

NCI TOBACCO CONTROL MONOGRAPH SERIES

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GREATER THAN THE SUM

Systems Thinking in Tobacco Control
MONOGRAPH EIGHTEEN

18

Major Conclusions

Greater Than the Sum: Systems Thinking in Tobacco Control describes key lessons from the first two years of the Initiative on the Study and Implementation of Systems (ISIS). The ISIS project, funded by the National Cancer Institute, was one of the first major coordinated efforts to explore the application of systems thinking approaches and methodologies to public health. The "Major Conclusions" below summarize the findings and lessons learned in the first two years:

- Tobacco control is at a crossroads because tobacco use is increasingly recognized as a complex adaptive system involving biological, behavioral, and environmental influences.
- Systems thinking has the potential to transform tobacco control research, practice, and policy by improving collaboration and by providing a more dynamic and adaptive evidence base for practice and a deeper knowledge about the impact of tobacco prevention and control activities.
- Systems organizing encourages the transformation to a systems culture by addressing the core issues: vision and paradigm, barriers, leadership, and the need for an ongoing learning environment for systems thinking.
- System dynamics encompasses qualitative and mathematical simulation approaches to model dynamic relationships that evolve over time, and can simulate behavior including possible unintended consequences and long-term effects.
- System networks of tobacco control stakeholders form a foundation for a systems environment in tobacco control, replacing "silos" with linkages of people and resources that transcend geography and discipline.
- Systems knowledge management and translation form a key component of systems approaches for tobacco control, examining purpose, people, process, and products within a broader knowledge infrastructure.
- Integration and synthesis of systems approaches are key to a systems thinking environment for tobacco control, moving toward a more adaptive system that changes public health outcomes. Achievement of this goal involves creating a vision, developing capacity, building planning models, and establishing meaningful and adaptive evaluation measurements.
- Capacity building for systems thinking touches on the resources needed for bringing a systems thinking environment to fruition in tobacco control.

For More Information

For more information about this monograph, go to

<http://www.cancercontrol.cancer.gov/tcrb/monographs/18/index.html>.

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