

Environmental Health Nursing Research Priorities. Enhancing methodological innovations and rigor in:

Population of Focus	Setting/Location	Precision Science	Big Data and Data Analytics	Environmental Health Determinants/Exposures	Interventions
<ul style="list-style-type: none"> * Vulnerable populations (children, prenatal, older adults, racial/ethnic under-represented, genetically at risk groups) * High risk occupations * Geographic communities overburdened with environmental pollution * EJ communities * Clinically at risk populations * At risk occupations (special emphasis on healthcare providers) * Family systems 	<ul style="list-style-type: none"> * International/ Global Health * Occupational Environment * Home Environment * School Health * Geographically defined population 	<ul style="list-style-type: none"> * Environmental Endotypes of Symptom Clusters, causal pathways to disease development and exacerbation * Develop and validate new Biomarkers of Body Burden (internal dose) * Validate of objective measures of personal exposure * Personalized prevention interventions * Report back of exposure, biomarker, and physiologic data * Phenotype/endotype identification * Gene-environment interactions (includes epigenetic measures) * Symptom clusters * Pollutants transformation and interaction in the environment and body 	<ul style="list-style-type: none"> * Visualization for stakeholder engagement * Multi-level analyses * Emerging techniques and large dataset linkages (e.g. machine learning) * Clinical/public health practice informatics * Secondary data analyses * Developing/testing novel digital applications * Big genomics data * Big data and precision nursing 	<ul style="list-style-type: none"> * Smoke/vaping exposure (includes second and third-hand) * Climate/Climate Change (Extreme events exposures) * Ambient Pollutants (industrial, traffic, extreme events) * Heavy Metals in air, water, food, and soil * Personal chemical exposures (e.g. pesticides, building materials, personal care products) * All hazards: CBRNE * Indoor exposures * Allostatic load (stress, adverse childhood events, noise, etc.) * Support development and validation of the Climate Health and Nursing Tool (CHANT) 	<ul style="list-style-type: none"> * Disaster/disaster preparedness * Environmental Risk Communication/Addressing perceived risk * Smoking Cessation, * Raise awareness * Environmental Health Education * Environmental Health Assessment * Organizational Sustainability * Symptom Management * Patient education and self-management * Indoor/outdoor Environmental modification * Policy

What distinguishes environmental health nursing research? Often interdisciplinary, defined by the public health problem. Use of the symptom science model with clinical and public health practice implications and applications relevant to the scope and standards of nursing.

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