

**Report:**

**National CVD Prevention Coordinators (NCPC)**

**Workshop**

ESC Preventive Cardiology 2024

Athens

26 April 2024

# Programme

12:30 – 12:35	Welcome & Objectives of the workshop	E Cavarretta
12:35 – 13:40	<b>How is pre-participation screening (PPS) conducted across ESC member countries?</b>	
	<ul style="list-style-type: none"><li>• 1 case presentation - 5 minutes</li></ul>	E Cavarretta / D Niederseer
	<ul style="list-style-type: none"><li>• Discussion in groups - 25 minutes</li></ul>	All
	<ul style="list-style-type: none"><li>• In your country, is it mandatory to perform PPS in professional athletes?</li><li>• Is 12-lead ECG mandatory for PPS in professional and/or competitive athletes?</li><li>• Who is in charge of performing PPS in your country in professional and/or competitive athletes?</li><li>• Do you screen amateur athletes in your country and how?</li></ul>	
	<ul style="list-style-type: none"><li>• Comparison of outcome - 35 minutes</li></ul>	All
13:40 – 13:45	Closing remarks	E Cavarretta

# Co-chairs & Participants

## Co-chairs:

- **Elena Cavarretta**, Prevention Implementation Committee Chair
- **David Niederseer**, Prevention Implementation Committee member and National Coordinator for Austria

**Participants:** 21 National Coordinators and Representatives from 4 European risk regions



Low risk



Moderate risk



High & very-high risk

## Objective

Elena Cavarretta presented the objective of the workshop:

- Patient case presentation (David Niederseer)
- Discussion in groups by risk region: **“Is this athlete screened in your country and if yes, how?”**
- Presentation of the outcome of each group
- Comparison of pre-participation screening (PPS) between the different risk category countries.

# Patient Case



**David Niederseer**

## Case presentation

- Master Athlete 50y, male, BMI 24 kg/m<sup>2</sup>
  - During youth: played football in local club
  - Manager, working a lot
  - No symptoms, no prior medical condition
  - No running competition so far
  - Wants to run a Marathon
- Is this athlete screened in your country and if yes, how?

# Group Discussion



## Comparison of outcome



- Is this athlete screened in your country and if yes, how?
- In your country, is it mandatory to perform PPS in professional athletes?
- Is 12-lead ECG mandatory for PPS in professional and/or competitive athletes?
- Who is in charge of performing PPS in your country in professional and/or competitive athletes?
- Do you screen amateur athletes in your country and how?



# Low risk group - results

## Norway:

- Screening for this patient not mandatory, but patient or the team could pay for it privately (ECG, Echo, consultation, stress- and blood test)
- Screening is only performed if an international sporting body obliges to do so (cycling or soccer)
- no data available due to lack of infrastructure and a general lack of agreement that screening is beneficial

## Switzerland:

- Screening for this patient not mandatory, but athlete or club could pay for it

## Luxembourg:

- Amateur athletes:
  - Screening is mandatory for a determined list of sport activities in competition sport when performed in sport clubs (age 7-50 years) and is for free for athletes (at the age of 7, 12, 15, 20, 30, 40, 50 years, including ECG at rest; regulated by the sport federations after the age of 50 years).
  - The list is provided by the Ministry of Sports and screening is fully in charge of Luxembourg State (*“Réglement Grand-Ducal modifié du médico-sportif de 2016”*)
  - The type of medical examination is dependent on the category of activity and done in 7 official medico centers (only medical doctors with sport specialization who are members of the national sport medicine society) and approved medical practices by Ministry of Sports
- Professional and competitive athletes:
  - Screening is mandatory (including 12-lead ECG, echography and stress test), performed in the National Olympic Medical Center at CHL

## Austria:

- Screening and refund depends on the insurance and the state (9 different states in Austria).
- For professional athletes screening is standardized (either national or international body)

