U.S. These clinics meet the needs of the small business community and require nurses who understand workplace health and safety issues of the businesses they serve.

Industries today look to sustainable business practices that drive new ways to solve problems. Known as the triple-bottom-line approach, this business discipline focuses on the 3P’s – people, planet and profit. Business sustainability recognizes that the health and well-being of employees and their environment creates a positive impact on a company’s bottom line.
RNs specializing in occupational health nursing practice have many opportunities to advance in responsibility. Some even serve at corporate executive levels. Figure 6 below shows the field’s most recognized titles in occupational health nursing which challenges the RN’s knowledge and can create inroads to a diverse and satisfying career.

Besides hands-on clinical responsibilities and/or designing and developing healthy work initiatives, the seasoned occupational health nurse may have opportunities to work with the governmental regulations offices and help to rewrite guidelines that affect employees in a myriad of industries.

**Occupational Health Nursing Job Titles**

- OHN/Clinician
- Manager
- OHN/Case Manager
- OH Services Coordinator
- Corporate Director
- Nurse Practitioner
- OHN/Safety & Environmental
- Consultant
- Educator
- Health Promotion Specialist
- Other

Figure 6: Retrieved from AAOHN 2013 Practice Compensation & Benefits Study pg. 63
Occupational health nurses (OHNs) hold many titles with vast duties depending on the industry sector and the number of employees for whom they are responsible. The titles and responsibilities listed below help explain the primary roles that occupational health nurses fill and the leadership qualities that an occupational health nurse needs to succeed.

**OHN Clinician** – a nurse qualified in the specialty practice of medicine within an occupational setting as distinguished from one specializing in laboratory or research techniques or in theory.

**OHN Manager** – the title for positions responsible for planning, organizing, directing, operating and evaluating an occupational health program for an entire agency, corporation or work site.

**OHN Case Manager** – responsible for planning treatment and monitoring a patient from the beginning of the illness/injury through recovery/back to work.

**OHN Coordinator** – the scope of responsibility usually includes employee treatment and vendor relationships to ensure the business integrity of the employee wellness program.

**OHN Corporate Director** – develops and implements occupational health, safety and environmental standards, systems, policies, and procedures to ensure that all activities for the company comply with standards and regulations.

**OHN Consultant** – a professional who provides professional or expert advice in a particular area, such as occupational health, safety and/or case management.

**OHN Educator** – a specialist in the theory and practice of teaching/educating others in personal and/or worksite health.

**OHN Health Promotion Specialist** – investigates communities, develops health-related programs into action, and then measures success.

**OHN Nurse Practitioner (NP)** – Nurse practitioners treat both physical and mental conditions through comprehensive history taking, physical exams, and ordering tests for interpretation. NPs can provide a diagnosis and recommendations for a wide range of acute and chronic diseases (within their scope of practice) and provide appropriate treatment for patients, including prescribing medications in some states. NPs can serve as a patient’s primary health care provider, and see patients of all ages depending on their specialty (family, pediatrics, geriatrics, etc.). Like all medical care providers, NPs make prevention, wellness, and patient education priorities. In addition to providing health care services, NPs may conduct research and are often active in patient advocacy activities.
The following profiles of selected individuals are provided to highlight some of the areas that occupational health nurses currently work. These profiles represent three career levels: Early Career – covers occupational health nurses in their first decade of practice, Mid Career – covers those occupational health nurses in their second decade of practice, and Senior Career – covers occupational health nurses who have three or more decades of experience.

**Early Career Level (1-10 years)**

**Bryan J. Topp, RN, MSN, MPH, COHN-S**

After graduation, Brian began his nursing career at St. Rose Dominican Hospital in Nevada, where he worked in the Emergency Department and Intensive Care Unit.

Bryan and his wife seized an opportunity to work as travel nurses and together, they took positions in a general clinic setting located in Nairobi, Kenya. In his practice, he served everyone from neonates through geriatrics. This global experience inspired him to return to the United States and pursue his higher education goals. In 2010, Bryan graduated from the University of Minnesota with dual degrees: Master of Science in Nursing and Master of Public Health.

Also in 2010, Bryan applied for the position of Occupational Health Nurse for the 3M™ Company. 3M™ offers imaginative products for metalworking and maintenance and repair operations. They also offer products to help an endless array of real-world customer needs. 3M™ offers safety product solutions including Personal Protective Equipment (PPE).

