File 20120229.1030: Some of Kletz's principles, notably *intensification* ('what you don't have can't leak') seem inapplicable to software engineering, but others, particularly *substitution* (using a safer material in place of a hazardous one) are paralled by use of languages like Ada, or Java, over C and assembly language.

Attenuation or moderation (using a hazardous material under the least hazardous conditions) corresponds to a software development process that includes peer review, change control boards, and configuration management.

Source: Kletz and Amyotte [1].

In cross domain systems, people don't usually die but national security can be harmed.

References

[1] Trevor Kletz and Paul Amyotte. *Process Plants: A Handbook for Inherently Safer Design.* CRC Press, Boca Raton, Florida, second edition, 2010. ISBN 978-1-4398-0453-1.