Respiratory Protection Curriculum
University of Michigan
Occupational Health Nursing Program
WHAT IS THE CURRENT RESPIRATORY PROTECTION CURRICULUM?
WHAT COURSES INCORPORATE THIS TRAINING?
WHO TEACHES THIS SEGMENT?
HOW MUCH TIME IS DEVOTED TO RESPIRATORY PROTECTION?
### MS Programs of Study

<table>
<thead>
<tr>
<th>Program</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Occupational Health Nurse-Specialist (OHN-S)</td>
<td>47 credits</td>
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<tr>
<td>ANP with concentration in OHN (OHN-ANP)</td>
<td>54 credits</td>
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<tr>
<td>FNP with concentration in OHN (OHN-FNP)</td>
<td>67 credits</td>
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Curriculum Structure

- **Core**
  - Theory
  - Research
  - Policy
  - Biostatistics
  - Scholarly project

- **Specialty**
  - Health promotion risk reduction
  - Population assessment (or Health Assessment)
  - Interventions w/ populations (or Primary care)
  - Managing community systems (or Primary care)
  - Issues in OHN

- **Cognates**
  - OH
  - Epidemiology
  - (Pharmacology)

Core and Specialty courses taught by nursing faculty, except Biostats; Cognate courses taught by PH and Engineering faculty
OH Cognates

- Occ Diseases
- Toxicology*
- Intro to OH (IH)
- Occ Safety
- Occ Ergo
- Interdisciplinary Seminar
- Issues in OHN

* OHN-S only
Occupational & Environmental Diseases

Course Overview

- Faculty: MD
- Credits: 2
- Selected Content (16 hours)
  - Respiratory Disease Overview
  - Pneumoconioses: asbestos, silica, coal
  - Immunologic lung disease
  - Health effects related to indoor air quality
  - Health effects of metals (lead, mercury, arsenic, cadmium)
  - Health effects of community air pollution
  - Occupational and environmental cancer
  - Persistent organic pollutants (e.g., dioxins, PCBs)
Intro to Occupational Health

Course Overview

• Faculty: Industrial hygienist
• Credits: 3
• Selected Content (15 hours)
  – Biological and physical agents in the environment
  – Inhalation as a route of exposure
  – Basic concepts of hazard and risk
  – Hazard recognition and evaluation – Aerosols, Biohazards
  – Exposure control: Personal protective equipment (PPE)
    • standards for PPE, rationale for respiratory protective equipment (RPE), types of RPE; filter media for RPE for particulates/aerosols; filter media for RPE for gases/vapors; - RPE performance: APF and EPF; RPE selection; fit testing; training in RPE usage
  – Exposure control: Ventilation
Selected Core & Specialty Courses

Course Overviews

• Theoretical Base for Advanced Nursing Practice
  – analysis of (health behavior) theory, relationship w/ practice & research

• Utilization of Nursing Research in Advanced Practice
  – evidence-based practice, implementing research in health care settings

• Strategy for Nursing & Health Care
  – political and financial dimensions of health care

• Biostatistics*
  – using data to assess health & monitor program effectiveness

• Health Promotion and Risk Reduction
  – issues in individual, family, community wellness; ecological perspective

• Population Assessment*
  – Data collection & analyzing community assets and needs

• Interventions with Populations*
  – design and implement a community intervention

• Scholarly project
  – primary research, ROL, ms for publication

* OHN-S only
Curriculum Summary

• The MS program builds on the baccalaureate degree; faculty assume (perhaps erroneously) some level of competency in that students are licensed and generally experienced BSNs.
• There are 3 programs of study in OHN
• The OHN curriculum includes
  – Nursing Core
    • 12-14 credits (theory, research, policy, stats)
  – Nursing Specialty
    • 17-40 credits (population or primary care)
  – Public and Occupational Health Cognates
    • 11-16 credits (epi, diseases, IH, tox, safety, ergo)
• Respiratory protection content is in cognate courses
• Nursing courses focus on nursing role, application of nursing process, behavior change
• Curriculum does not include details of OSHA 29.CFR 1910.135 rule, medical screening, fit testing
• OHN program of study prepares graduates to work in a vast array of settings
In what ways could the respiratory protection curriculum be enhanced?

• Development of a respiratory protection training program for OHNs, features of which may include
  – Short course/workshop format
  – Supplemental to existing coursework
  – Portable, stand-alone program
  – Applicable to OHN academic programs & multiple practice settings
  – Easily accessible (e.g., online)
  – Evidence-based, periodically updated
  – Include workplace fact sheet/poster, post-test, annotated bibliography

• Occ Diseases course lacks content related to infectious diseases
Are there any barriers or challenges that need to be overcome to improve the training to produce professionals who are fully aware and informed about respiratory protection technologies and who can teach and model the use of respiratory protection? How might barriers be surmounted?

• Lack of AAOHN competencies specific to respiratory protection to guide curriculum design