**Degrees**

- Bachelor of Science in Nursing
- Master of Science in Nursing
- Master of Science in Public Health

**Current Position**

- Mr. Topp is employed by 3M™ Company as an Occupational Health Clinician.

**Memberships**

- American Association of Occupational Health Nurses
- Minnesota Association of Occupational Health Nurses

**Certification**

- Certified Occupational Health Nurse – Specialist
Ms. Smiling’s nursing career began in 1998, in a variety of nursing specialties. Wanda has spent time working in Neonatal Intensive Care, Orthopedic, Rehabilitation and Addictions Counseling. She also served as the Health Services Administrator and Regional Director of Nurses for the Maryland Department of Corrections.

Wanda entered the field of occupational health in 2006 when she accepted a position with the Alcohol and Drug Commission of Marion County. She worked with the “Fresh Start Program.” The focus of the program was to counsel teenage pregnant drug users and on site work related employee health issues. She regards “occupational health as her nursing field of choice.”

Her past experience in case management was easy to apply to the Perdue Farms work environment. She quickly ascertained there was an opportunity for improvement in the system. The principles of certification are applicable in the practice of an occupational health nurse. The roles of clinician, manager, educator, consultant and case manager work in the integrated practice of the Perdue Health Improvement Program.

Her current accomplishments include the quantitative changes experienced with the clinic hours increasing from 10 to 17 hours per week and clinic visits increased from 98 to 255 associates being seen on a daily basis. Patient utilization increased from 12.14% to 25.1%. The sites overall worker’s compensation dollars decreased by 50% from the previous year. She states “her personal best accomplishment was obtaining her occupational health nursing certification.”

**Degrees**
- Associates of Science in Nursing
- Bachelor’s of Science in Nursing
- Bachelor’s of Theology

**Current Position**
- Wellness Center Supervisor for Perdue Farms Incorporated in Dillon, South Carolina.

**Memberships**
- International Nurses Society of Addiction
- American Association of Occupational Health Nurses

**Certifications**
- Certified Addiction Registered Nurse
- Certified Occupational Health Nurse – Specialist
Mid Career Level (10-20 years)

Sandra J Cinque, RN, BA, FAAOHN COHN-S/CM

Ms. Cinque received her Bachelor’s of Arts Degree in Psychology and Management from Moravian College and began working for Tiffany & Co. in various positions. She decided this was not what she wanted to do with her career. So she began planning to return to college at Morris County where she received an Associate’s Degree in Nursing Arts. This was a total change of focus from management to nursing but certainly the two areas were helpful in the progression of her career. After graduation, she was hired as a staff nurse in the local hospital. Two weeks later, after leaving Tiffany & Co., they offered her a position as an occupational health nurse. She realized hospital nursing would always be there but the chance to work in an occupational health position might not be available again.

Sandra provides initial care including clinical nursing assessment, diagnosis and management of occupational and non-occupational injuries and illness. Part of her practice includes counseling in travel health medicine and education based on the Center for Disease Control Travax database. Each year, she invites the nursing students from a local nursing school to visit her site as part of their Community Health Nursing curriculum. She feels occupational health nursing is her calling and her background makes her proud of her credentials. She definitely hopes it is reflected in her practice. Her mission statement is being a competent and a caring nurse. Sandra has always taken pride in what she is doing and considers occupational health nursing her passion.

Degrees

- Bachelor’s of Arts Degree in Psychology and Management
- Associate’s Degree in Nursing

Current Position

- Ms. Cinque has been employed by GlaxoSmithKline for the past ten years as the Nurse Clinical Coordinator for the Parsippany, New Jersey and Pittsburgh, Pennsylvania locations.

Memberships

- American Association of Occupational Health Nurses
- North East Association of Occupational Health Nurses
- New Jersey State Association of Occupational Health Nurses
- New Jersey State Nurses Association

Certifications

- Certified Occupational Health Nurse – Specialist
- Certified Occupational Health Nurse – Specialist Case Manager
Ms. Floyd has been a nurse at Shands Hospital at the University of Florida since 1979. She has held a variety of positions but currently Ms. Floyd is a Return to Work Coordinator. In this position, Mary plans, organizes, implements, and conducts administrative and operational activities related to disability case management for the University hospital employees. She also coordinates the American with Disabilities issues for both employees and applicants.

