

2006 ANA HOUSE OF DELEGATES

SUBJECT: Nursing Practice, Chemical Exposure and Right-To-Know Action Report

RELEVANT CORE ISSUE: Workplace Rights and Workplace Health and Safety

INTRODUCED BY:

REFERRED TO:

EXECUTIVE SUMMARY:

This report identifies the need to ensure that the nursing profession supports a fundamental reform of the nation's current chemical laws, regulations, rules, standards and policies in order to protect nurses, other health care workers, patients and their families, communities and the environment and advocates for increased research to better understand the relationship between health and the environment. It supports the integration of environmental health policy into nursing education, practice, research, and advocacy and policy development. The report further seeks to ensure that nurses have full access to information and the right-to-know about the potentially harmful chemicals, pollutants and hazards (neurotoxins, terratogens, carcinogens, pesticides, latex exposure, ionizing radiation, lasers, musculoskeletal injuries, viral and bacterial illnesses, needlestick injuries, violent assaults and physiological and psychological stressors) to which they are exposed regardless of nursing specialty or health care setting.

RECOMMENDATIONS:

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3 **WHEREAS**, in 1983, the Occupational Health and Safety Administration's (OSHA) Hazard
4 Communication Standard established the right-to-know about the potential hazards, including the health
5 threats posed by the chemicals in the nation's workplaces, and now, over 20 years later, most workers,
6 including nurses and other healthcare workers, still do not have sufficient knowledge about the health
7 risks associated with the chemicals that they use or are exposed to in the workplace, and

8
9 **WHEREAS**, the Centers for Disease Control (CDC) has measured select toxic chemicals found in the
10 urine and blood samples of Americans finding significant human body burdens of dioxins, heavy metals,
11 pesticides, phthalates and other chemicals, and

12
13 **WHEREAS**, the Louisville Charter for Safer Chemicals recognizes the current chemical burden of
14 individuals is unprecedented in human history; calls for immediate action in reforming the nation's
15 chemicals policy; establishes as a priority the need to phase out the most dangerous chemicals in the
16 environment, develop safer alternatives, and protect high-risk communities; and supports giving the
17 public and workers the full right-to-know about chemical hazards and implementing immediate
18 intervention when workers and communities are exposed to levels of chemicals that pose a health
19 hazard; and
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1 **WHEREAS**, according to the Bureau of Labor Statistics (BLS) healthcare workers report a higher rate
2 of work-related injuries and illnesses greater than workers in such hazardous occupations as farming,
3 mining, construction and manufacturing, and
4

5 **WHEREAS**, according to the National Academy of Science (NAS) and Institute of Medicine (IOM),
6 there is a current trend in the federal government to reduce access to information regarding potentially
7 hazardous chemicals in the environment; and
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9 **WHEREAS**, the Institute of Medicine has recommended that environmental health principles be
10 integrated into nursing education, practice, research, advocacy and policy development, and
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12 **WHEREAS**, the American Nurses Association (ANA) is an essential partner in Health Care Without
13 Harm (HCWH) and Hospitals for a Healthy Environment (H2E), two organizations that are actively
14 engaged in eliminating persistent bioaccumulative toxins, mercury and other toxic products from health
15 care, educating the nation about chemical hazards, utilizing safer alternatives and keeping our
16 communities and workplaces safe,
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18
19 **THEREFORE BE IT RESOLVED** that the American Nurses Association:
20

21 Promote a course of action both nationally and in the states that reduces the use of toxic chemicals
22 requiring that less harmful chemicals be substituted whenever possible; supports labeling and full
23 disclosure mechanisms; demands adequate information on the health effects of chemicals and chemicals
24 in products before they are introduced on the market; creates more streamlined methods for chemicals to
25 be removed from use; and,
26

27 Monitor national, state and local policies on these issues and meet with legislators informing them of
28 what nurses and the nursing profession believe concerning the links between chemical exposures, a
29 healthy environment and the public's health; and
30

31 Support enhanced research efforts in environmental health to better understand the relationship between
32 health and the environment, especially in the area of toxicology and in vulnerable populations such as
33 infants, children, pregnant women, and the elderly, looking at interactions when more than one chemical
34 exposure occurs; and
35

36 Create an enhanced organizational initiative to educate nurses about the potentially harmful chemicals
37 that are typically used in health care settings including identifying currently available, safer products for
38 substitution; and
39

40 Support the integration of environmental health principles into nursing education, practice, research,
41 advocacy and policy development, and
42