# Moderate risk group - results

Country	Is the athlete from the case presentation screened in your country ?	Is PPS mandatory in professional athletes	Is ECG mandatory for PPS in competitive and/or professional athletes	Who is in charge of performing PPS in professional and/or competitive athletes	Do you screen amateur athletes	How are amateur athletes screened
Finland	Voluntary	Olympic/international and those competing in international competitions. Rescreening dependent on governing sporting body	Yes (if PPS is mandatory)	Sport Institutes or Private Cardiologist	No	N.A.
Iceland	Voluntary	Only in top divisions. Rescreening dependent on governing sporting body.	Yes (if PPS is mandatory)	Team Doctor	No	N.A.
Malta	Voluntary	Yes, in certain disciplines, as dictated by international bodies. Rescreening dependent on governing sporting body	Yes (if PPS is mandatory)	Any Physician	Voluntary	H/P + ECG ± ECHO
Italy	Definitely	All professional/competitive athletes (>12Y), yearly. Non-competitive and amateur athletes only a 12-lead resting ECG	Yes (if PPS is mandatory)	Sport Medicine Physician	Voluntary, routinely no	H/P + ECG
Portugal	Voluntary	Mandatory for international / national competitions, rescreening dependent on governing sporting body	Yes (if PPS is mandatory)	General Practitioners / Cardiologists	Voluntary	H/P ± ECG

# High risk group - results

## Poland:

- Professional athletes receive: ECG/PA/Med Hx/PE
- For competitive athletes it is not mandatory and based on individual decision, mostly ECG and blood exams conducted
- Performed by family doctors, refunded by the state
- It can also be done in private practice

## Turkey:

- Screening for:
  - Competitive athletes: performed by general practitioners and checked also by a cardiologist
  - Professional athletes is mandatory: ECG, echo and stress test done by a cardiologist
  - Amateur athletes: Depending on the sports type and if there is a competition involved (for the presented case not necessary)
- No screening if training on individual basis or non-endurance sports.

## Hungary:

- PPS is mandatory for competitive level athletes, at both, professional and amateur levels. PPS core examination include ECG, auscultation of heart and lung, brachial blood pressure measurement, and urine test.
- Sports medicine specialists are in charge performing PPS.
- Is the athlete from the case presentation screened in your country? Voluntary.

# Very-high risk group - results

## Georgia:

- Screening for:
  - Professional athletes is mandatory with 12-lead ECG and done by sub-specialty sports cardiologists (special training)
  - Competitive athletes is done by General Practitioners
  - Amateur athletes: Medical history, physical examination, 12-lead ECG

## Lithuania:

- Screening is mandatory for professional athletes with 12-lead ECG, echo, and stress test, done by sports medicine doctors.
- The government pays for professional athletes' screening.
- The 12-lead ECG is mandatory for PPS in professional and/or competitive athletes.
- Sports doctors are responsible for performing PPS for professional athletes in Lithuania, and this is done free of charge. For competitive athletes, PPS is performed for a fee or can be performed by a family doctor and then referred to a cardiologist if needed.
- Amateur athletes can be examined by a sports medicine doctor, but they have to pay. Amateur athletes can be examined free of charge by family doctors and referred to specialists if necessary.

## Latvia:

- Screening is mandatory for professional athletes with 12-lead ECG, echo, stress test, done by sports medicine doctors and can be sent to cardiologists
- Screening of amateur athletes is done on an individual basis and is not mandatory
  - ECG, echo and test ergo if sent to a cardiologist

# Very-high risk group – results (continued)

## Romania:

- Mandatory check up for professional athletes, done by sports medicine doctors.
  - ECG for every screening: ECG, Treadmill test/CPET (depends on the type of sport), Echocardiography
  - Double check up before competition (12-lead ECG) according to European recommendations and sports law and every 6 months
- Pediatric population: medical examination mandatory (ECG and echo) after the age of 6 years before starting competitive sports
- Screening of Olympic athletes only in Bucharest mandatory
- Presence of sports medicine doctors is mandatory for marathons

## Ukraine:

- Professional athletes have a medical check-up every 6-12 months with ECG, treadmill test (no CPET), done by sports medicine doctors and cardiologists
- Screening for amateur athletes is not mandatory (under the responsibility of the athlete)

# Conclusions

- Despite recommendations, there is heterogeneity on how, when, by whom and how frequently pre-participation screening (PPS) is conducted in the ESC member countries.
- This is particularly evident for specific categories as paediatric, non-competitive and master athletes
- Thanks to the National Cardiovascular Prevention Coordinators (NCPCs) network and in collaboration with the nucleus of Sports Cardiology and Exercise, it will be important to continue and extend this mapping across all ESC member countries. Stay tuned!

# Thank you!