Mary provides appropriate referrals to the Employee Assistance Program, disability management, and deals with issues involving the Family and Medical Leave Act (FMLA). She also provides reasonable suspicion drug testing for a drug-free workplace along with case-management and return to work coordination issues. She is also involved with the Occupational Health Clinic including communicable disease exposures, pre-placement evaluations, and immunizations.

Mary has worked in the occupational health profession since 2000. She feels her best accomplishment has been caring about people. She has developed a trust relationship with employees and management. The employees know they can talk to her and she promises to do her best to educate, guide, advocate and protect them. Managers know she will look at the whole picture, advocating for a win-win scenario while mindful of their mission to provide safe patient care.

**Degrees**

- Associate Degree Nursing
- Bachelor of Science in Professional Management
- Master of Public Health

**Current Position**

- Return to Work Coordinator at Shands Hospital – University of Florida

**Memberships**

- American Occupational Health Professionals

**Certifications**

- Certified Occupational Health Nurse – Specialist
- Certified Occupational Health Nurse – Specialist Case Manager
Ms. Burgel’s entry into occupational health nursing was at the University of California at San Francisco (UCSF) in 1981. The University was a new NIOSH-funded Education and Research Center. Barbara learned what she could by taking continuing education courses, auditing coursework, and in 1983, she began a faculty practice in occupational health.

Before San Francisco, she worked in ICU and a cardio-surgical ICU. During school, she worked in inpatient and emergency room settings. After graduate school, she worked in an STD clinic and student health before beginning her teaching position. Barbara has been teaching for 32 years. She practiced as a nurse practitioner in primary care and occupational health.

Barbara stated “her best accomplishment in occupational health nursing” was when she served on the ABOHN Board of Directors in the early 1990s. “This was a very important grounding experience; it was the time we made solid policy about two credentials to support educational and professional growth recognition for OHNs”. She served on task forces for AAOHN, co-wrote a white paper on primary care in the worksite and, recently helped to build a national coalition on respiratory protection competency for occupational health nurses.

She is proud of her work as an educator and privileged to work with bright, engaged graduate students, many who were new to the Occupational Health Nursing field. From a practice perspective, she is proud of the UCSF Community Occupational Health Project (2000-2006), funded by The California Wellness Foundation, which included outreach, education and clinical care for garment workers, janitors, and day laborers. In her PhD studies, she explored psychosocial work factors associated with shoulder pain in hotel room cleaners. Since completing her doctoral studies, she has focused on taxi drivers, a diverse group of workers with many risk factors associated with their work.

continued next page
Profiles of Currently Practicing Occupational Health Nurses

Barbara Burgel continued

Degrees
• Bachelor of Science in Nursing from University of Michigan, Ann Arbor
• Master of Science, Adult Health from University of California, San Francisco
• PhD, Occupational Health from University of California, San Francisco

Current Position
• Professor of Clinical Nursing at UCSF School of Nursing, teaching in the Occupational and Environmental Health Graduate Program, and in the Adult-Gerontology Nurse Practitioner Program. She spends 4 to 8 hours per week in a residential treatment program for adults with mental illness, precepting students, and providing primary care. She consults for manufacturing companies by auditing their occupational health programs.

Memberships
• American Association of Occupational Health Nurses
• California El Camino Real Association of OHNs, current President-Elect
• Fellow of the American Association of Occupational Health Nurses
• American Academy of Nurses
• Fellow of the American Academy of Nurses
• American Nurses Association/California
• Sigma Theta Tau
• International Commission of Occupational Health
• California Association of Nurse Practitioners
• National Organization of Nurse Practitioner Faculties

Certifications
• Certified Occupational Health Nurse – Specialist
• Certified Adult Nurse Practitioner
Profiles of Currently Practicing Occupational Health Nurses

Senior Career Level (20+ years)

Frances Childre, RN, MSN, FAAOHN, COHN-S

Ms. Childre is currently Vice President of CHS Health Services. CHS manages onsite health centers for large employers and their corporate campuses across the United States. The corporation currently has over 140 sites in 29 states. CHS provides occupational health services as well as full service primary care, including preventive services, health coaching, and wellness programs. At some sites, they also provide physical therapy, EAP counseling and pharmacy services.