43 Support efforts to ensure that nurses have full access to information and the right-to-know about the
44 potentially hazardous chemicals to which nurses, other healthcare workers, patients, and communities in
45 general are exposed.
46

1 **REPORT:**

2
3 In 1992, the World Health Organization stated that “ Environmental health comprises those aspects of
4 human health, including quality of life, that are determined by physical, chemical, biological, and social
5 and psychological problems in the environment. It also refers to the theory and practice of assessing,
6 correcting, controlling, and preventing those factors in the environment that can potentially adversely
7 affect the health of present and future generations”. (WHO, 1992) Since the early years of the profession
8 such nursing leaders as Florence Nightingale and Lillian Wald have recognized the role of nurses in
9 controlling the impact of environmental factors (air and water quality, food, sanitation, cleanliness,
10 chemicals, pesticides, waste products) on the health of individuals, families and communities. In 1992,
11 the International Council of Nurses (ICN) noted: “The concern of nurses is for people’s health – its
12 promotion, its maintenance, its restoration. The healthy lives of people depend ultimately on the health
13 of Planet Earth – its soil, its water, its oceans, its atmosphere, its biological diversity – all of the
14 elements which constitute people’s natural environment”. (ICN, 1992)

15
16 Recently, nurses have been challenged to rediscover their traditional environmental health roots by such
17 environmental nursing activists as Hollie Shaner, Charlotte Brody, Patricia Butterfield, Anna Gilmore
18 Hall, Jane Lipscomb, Lillian Mood, Barbara Sattler and Susan Wilburn and environmental groups such
19 as Health Care Without Harm (HCWH), Hospitals for a Healthy Environment (H2E) and the
20 Nightingale Institute for Health and the Environment (NIHE). These individuals and organizations have
21 been instrumental in educating nurses about the human health effects associated with chemicals and how
22 exposure to these chemicals when combined with other factors such as genetics, dietary habits, smoking,
23 exercise, and exposure to sunlight, radiation and viruses affect one’s health and susceptibility to various
24 diseases and certain illnesses.

25
26 This increased awareness is reflected in previous ANA House of Delegates’ actions related to indoor air
27 quality (1995), reduction of health care production of toxic pollution (1997) and the need to develop
28 environmental health principles in nursing practice (2004). This has resulted in the American Nurses
29 Association assuming a leadership role in working on a federal level to address workplace issues related
30 to environmental pollutants and developing educational opportunities and tools for nurses through its
31 RN No Harm program. In addition, the ANA Board of Directors has endorsed utilization of The
32 Precautionary Principle, a consensus statement that advocates when an activity raises threats of harm to
33 human health or the environment precautionary measures should be taken even if some cause and effect
34 relationships are not fully established scientifically. The Principle has four main components: take
35 preventative action in the face of uncertainty; shift the burden of proof to the proponents of an activity;
36 explore a wide range of alternatives to possibly harmful actions; and increase public participation in
37 decision-making.

38
39 Application of The Precautionary Principle has particular meaning in the health care industry and the
40 health care facilities and agencies in which nurses practice. The health care industry is a major source of
41 environmental health hazards and pollutants, It is imperative that nurses, who constitute the single
42 largest group of workers in the industry, recognize and address the environmental hazards (biological,
43 chemical and physical) that might affect themselves, patients and their visitors, and the community-at-
44 large. Some of these chemicals, pollutants and hazards are neurotoxins, terratogens, reproductive
45 hazards and carcinogens including mercury, polyvinyl chloride plastics (PVCs), dioxin, di-ethylhexyl
46 phthalate (DEHP), latex exposure, glutaraldehyde, formaldehyde, pesticides, antineoplastic drugs, waste

1 anesthetic gases, ionizing radiation, lasers, musculoskeletal injuries, viral and bacterial illnesses,
2 needlestick injuries, violent assaults and physiological and psychological stress.

3
4 Unfortunately, there are substantial data gaps regarding the current understanding of the human health
5 threats associated with the “chemical soup” that comprises the nation’s air and water, as well as the
6 chemical exposures associated with energy production, manufacturing, and consumer products such as
7 household cleaners and personal care products. There are approximately 100,000 chemicals now used in
8 the industrialized world. Almost all are manmade with 15,000 of them produced annually in quantities
9 greater than 10,000 pounds and 2,800 in quantities greater than 1 million pounds a year. Of the 2,800,
10 only 7% have been tested for developmental effects and only 43% have been tested for human health
11 effects. (Goldman and Koduru, 2000) In Europe, the trend in chemical policies is towards increased
12 testing requirements, while the U.S. relies on voluntary testing efforts by manufacturers – the results of
13 which are often not required to be made public.

