

# **FEI™ GENERAL ASSEMBLY**

FEI Hyposensitivity Control System

# Background

## Problem

- Horses fracturing during Endurance rides

## Observations

- Proof of Endurance Horses being **nerve blocked** and during rides leading to sensitivity alteration consequently **loss of warning signal**.
- Intelligence also indicate extensive use of nerve blocks



# Introduction of the FEI Hyposensitivity Control System

## Scope

- 2019 Endurance rides
- Aiming to develop for other disciplines

## Objectives

- To protect horses from injury by identifying horses with lower limb hyposensitivity and stop them from competing in a ride
- Ensure a level playing field
- Deterrent effect on cheaters



# FEI Hyposensitivity Control System



**Based on study by**

Dr Morgane Schambourg, DMV, MSc, Dipl. ACVS/ECVS

Dr Polly Taylor, MRCVS, PhD, Dip. ECVAA

**Study supported by**

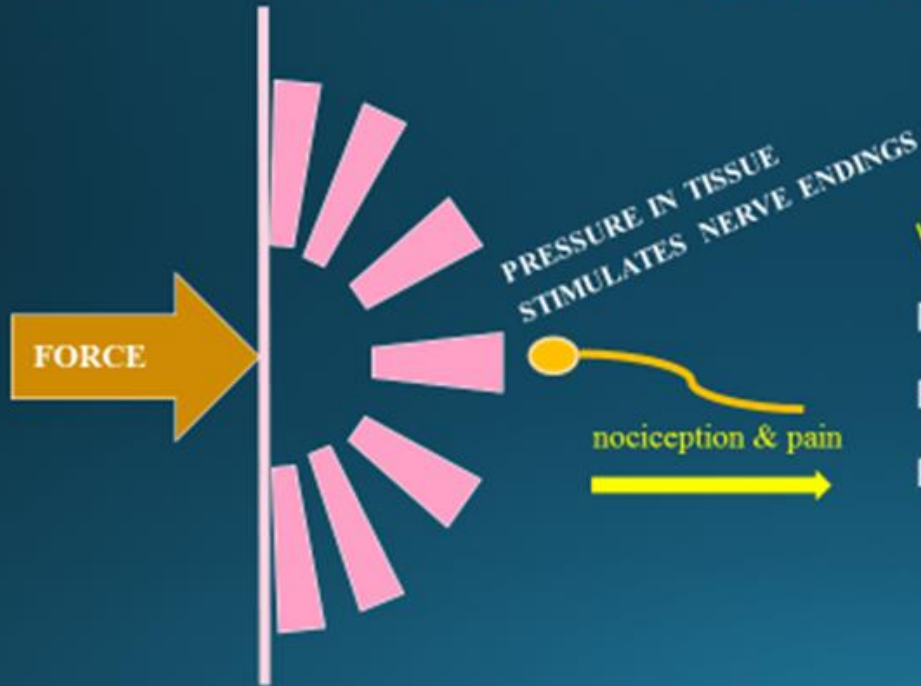
Boudheib Endurance

FEI

UAE NF



# MECHANICAL TESTING



Visible eviction reaction

No response if no sensation

Repeatable and atraumatic

Provides a quantifiable value (N)

# PROD AND LIMB ACTUATOR



“Soft” transducer :

- ✓ Air from syringe increases pressure in pneumatic actuator
- ✓ Pressure drives blunt-ended pin on skin
- ✓ Rate controlled by lights
- ✓ Stimulus stopped when horse reacts (picks up leg, stamps, noses leg)
- ✓ Force reading held on display

# MNT TESTING IN THE FIELD

- 2mm pointed tip
- Custom made pastern strap
- Remotely controlled
- Bilateral positioning



