

The Expansion of the Northern Kentucky Nursing Research Collaborative to Address Community Health Outcomes

The NKNRC at Work

The Northern Kentucky Nursing Research Collaborative (NKNRC) was established in 2005 and its purpose was to link the clinical resources of local hospitals and medical practices with the academic resources of Northern Kentucky University for the advancing nursing research throughout the Northern Kentucky region. The Collaborative success can be attributed to the partnerships with Rho Theta Chapter, Northern Kentucky University and community partners, that included St. Elizabeth Medical Center, St. Luke Hospitals, Riverhills Healthcare, Northern Kentucky Independent District Health Department, Health Point Family Care, and others. The Rho Theta Chapter continues to support the Collaborative by acting in an advisory board capacity, as well as, funding of the Vision Award. The Collaborative is possible due to the dedication and time commitment of close to 20 members who serve to oversee the conference, poster day and support participants as they complete their research. Members are update on the Collaborative events through the member list serv, the Rho Theta Blackboard shell and the group Facebook account. The NKNRC recently held its 4th Annual Nursing Research Conference with approximately 75 community nurses and nursing students in attendance. This event offered sessions on qualitative and quantitative nursing research, nursing research statistics, how to write for publication, and how to develop a professional nursing research poster. In the months following the conference, students, faculty, and community nurses are provided with statistical consultation and poster printing and design assistance through NKU's services at no charge or reduced rates. This support is offered to encourage nurses to create their own research posters for submission in the NKNRC Poster Reception and Awards Ceremony that is held every April.

Participation by Community Partners

There has been tremendous buy in and participation by NKNRC partners. The NKNRC Poster Reception was held April 24, 2008. It had been scheduled to occur in the atrium of St. Luke Hospital, but the venue was changed to the Hilton Hotel ballroom because the number of entrants exceeded the space available at St Luke. Forty five nursing posters were presented by the nursing community at this event. Continuing Education Units were granted for conference attendance and three awards were presented. A \$500 award, entitled "NKNRC Researcher of the Year" was sponsored by St. Luke Hospitals and presented to the nurse researcher whose project held the most promise for advancing nursing knowledge. A \$250 award entitled "Vision: Early Research", sponsored by Riverhills Health Care, was presented to a graduate student who had designed an exemplary model for a research project, but had not yet completed the research. The final \$250 award sponsored by the Rho Theta Chapter of Sigma Theta Tau International was entitled "Vision Award: Exemplary Nursing Project". This award was given to three nursing students who reported on significant project outcomes. Interestingly, the students selected for this award were chosen because of their work to complete video streaming of NKNRC conference presentations. These videos are now available for all NKNRC partners and NKU nursing students to view on Blackboard, NKU learning platform.

Expansion of the NKNRC: The Lead Exposure Control (LEC) Initiative

To further expand the impact of the Collaborative, the NKNRC Grant Directors applied for and were awarded a two year project continuation grant from the George Renaker, MD Charitable Foundation in the amount of \$45,870 in February 2008. The focus of this grant is not only to continue the work of the NKNRC, but also to expand our work to include nursing interventions that address the poor health outcomes of Northern Kentucky. The first health concern being addressed through this initiative is the serious problem of lead poisoning among children in Newport and Covington. The NKNRC Lead Exposure Control (LEC) Initiative will receive referrals of children under the age of six from the Northern Kentucky Independent District Health Department. To participate in the LEC Initiative, children will be identified as having risk factors for lead poisoning by the Health Department, but will have presented with blood lead levels that fall *outside* the state guidelines for direct intervention. The goal of the LEC arm of the NKNRC is to proactively provide primary interventions that prevent blood levels from further elevation, and in fact, reverse those levels. Interventions will include family education, Lead Safe Home training classes, and free home lead test kits (approved for use by EPA). Parents will be trained to test their own homes so that lead hazards can be identified and addressed, and further exposure to children in the household minimized. Families participating in the LEC Initiative will also be eligible for home based interventions such as cleaning supplies; HEPA filtered vacuum cleaners, 10 gallons of approved paint, top soil, mulch, and grass seed. If the home requires further lead hazard control, referrals for financial counseling and loan application assistance will be provided

As a function of the NKNRC-LEC Initiative, nursing students completing course requirements for nursing research, community and public health nursing and leadership will have the option of working on service learning projects for this initiative. Three groups of students have already completed educational programs for elementary, middle school age children, and caregivers with lead poisoned children. The students also developed age appropriate pre and post tests and obtained IRB approval. Presently a group of students are working on a lead education offerings that will be web based, age appropriate for elementary and middle school age children that can be used in the classroom. Lead screening initiatives also include service learning opportunities for students in the public health nursing classes.