14
15 The Centers for Disease Control (CDC) sponsors an extensive and on-going, national study that
16 measures select toxic chemicals found in urine and blood samples from Americans across the country.
17 Its most recent findings reveal significant human body burdens of heavy metals, dioxins, a wide range of
18 pesticides and other chemicals. (CDC, 2005) Another study that analyzed chemicals found in umbilical
19 cord blood of newborns completely dispels any residual notion that the placenta is protected from
20 environmental contaminants. An average of 200 industrial chemicals and pollutants were found in the
21 cord blood, demonstrating how penetrable and vulnerable the placenta is and how a mother’s current and
22 sometimes even lifelong exposures to toxic chemicals are shared with her baby, even before it is born.
23 Of the 287 chemicals detected in cord blood, 180 are known to cause cancer in humans or animals, 217
24 are toxic to the brain and nervous system, and 208 cause birth defects or abnormal development in
25 animal tests. (EWG, 2005)

26
27 The following examples of chemical health hazards are well known: DDT was banned in the 1960’s as a
28 result of a national crusade led by the “mother of the environmentalist movement”, author Rachel
29 Carson; lead in gasoline was banned in the 1970’s; the manufacture of lead-based paint for interior paint
30 was banned in 1978; and polychlorinated biphenols (PCBs), a compound used extensively in electrical
31 power transformers for industrial applications, was banned in 1977. Each of these chemicals is still
32 found in almost all humans and has the potential to harm human reproduction.

33
34 Many federal, state and local agencies are responsible for overseeing and addressing environmental
35 issues and protection in most workplaces, the health care industry and communities. The Occupational
36 Safety and Health Administration (OSHA), a federal regulatory agency that promulgates and enforces
37 workplace standards, oversees workplace occupational health and safety. There are OSHA Standards
38 established for such occupational illnesses and injuries as cancers, fibrotic lung disease, hearing loss,
39 Hepatitis A, B and C, lead poisoning, HIV, reproductive concerns and tuberculosis. There are also
40 OSHA Standards for workplace exposures such as arsenic, asbestos, benzene, bloodborne pathogens,
41 cadmium, carcinogens, compressed air, ethylene oxide, formaldehyde, hazardous waste operations, lead,
42 methylene chloride, noise levels, silica and vinyl chloride. (Sattler and Lipscomb, p. 253-255, 303)
43 Protection within communities involves many agencies: food quality is addressed by the federal Food
44 and Drug Administration (FDA) and the Department of Agriculture; transportation of hazardous
45 substances through communities is addressed by the federal and state Departments of Transportation
46 (DOT); radiation exposures are addressed by the Nuclear Regulatory Agency (NRA); biological

1 contaminants are addressed by the Department of Health and Human Services (DHHS), the Department
2 of Homeland Security and the Department of Justice; and air, soil, and water quality is addressed by the
3 federal Environmental Protection Agency (EPA) and similar state agencies. (Sattler and Lipscomb, p.
4 303-310) There are many federal, state and local laws and regulations that address environmental policy,
5 control of insecticides and fungicides, clean water and air, safe drinking water, food quality, control of
6 toxic substances, hazardous waste sites and compensation and liability, pollution prevention, and
7 workers/communities rights-to-know about hazards and contamination. The EPA provides considerable
8 resources to the public through its Concerned Citizens Resources where it stresses, “Every American has
9 the right to know about the chemicals to which they may be exposed in their daily living”. (EPA)

10
11 The significant exception regarding requirements for pre-market testing is the Food and Drug
12 Administration’s (FDA) oversight of pharmaceuticals. Drug companies are required to engage in
13 multiple phases of extensive pre-market studies, all of which are reviewed by the FDA before the drugs
14 are released. For all other chemicals and products, consumers have to wait until the chemicals are
15 widely distributed in the market place and until substantial knowledge is amassed about any human
16 health threats and are consequently widely dispersed in the earth’s ecosystem before the government
17 intervenes by banning or phasing out the harmful chemical or product.