Frances wanted a career where she could provide a meaningful service and use her business skills. While realizing she still needed to get a nursing degree, she followed this path with the clear idea that she wanted to go into occupational health. After obtaining her BSN, she worked in the hospital to hone her skills, and then worked in public health nursing.

The University of California offered a Masters degree along with nurse practitioner training; she felt this was the best place for her to attend. They did accept her, and she has primarily practiced in the occupational health specialty since that time.

Prior to this, she was the Director of Employee Health & Workers’ Compensation for Emory University and Emory Hospitals in Atlanta, GA. She also spent time as the Director of Professional Affairs for the American Association of Occupational Health Nurses and other various organizations.

Frances feels her most significant contributions to the profession have been from her writing and editing skills. Frances’ first article was published in 1987 and she continues to publish articles and papers for the field of occupational health. She has contributed to the 2nd, 3rd and 4th editions of the AAOHN Core Curriculum. Her greatest joy is editing the CE modules for the AAOHN Journal. She has edited the Professional Practice articles for the AAOHN newsletter and as an editor for the AAOHN Journal (now Workplace Health & Safety) for many years. “It is very satisfying to help someone, who definitely has something to say, to write, so that many people have the opportunity to benefit from their great ideas. It is great fun to share in the satisfaction of the first time writer when they see their name in print.”

Recently, one of the units she oversees was featured in a full-page spread in the Wall Street Journal. She also had the opportunity to be on a panel sponsored by Mercer Consulting Group and it streamed live to all Mercer clients. It was moderated by Paula Zahn former news anchor for CNN. She shared panel responsibilities with the Director of Health & Wellness at Lockheed Martin, the Medical Director of the Pacific Business Group on Health and Chief Physician at Mercer Health & Benefits, and a senior partner at Mercer.

continued next page
Profiles of Currently Practicing Occupational Health Nurses

Frances Childre continued

Degrees
- Bachelor of Science in Psychology from Stetson University
- Bachelor of Science in Nursing from Emory University
- Masters of Science in Nursing and Nurse Practitioner in Occupational Health from University of California at San Francisco

Current Position
- Frances has been in the profession for 26 years. She worked at her current employer, for more than 10 years, she started as a National Manager of Health Services, progressed to a Senior Director of Operations and most recently took on the responsibility of Vice President of Operations for CHS Health Services.

Memberships
- American Association of Occupational Health Nurses
- Fellow of the American Association of Occupational Health Nurses
- Medical Group Management Association

Certification
- Certified Occupational Health Nurse – Specialist
How to Become an Occupational Health Nurse

Occupational health nurses first and foremost must be RNs. Many practicing occupational health nurses begin as hospital RNs in emergency or intensive care units where they gain clinical experience and move into occupational health nursing.

Academic Programs

Many colleges and universities that offer degrees in Public Health will also have a sub-section of classes aimed directly at occupational health nurses.

Certificate Programs

The National Institute of Occupational Safety and Health (NIOSH) funds Education and Resource Centers (ERC’s), at 18 universities across the U.S. These centers help prepare professionals in occupational health and safety disciplines. Some of these centers offer academic programs and some offer only certificate programs in occupational health nursing. The goal of the ERC is to help NIOSH achieve its mandate of “providing an adequate supply of qualified personnel to carry out the purposes of the Occupational Safety and Health Act” by providing education for occupational health and safety (OH&S) professionals. Those ERC’s offering certificate programs are recognized as a stepping stone to help individuals get started in the profession. Please check the NIOSH website at http://niosh-erc.org for up-to-date news regarding their ERC programs.