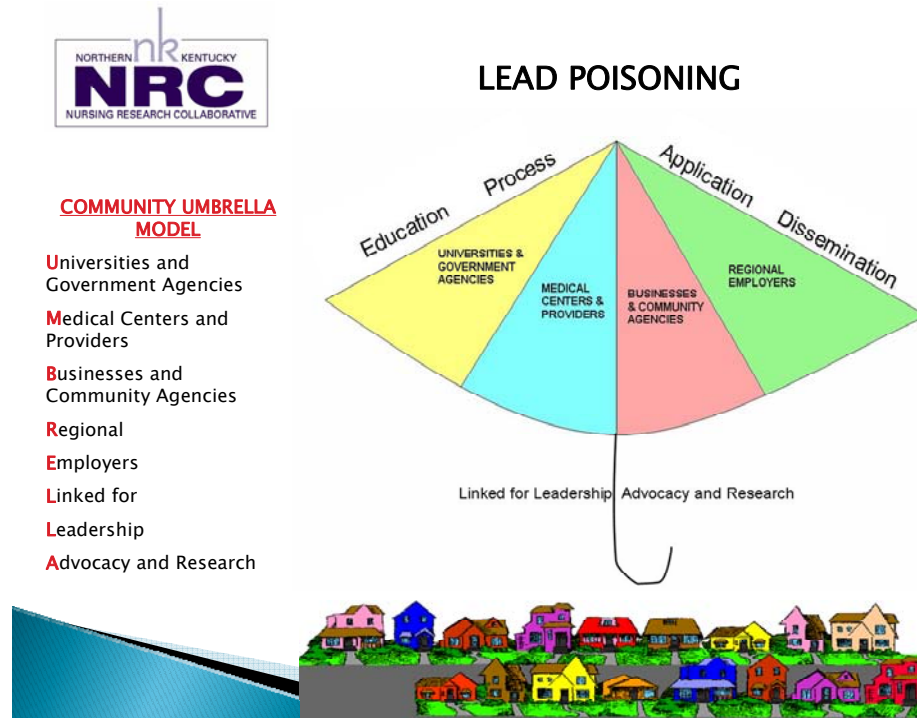
The purpose of the NKNRC Lead Hazard Reduction Initiative is to:

- Increase the number of nurse researchers in the Northern Kentucky area who are educationally prepared to deliver nursing care that is based on research outcomes and scientific inquiry.
- Utilize a problem based learning strategy that partners NKU nursing students and community Registered Nurses for the conduction of research projects that explain the problem of lead poisoning in Northern Kentucky's children.
- Implement primary prevention strategies to dramatically reduce or eliminate the progression of lead poisoning among children who are chronically exposed to lead contaminated housing stock in designated areas of Kenton and Campbell Counties.

- Measure project outcomes and incorporate successful strategies into a Lead Abatement Community Model that can be applied to the long term management of lead hazards and the ultimate elimination of lead poisoning in Northern Kentucky children.

- Disseminate research findings through publications, presentations, and during annual Nursing Research Poster Receptions sponsored by partners of the NKNRC.

The NKNRC’s Community UMBRELLA Model



The *Community UMBRELLA Model*, developed by NKRC Project Directors, incorporates interdisciplinary strategies and functions as the organization’s operational framework for reversing the poor health outcomes of Kentuckians. Collaborative and diverse partners from university and governmental programs, medical centers and health care facilities, businesses and non-profit agencies, and regional employers in the national and global market have the capacity to contribute academic, operational, intellectual and financial resources to the NKNRC. Current and future partners who contribute to the Community UMBRELLA Model are as follows:

University and governmental programs: University of Northern Kentucky, Gateway Community and Technical College, Northern Kentucky Independent District Health Department,

Medical centers and health care facilities: St. Elizabeth Medical Center, St. Luke Hospitals, Riverhills Health Care, Health Point Family Care

Businesses and non-profit agencies: Brighton Center, Accountability and Credibility Together, Henry Hosea House, People Working Cooperatively, Newport Independent Schools, George A. Renaker Charitable Foundation, Sigma Theta Tau International Nursing Honor Society

Regional

Employers in the national and global market: General Electric and Proctor and Gamble (prospective future partners)

Linked in

Leadership and

Advocacy

The *Community UMBRELLA Model* can be applied to *any* chosen Kentucky health indicator that the NKNRC chooses to collectively address through carefully identified student and diverse community interventions. The NKNRC has chosen to address the serious problem of lead poisoning among the children of Kenton and Campbell Counties as its first focus for population based research and interventions because of the alarming number of children in the Northern Kentucky area who are considered at high risk for lead poisoning. Within a seven zip code area of Newport and Covington, a ***total of 7,910 children are considered to be at high risk for lead poisoning*** (Ky. Department for Public Health, 2006). These high risk areas will be the target of the NKNRC's community based interventions beginning summer 2008.

Summary

The Northern Kentucky Nursing Research Collaborative has had a dramatic influence on the use and application of nursing research in our community. With the expansion of the model to include the Lead Exposure Control Initiative, the NKNRC is positioned to positively impact the many serious health concerns facing Northern Kentucky. The NKNRC's Community Model can be applied to other health concerns specific to our region, and can serve as a foundation for future collaborative interventions that will improve Kentucky's health outcomes.