18
19 In 1983, the Federal Hazard Communications Standard or the “workers’ right-to-know” rule was passed.
20 OSHA enforces the Standard. There are several key elements:

- 21 • Chemical manufacturers must determine whether or not their chemicals pose a hazard to human
22 health and/or physical safety.
- 23 • If a chemical is determined to be a threat, its manufacturer must produce a material safety data
24 sheet (MSDS) for the chemical and distribute it.
- 25 • In the workplace all hazardous chemicals must be labeled and there must be a corresponding
26 MSDS with all workers having access to the data sheet.
- 27 • All workers must be trained about the hazardous chemicals in the workplace.
- 28 • When new chemicals are being used the employers must be trained in them.
- 29 • The MSDS and a written Hazard Communication Standard Plan must be accessible to all
30 employees. (Sattler and Lipscomb, p. 88-98)

31 A worker’s right to know is repeatedly limited because the MSDS are often incomplete or contain
32 inaccurate or conflicting information; are not required to contain information on environmental effects
33 and chemical reactions; have no “plain language” requirements; and, are not required to undergo
34 certification or a third party review so that the manufacturer may underestimate the hazard and its health
35 effects to workers.

36
37 Fundamental reform to the nation’s current chemical law, regulations, rules, standards and policies is
38 necessary to protect health care workers, patients and their visitors, communities and the environment.
39 The Louisville Charter for Safer Chemicals provides a policy platform for creating safe and healthy
40 environments through such reform initiatives as:

- 41 • Require safer substitutes and solutions.
- 42 • Phase-out persistent, bio-accumulative, or highly toxic chemicals.
- 43 • Give the public and workers the full right-to-know and participate.
- 44 • Act on early warnings.
- 45 • Require comprehensive safety data for all chemicals.
- 46 • Take immediate action to protect communities and workers.

1
2 Nurses often place their own health and safety secondary to those of patients. They have a right to know
3 about their workplace environment. Nurses and the profession must advocate for a healthy and safe
4 workplace with a significant reduction in chemicals exposures for all nurses regardless of nursing
5 specialty or health care setting.
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9 **REFERENCES:**

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36 *and the environment*. Geneva: World Health Organization.
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39 **Past House Actions:**

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41 2004: Environmental Health Principles in Nursing Practice
42 2004: Inappropriate Use of Antimicrobials in Agriculture
43 1997: Reduction of Health Care Production of Toxic Pollution
44 1995: Indoor Air Quality
45 1992: The Profession's Responsibility for the Occupational Health, Safety and Wellness of Nurses
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1 **Relates to ANA Strategic Goals: (Please Check One)**

2

3 **I. Professional Practice Excellence**

4 ANA successfully champions professional nursing excellence through standards, code of ethics,
5 credentialing and professional development.

6

7 **II. Healthcare & Public Policy**

8 ANA is an acknowledged leader in the formulation of effective healthcare and public policy as they
9 affect workplace issues related to nursing and the adequate supply of nurses.

10

11 **III. Knowledge & Research**

12 The nursing healthcare community looks to ANA as the recognized source for accurate, comprehensive
13 health policy information.

14

15 **IV. Unification**

16 ANA has a structure that facilitates unification and advancement of the profession.

17

18 **V. Workforce & Workplace Advocacy**

19 Nurses are recognized as essential providers and valued decision makers in all practice settings.

20

21 **VI. does not relate to ANA Goals**

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26 **Relates to ANA Core Issues:**

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28 **Appropriate Nurse Staffing**

29 **Nursing Shortage**

30 **Workplace Rights**

31 **Workplace Health & Safety**

32 **Patient Safety & Advocacy**

2006 ANA HOUSE OF DELEGATES

SUBJECT OF PROPOSAL: Nursing Practice, Chemical Exposure and Right To Know

INTRODUCED BY:

CONTACT PERSON:

Proposed Implementation Activities: (Action Reports Only)

1. Endorse The Louisville Charter for Safer Chemicals.
2. Develop a legislative policy to support a fundamental reform of the nation's chemicals policy based on the principles in The Louisville Charter and The Precautionary Principle.
3. Meet with legislators to inform them of what the nursing profession wants with regard to such chemicals policy reform, the perceived links between chemical exposures and the public's health.
4. Work collaboratively with the CMAs and specialty nursing organizations to advance a chemicals policy reform agenda and to increase support for nurses' right-to-know about chemical exposures.
5. Support federal research to better understand the relationship between health and the environment especially with vulnerable populations
6. Develop an enhanced ANA-sponsored educational initiative for nurses related to potentially harmful chemicals in the health care industry; alternative, safer substitutes; protecting self, patients, families and communities; and understanding their right-to-know.