1. Univ. of Alabama, Birmingham
2. Univ. of California, Berkeley
3. Southern CA (UCLA & UCI)
4. Univ. of Cincinnati
5. Harvard Univ.
6. Univ. of Illinois, Chicago
7. Univ. of Iowa
9. Univ. of Michigan
10. Univ. of Minnesota
11. Mount Sinai School of Medicine
12. Univ. of North Carolina
13. Univ. of South Florida
14. Univ. of Texas
15. Univ. of Utah
16. Univ. of Washington
17. Univ. of Colorado
18. Univ. of Kentucky

Figure 7: retrieved from http://www.cdc.gov/niosh/oep/ercportfolio.html
Professional Societies

AAOHN – The American Association of Occupational Health Nurses
www.aaohn.org

Founded in 1942 as the American Association of Industrial Nurses, AAOHN is a membership based association group dedicated to the occupational health nursing profession. AAOHN is a 6,000 member professional association with 127 state and local chapters throughout the United States. The AAOHN mission is to advance the health, safety, and productivity of domestic and global workforces by providing:
• education
• research
• public policy
• and practice resources for occupational and environmental health nurses. These professionals are the largest group of health care providers serving the worksite.

AAOHN hosts a yearly conference dedicated to the latest trends and best practices for the occupational health nursing field. More than 1,000 occupational health nurses attend this conference. It is the largest education forum for occupational health nursing in the United States.

In 1998, AAOHN created a Foundation to enable occupational and environmental health professionals to improve worker health and safety by preventing workplace illnesses and injuries. The Foundation accomplishes these purposes through grants and scholarships to support:
• ongoing professional education;
• leadership development; and
• grants for research initiatives.

AOHP – The Association of Occupational Healthcare Professionals in Healthcare
www.aohp.org

In January of 1981, the first organizational meeting was held in Santa Rosa, California. The first objective of the organization was to develop a political awareness program regarding the impact of employee health nurses in hospitals and development of the role of the employee health professional.

In 1993, the name of the organization was changed to its current name.

Occupational health nurses working in hospital settings are generally referred to as the Employee Health Nurse.

AOHP holds a yearly conference which addresses the educational needs of the Employee Health Nurse. In addition, the organization publishes a “Getting Started Manual” which provides insight into hospital based practice.
ABOHN – The American Board for Occupational Health Nurses, Inc.
www.abohn.org

ABOHN is the sole credentialing body for occupational health nurses and offers two core credentials and one specialty credential. The core credentials are the Certified Occupational Health Nurse (COHN) and the Certified Occupational Health Nurse – Specialist (COHN-S). The specialty credential offered is Case Management (CM). Table 3 lists the qualifications of candidates for these ABOHN certifications. To achieve certification, candidates must pass the applicable examinations. Certification in this nursing specialty practice demonstrates professionalism and proficiency to employers and to the general public.

### Qualifications for ABOHN Credentials

<table>
<thead>
<tr>
<th>Credential</th>
<th>Licensure</th>
<th>Education</th>
<th>Work Experience or Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>COHN</td>
<td>Current, Active RN License</td>
<td>None Specified</td>
<td>3,000 hours in occupational health in the past five years; or a completion of a certificate program in occupational health nursing for academic credit.</td>
</tr>
<tr>
<td>Certified Occupational Health Nurse</td>
<td>Current, Active RN License</td>
<td>Bachelor’s degree or higher</td>
<td>3,000 hours in occupational health in the past five years; or a completion of a certificate program in occupational health nursing for academic credit; or a completion of a graduate level of education with a concentration in occupational health.</td>
</tr>
<tr>
<td>COHN-S</td>
<td>Current, Active RN License</td>
<td>COHN or COHN-S</td>
<td>10 contact hours of case management related continuing education earned during the previous five years.</td>
</tr>
</tbody>
</table>

Table 3: Qualification for ABOHN Credentials
Additional information regarding the occupational and environmental health industry can be found at the organizations listed below.

American Association of Occupational Health Nurses
www.aaohn.org
7794 Grow Drive
Pensacola, FL 32514
(800) 241-8014
(850) 474-6963

American Board for Occupational Health Nurses, Inc.
www.abohn.org
201 E. Ogden Ave., Suite 114
Hinsdale, IL 60521
(630) 789-5799
(888) 842-2646

American Board of Nursing Specialties
www.nursingcertification.org
610 Thornhill Lane
Aurora, OH 44202
(330) 995-9172

American College of Occupational and Environmental Medicine
www.acoem.org
25 Northwest Point Blvd.
Suite 700
Elk Grove Village, IL 60007-1030
(847) 818-1800

American Industrial Hygiene Association
www.aiha.org
3141 Fairview Park Drive, Suite 777
Falls Church, VA 22042
(703) 849-8888

