

Practical Example/Safety Culture From a High Reliability Organization United States Nuclear Regulatory Commission

The United States Nuclear Regulatory Commission (NRC) sets all policies and regulations that govern nuclear reactor and nuclear materials safety in the U.S. The NRC employs over 4,000 people and has an annual budget of about \$1 billion to ensure that the commercial use of nuclear materials in the U.S. is safely conducted. NRC safety policies apply to all 100 nuclear power plants, the handling and storage of nuclear materials and nuclear security as well as the storage of radioactive waste.¹ In 2011, the NRC adopted a revised Safety Culture Policy Statement that establishes expectations for all individuals and organizations subject to NRC regulatory oversight. The Policy requires “a positive safety culture commensurate with the safety and security significance of their activities and the nature and complexity of their organizations and functions.”² Over the years, the NRC has modified its Safety Culture Policy to include important safety practices like “Freedom of Employees in the Nuclear Industry to Raise Safety Concerns without Fear of Retaliation” and improvements to the Reactor Oversight Process to strengthen the agency’s ability to detect potential safety culture weaknesses during inspections and performance assessments. The NRC defines nuclear safety culture “as the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.”³

The NRC’s Safety Culture Policy Statement defines a positive safety culture through nine “traits” that describe patterns of thinking, feeling, and behaving that emphasize safety, particularly in goal conflict situations. Goal conflicts occur when safety goals come into potential conflict with production, scheduling, or financial/cost control goals.⁴

As the chart below describes, the NRC’s experience has shown that certain personal and organizational traits are present in a positive safety culture. These

¹ [nrc.gov/about-nrc/organization & functions](http://nrc.gov/about-nrc/organization&functions)

² nrc.gov/about-nrc/safety-culture/sc-policy-statement

³ nrc.gov/about-nrc/safety-culture/sc-policy-statement

⁴ [nrc.gov/traits of a positive safety culture](http://nrc.gov/traits-of-a-positive-safety-culture)

attributes of a positive safety culture start with leadership – where leaders demonstrate a strong commitment to safety in both their decisions and their behaviors. All staff are expected to take personal responsibility for safety and therefore, be personally accountable for their behaviors and actions. A safe culture is a respectful work environment where trust and respect are the norm and where staff feel free to raise safety concerns without fear of retaliation, intimidation, harassment, or discrimination. The “secret sauce” of high reliability organization performance is instilling all staff with a “questioning attitude” where individuals avoid complacency and are constantly mindful of both the latent and active hazards that are ever-present in complex systems and processes and seek to identify any process anomalies BEFORE they cause harm.

The NRC nine traits of a positive safety culture, if applied in hospitals or health care systems, would have an immediate positive impact on the adoption of a safety culture and on reducing the occurrence of serious safety events.

The following are traits of a positive safety culture:

1. Leadership Safety Values and Actions

Leaders demonstrate a commitment to safety in their decisions and behaviors.

2. Problem Identification and Resolution

Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance.

3. Personal Accountability

All individuals take personal responsibility for safety.

4. Work Processes

The process of planning and controlling work activities is implemented so that safety is maintained.

5. Continuous Learning

Opportunities to learn about ways to ensure safety are sought and implemented.

6. Environment for Raising Concerns

A safety conscious work environment is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment, or discrimination.

7. Effective Safety Communication

Communications maintain a focus on safety.

8. Respectful Work Environment

Trust and respect permeate the organization.

9. Questioning Attitude

Individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action.

There may be traits not included in this SOP that are also important in a positive safety culture. It should be noted that these traits were not developed to be used for inspection purposes.

