

Human Damage Mapping tool

Description of the tool:

The goal of the tool is to determine a probabilistic damage mapping of people populating an urban area in which a blast attack (terrorism) occurs.

Different levels of human damage are considered based on probabilistic methods: eardrum rupture, lung hemorrhage, death by impact

The obtained results are fundamentally based as they part from numerical model analyses to obtain the key parameters (peak pressure and specific impulse) for each position.

Needed inputs are: the geometry of the environment considered the location and type of the explosion.

Added value:

- Easy to use tool providing not only the maximum possible impact of an explosion but also the maximum probable impact.

Intended use:

- Urban planning
- Urban and Critical infrastructure Risk assessment

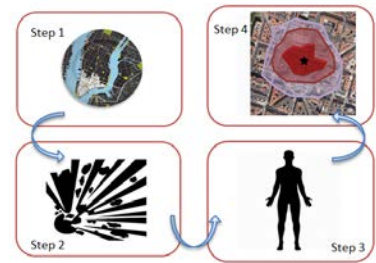
For further information on this tool, or the HARMONISE Project, please contact:

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Methodology

In order to use the human damage mapping tool, the following steps must be followed.

- 1) Define the Urban Area
- 2) Obtain the key blast parameters
- 3) Apply the human damage algorithms
- 4) Visualize the results



Below a visual example of how to use the tool as well as the results provided in an underground infrastructure.

