Mechanical compressions on lifeboats at sea

No registrations found.

Ethical review Positive opinion **Status** Recruiting

Health condition type -

Study type Interventional

Summary

ID

NL-OMON24729

Source

NTR

Brief title

MCD on lifeboats

Health condition

Cardiac arrest on sea

Sponsors and support

Primary sponsor: University Medical Center Groningen, Department of Anestesiology **Source(s) of monetary or material Support:** None

Intervention

Outcome measures

Primary outcome

quality of thoracic compressions, measuring compliance and performance relative to published standards:

- mean compression depth
- mean compression rate
- percentage of correct compression depth

- percentage of not leaning on the thorax
- percentage of correct hand placement on the thorax

Secondary outcome

Demographics of the crewmembers Weather/sea conditions Opinion of crewmembers regarding mechanical compressions

Study description

Background summary

Performing adequate resuscitation of a drowning victim on a lifeboat is challenging due to factors such as ship movements and long transport times, especially during bad weather conditions. Current guidelines recommend considering the use of a mechanical chest compression device (MCD) during transport, but to our knowledge, the feasibility of using mechanical compression devices on lifeboats at sea has not been investigated. The primary objective of the current study is to investigate the feasibility of the use of a mechanical compression device for thoracic compressions on a lifeboat at sea.

Study objective

feasibility study whether mechanical chest compression device (MCD) can be used on sea

Study design

In total: 2-4 measurement sessions (different wave height conditions). Per measurement session: 3-4 crewmembers will perform thoracic compressions during 2 periods of each 5 epochs of 6 minutes on a resuscitation manneguin.

Intervention

Comparing thoracic compressions by lifeboat crewmembers of the Royal Netherlands Sea Rescue Institution (KNRM) versus an MCD during a simulation on a resuscitation mannequin.

Contacts

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Eligibility criteria

Inclusion criteria

- He/she is an active lifeboat crew member (including trainees/aspirants)
- Age 18 years or older
- Informed consent provided.

Exclusion criteria

- KNRM members who are not part of a lifeboat crew (office members, inspectors, board, etc.)
- (possible) pregnancy
- Physical restraints

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 11-12-2019

Enrollment: 20

Type: Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion

Date: 11-12-2019

Application type: First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

NTR-new NL8222

Other METc Groningen : METc 2019/620

Study results