

# Effectiveness of VolleyVeilig: the prevention of injury among youth volleyball players

No registrations found.

|                              |                |
|------------------------------|----------------|
| <b>Ethical review</b>        | Not applicable |
| <b>Status</b>                | Pending        |
| <b>Health condition type</b> | -              |
| <b>Study type</b>            | Interventional |

## Summary

### ID

NL-OMON20472

### Source

Nationaal Trial Register

### Brief title

VolleyVeilig Jeugd

### Health condition

Musculoskeletal injuries (acute and overuse injuries)

## Sponsors and support

**Primary sponsor:** Department of Public and Occupational Health, Amsterdam UMC, locatie VUmc; Dutch Consumer Safety Institute VeiligheidNL; Nevobo, Dutch Volleyball Federation; Universitair Sportmedisch Centrum, University Medical Center Groningen; Dotcomsport

**Source(s) of monetary or material Support:** ZonMw, the Netherlands Organization for Health Research and Development (50-5360098102)

## Intervention

## Outcome measures

### Primary outcome

Injury rate, severity of injuries and burden of injuries  
Compliance with intervention

## **Secondary outcome**

Facilitators and barriers for the uptake of the VolleyVeilig youth programme in daily practice of Dutch volleyball clubs

# **Study description**

## **Background summary**

Both acute and overuse injuries are common among volleyball players. The incidence rate ranges from 1.7 to 10.7 injuries per 1,000 playing hours. Depending on the definition used, 25-35% of injuries are sustained by youth players. Volleyball injuries most often involve the shoulder, knee and ankle. Consequently, an intervention called 'VolleyVeilig' was developed in order to prevent or reduce the occurrence of shoulder, knee and ankle injuries in youth and adult volleyball players. 'VolleyVeilig' is an exercise-based warming-up programme. The effectiveness of 'VolleyVeilig' has been recently assessed in adult Dutch recreational volleyball players. The next step is to evaluate the effectiveness of the 'VolleyVeilig' intervention among youth volleyball players. A quasi-experimental study, based on a prospective controlled design, will be conducted over one volleyball season (September 2019 – April 2020). The intervention group will be asked to use 'VolleyVeilig' for youth players, and the control group will be asked to continue their usual warming-up practice during the course of the study. Allocation is based on competition region. Nevobo organizes its recreational competitions in four different geographical regions, and recreational teams compete against each other within a geographical region. Allocation by competition region is chosen to avoid any contamination and competitive bias within a competition region. Volleyball exposure and injuries are registered weekly per player over the volleyball season (September 2019 - April 2020). The aim of the proposed study is to evaluate the effectiveness of the 'VolleyVeilig' volleyball warming-up programme for youth players over one-season (2019-2020) among youth volleyball players aged 10 to 16 years on volleyball related injury rate, severity, and burden of injuries. Secondary aim is to evaluate the delivery and use of the programme within the context of the effectiveness study, in order to explain programme outcomes and gain insight in facilitators and barriers that influence the uptake of the programme by youth volleyball trainers/coaches (process evaluation).

## **Study objective**

The hypothesis is that the injury rate, severity and burden of injury over one-season is lower among youth volleyball players using 'VolleyVeilig' than among youth volleyball players not using 'VolleyVeilig' (volleyball as usual).

## Study design

Aug/Sept 2019 - Inclusion

Exposure, injuries and compliance are measures weekly during the volleyball season (Sept 2019 - April 2020)

April / May 2020 - Process evaluation

May 2020 - Study end

## Intervention

The intervention 'VolleyVeilig' (available in Dutch) provides volleyball trainers/ coaches and players with a good and standard warming-up programme to prevent volleyball related injuries, and was specifically developed for this purpose by Nevobo and VeiligheidNL in cooperation with sport physiotherapists, volleyball trainers/coaches and other experts. The programme includes more than 50 distinct exercises, each warming-up will take up to 15 minutes, and has to be conducted at least twice a week prior to any volleyball activity (training or match). It provides volleyball trainers/coaches every week with a new warming-up programme that shows progressive increments in terms of intensity, frequency, duration and/or complexity.

## Contacts

### Public

Department of Public and Occupational Health, Amsterdam UMC, locatie VUmc  
Evert Verhagen

0204449691

### Scientific

Department of Public and Occupational Health, Amsterdam UMC, locatie VUmc  
Evert Verhagen

0204449691

## Eligibility criteria

### Inclusion criteria

Volleyball players aged 10 to 16 years, enrolled at one of the participating volleyball clubs and teams, who train under the guidance of a trainer/coach and participate in the Nevobo volleyball competition in the B- (14 to 16 years), C- (12 to 14 years) and D-youth category (10 to 12 years).

## Exclusion criteria

Teams are not eligible for study participation if the trainer/coach is not willing or able to register volleyball exposure and injuries weekly over one season for the players of his/her volleyball team.

## Study design

### Design

|                     |                                 |
|---------------------|---------------------------------|
| Study type:         | Interventional                  |
| Intervention model: | Parallel                        |
| Allocation:         | Non-randomized controlled trial |

**Control:** Active

### Recruitment

|                           |             |
|---------------------------|-------------|
| NL                        |             |
| Recruitment status:       | Pending     |
| Start date (anticipated): | 01-09-2019  |
| Enrollment:               | 480         |
| Type:                     | Anticipated |

### IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

|                   |                |
|-------------------|----------------|
| Not applicable    |                |
| Application type: | Not applicable |

## 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  | NL7651               |
| Other    | MEtc VUmc : 2019.109 |

## Study results