Association of Occupational Health Professionals
www.aohp.org
109 VIP Drive, Suite 220
Wexford, PA 15090
(800) 362-4347

National Institute for Occupational Safety and Health
www.cdc.gov/niosh/contact/
1600 Clifton Rd.
Atlanta, GA 30333
(800) 232-4636

Occupational Safety & Health Administration
www.osha.gov
U.S. Department of Labor
Occupational Safety & Health Administration
200 Constitution Avenue
Washington, D.C. 20210
(800) 321-6742
We wish to acknowledge the following individuals for their contribution to this guide:

Barbara Burgel, RN, PhD, FAAN, FAAOHN, CANP, COHN-S
Frances Childre, RN, MSN, FAAOHN, COHN-S
Sandra J. Cinque, RN, BA, FAAOHN, COHN-S/CM
Mary C. Floyd, RN, BS, MPH, COHN-S/CM
Wanda Smiling, RN, CARN, COHN-S
Bryan J. Topp, RN, MSN, MPH, COHN-S
Brian Verrall, MSc, DOHS, RN, COHN(C), COHN-S/CM, FAAOHN
Andrea Wiley, BA, Media Consultant

Special thanks to the 2013-2014 ABOHN Public Relations Committee and Staff:

Roger Brauer, Ph.D., PE
Carole Cusack, MBA
Denise Knoblauch, RN, BSN, COHN-S/CM
Ann Lachat, RN, BSN, FAAOHN, COHN-S/CM
Eileen Maloney-White, BScRN, LNC-CSp, COHN (C), COHN
Mark Sebastian, RN, BSN, MPH, COHN-S

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CEO • Ann Lachat, RN, BSN, FAAOHN, COHN-S/CM
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Humans have cared for each other since the beginning of time. Taking care of workers and the environment in which they work can be traced back to the ancient Babylonians.

History shows us that in 2000 B.C., the Code of Hammurabi contains clauses for dealing with injuries and set monetary damages for those who injured others.

Hippocrates (470-410 B.C) was from Greece and considered by many to be the father of medicine. He observed lead poisoning among miners and taught his students to consider all environmental factors when making a diagnosis.

Pliny the Elder (23-79 A.D.) was a Roman senator, writer and scientist who noted the dangers related to zinc and sulfur. He was the first to recommend respiratory protection by having miners cover their mouths with an animal bladder.

Georgius Agricola (1494-1555) wrote *De Re Metallica*. His writings showcased the need for ventilation and fresh air in mines, environmental contamination, management techniques (shift work), and ergonomics related to mechanical lift processes among others topics.

Paracelsus (1493-1591), known as the father of toxicology, established concepts of acute and chronic toxicity.

The “Law of Deodand”, passed in 1540 in England is the earliest legal writing regarding occupational health. It was a forerunner of the present day Industrial Injuries Acts in the United Kingdom, and probably the rest of the world.

Bernardino Ramazzini (1633-1714) is thought of as the father of occupational medicine. He wrote *Diseases of Workers* and related occupational diseases to handling of harmful materials or unnatural movements of the body.

Percival Pott (1713-1788) identified relationships between an occupation (chimney sweep), a toxin (polyaromatic hydrocarbons) and malignancy (testicular cancer).

Alice Hamilton (1869-1970) was the first woman appointed to the faculty of Harvard University and was a leading expert in the field of occupational health. She was a pioneer in the field of toxicology, studying occupational illnesses and the dangerous effects of industrial metals and chemical compounds on the human body.

Occupational health nursing started with Florence Nightingale (1820-1910) who is known as “the lady with the lamp”. Nightingale has many accomplishments credited to her. The most widely recognized is her work during the years of the Crimean War where she continued her rounds of taking care of the wounded at night.

Phillipa Flowerday was the first occupational health nurse on record in the United Kingdom. She was employed...
by the J. J. Coleman Company of Norwich, England in 1878.

The first record of occupational and environmental nursing in the United States dates back to 1888 when a nurse named Betty Moulder cared for Pennsylvania coal miners and their families.

Ada Mayo Stewart was the first industrial nurse in the United States. She began her work with the Vermont Marble Company in March 1895.

The profession evolved with the growth of industry around the beginning of the 20th century as factories employed nurses to combat the spread of infectious diseases like tuberculosis.

