

# Adaptive Resilience Management in the Port

## Description of an Interdisciplinary Project

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The **aim of the project** is to improve the resilience and capability in case of a mass-casualty incidences (MCI) with a high number of extremely infectious patients due to the development of an emergency plan and a training concept for rescue workers and relevant stakeholders in the port.

### Background

The cruise industry is facing a **constantly growth of infectious diseases** reaching the extent of MCIs. A MCI is characterized by an occurrence of injured or infected people that exceed the resources normally available from local resources. The most important interface between the ship and the landscape is the **port with its critical infrastructure**. To prepare responding staff for such events specific emergency plans and trainings should be in place.



### Methods

The main task will be the analyses of damage scenarios due to an infectiological emergency with numerous stakeholders. Based on this, a suitable adaptive emergency concept with a corresponding training concept will be developed taking communication patterns of relevant stakeholders into account. The concepts will be tested for feasibility and coherence through **simulation exercises**. The training and emergency concept will be finally evaluated in a **full exercise** in terms of practicality.

### Results

The study includes all stakeholders within the rescue chain of a MCI with infected people in the Port of Hamburg, Germany. The simulations contribute to **more resilient structures in port** of Hamburg areas. For this purpose, concepts for coping with this major emergency and an **adaptive training concept** are created.



### Conclusion

The results can be **transferred** to comparable infrastructures to cope with a MCI with infected people in the port area.

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