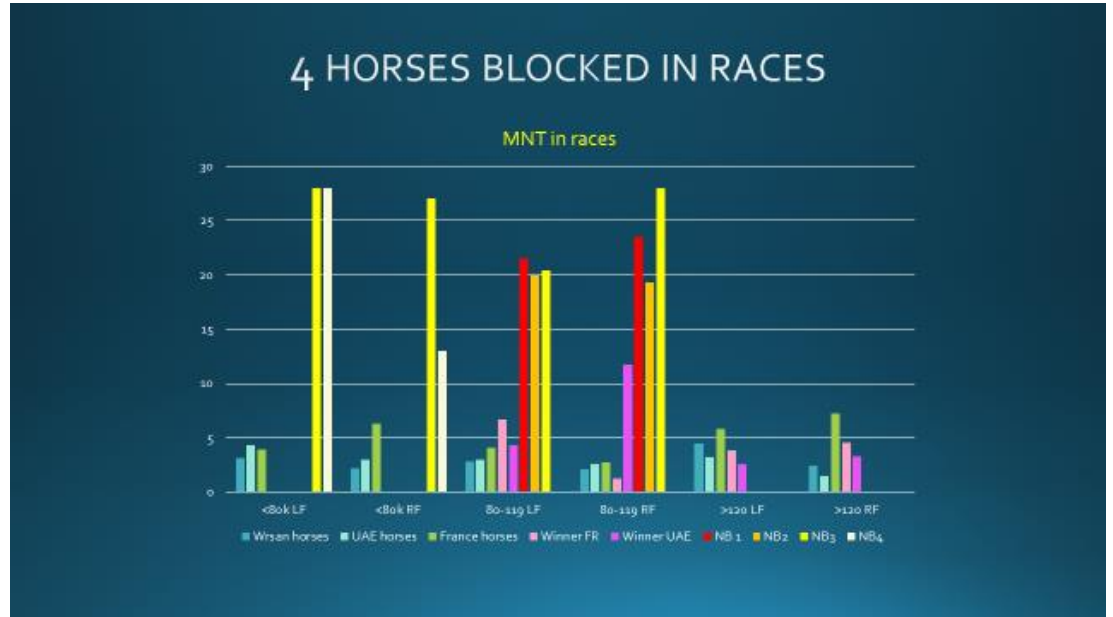
# The study

- Horses in rest
- Horses after cooling
- Horses at competitions
- Horses that blocked in experiment
- Horses that blocked in competition



# Conclusions

- Very clear differences
- between blocked and
- unblocked horses
  
- Safe system
- Reviewed science



# FEI Hyposensitivity Control System

## Scenarios when testing can take place

1. Pre-ride test
2. During ride test
3. After ride test

## Positive result

**18-19 Newton** would give a sufficient safety margin in order to avoid false positives.

Dr Schambourg et al's study indicate that nerveblocked horses would be clearly identified at this level.

# FEI Hyposensitivity Control System

## Organisation

- Administered and financed by the Veterinary Department within the FEI EADCMP
- Examinations carried out by Hyposensitivity Control System (HCS) Teams
- HCS Teams consists of two FEI Examining Veterinarians

# FEI Hyposensitivity Control System

## Equipment

- Approved and certified by the FEI
- Does not cause any injury to skin
- Biosecure
- Calibration protocol
- Video recording may be used

## Horse examined

### Negative

No actions

### Positive

- GJ member requested by HSC Team
- Horse is disqualified by decision of a GJ member following Examining Vet's advise. Withdrawal not allowed.
- No appeal, no re-examination
- EADCM – sampling
- Mandatory Rest Period 4 weeks + a mandatory negative HCS test before allowed to enter any CEN or CEI ride.
- FEI may open legal disciplinary proceedings depending on the facts/evidence

### Failure to have examination

- **Refusal** – See actions for Positive + Yellow Warning Card
- **Difficult horse** – Two attempts to measure. If not successful the horse is eliminated GJ. No warning card.
- **Withdrawal** – Not allowed

# FEI Hyposensitivity Control System

## Project to prepare for implementation

- Project lead by Dr Morgane Schambourg
- Recruit and train Examining Veterinarians for HSC
- Obtain equipment
- Develop biosecurity measures
- Develop protocols for controls, calibration and recording and reporting of data
- Testing and training in the Field of Play



**Thank you!**