1911 brought the first approved worker’s compensation legislation. It made industries at least financially responsible for their work-related injuries. Physicians and nurses were initially employed in industry to provide primary emergency care, and to make sure that some form of secondary care was being given.

Before WWI (1914-1919) the occupational health nursing profession grew extremely slowly. With the boom in the defense industry, government led the way by encouraging the advancement and care of the employee’s health in the shipyards, factories and mills that were under Federal contract. Records show that in 1912 there were 39 nurses listed as being employed in industry in the U.S. By the end of WWI, there were 1,213 nurses employed in 871 businesses throughout the country.

At the beginning of The Great Depression, there were over 3,189 nurses employed in industry in the U.S. 1939 records indicate 6,255 occupational health nurses in the workforce and by the end of WWII (1945) the number of occupational health nurses had doubled to 12,939. The occupational health nursing field continued to grow despite an economic downturn and a world war.

The American Association of Industrial Nurses (AAIN) was formed in 1942. This membership association is still active today under the new name of American Association of Occupational Health Nurses (AAOHN).

In 1970, Congress passed the Occupational Safety and Health (OSH) Act. In 1972, occupational health nurses formed the American Board for Occupational Health Nurses, (ABOHN) to advance the profession by offering a certification program that recognizes occupational health nurses as leaders in this noble field.

Today, the Department of Health and Human Services estimates there are 22,000 occupational health nurses.
Appendix B: Glossary

**Case Management** – Process of coordinating an individual client’s total healthcare services.

**Client** – Recipient of health and safety services. For the OHN, this may include individual workers, workers’ families/significant others, worker populations, community groups and employers.

**Confidentiality** – A legal responsibility and professional obligations to ensure a public trust and prevent unauthorized and inappropriate disclosure of personal health information.

**Credentialing** – complex process intended to define levels of practice and associated knowledge, skills, abilities and competencies.

**Criteria** – Relevant, measurable indicators of the standards of practice and professional performance.

**Disaster Preparedness** – prepare for, respond to, and recover from large-scale disasters — including hurricanes, earthquakes, nuclear accidents, pandemic flu, and terrorist attacks.

**Ergonomics** – an applied science concerned with designing and arranging things people use so that the people and things interact most efficiently and safely.

**Infection Control** – is the discipline concerned with preventing healthcare-associated infection and addresses factors related to the spread of infections within the healthcare setting (whether patient-to-patient, from patients to staff and from staff to patients, or among-staff), including prevention, monitoring and investigating of demonstrated or suspected spread of infection within a particular healthcare setting, and management of outbreaks.

**Occupational Health & Safety** – is an area concerned with protecting the safety, health and welfare of people engaged in work or employment.

**Regulations** – A process of the promulgation, monitoring, and enforcement of rules, established by primary and/or delegated legislation.

**Travel health** – deals with the prevention and management of health problems of international travelers.

**Workplace hazards** – Anything that presents a potential threat to employees, whether physical or psychological, can be classified as a workplace hazard.
Figure 8: "Occupational Health Nurses' Contributions to Excellence"
created by Lachat, A., ABOHN, Chief Executive Officer, Model adapted from Mary Ann Gruden


470-410 BC Hippocrates
470-410 BC Code of Hammurabi
1494-1555 AD Georgius Agricola
1460 AD Law of Deodand
1493-1591 AD Paracelsus
1533-1744 AD Bernardino Ramazzini
1633-1714 AD Percival Pott
1869-1970 AD Alice Hamilton
1895 AD Ada Mayo Stewart
1898 AD Phillipa Flowerday
1911 AD Florence Nightingale
1912 AD – 39
1918 AD – 1,213
1930 AD – 6,255
1945 AD – 12,939
1940 AD – 22,000

2000 BC
2100 BC
2000 AD
2200 BC
2300 BC
23-79 AD Pliny the Elder

Figure 1: Timeline of events that shaped Occupational Health & Safety – for additional information see Appendix A

2013 AD
Approx.
22,000

The American Board for Occupational Health Nurses

Figure B: "Occupational Health Nurses' Contributions to Excellence" created by Lachat, A., ABOHN, Chief Executive Officer, Model adapted from Mary Ann Gruden
Occupational Health Nursing Profession