

Less common Snow Sports **Injuries**

SITEMS CONGRESS 2016
INAWASHIRO-FUKUSHIMA JAPAN

Dr. TORRENS, Joan
CENTRE MÈDIC ORDINO-ARCALÍS
VALLNORD
ANDORRA

STUDY MADE FROM 2014 TO 2016 IN ANDORRA¹

LESS COMMON SNOW SPORTS

Speedride

Snow bikes

Adapted ski

Competitions:

Freeride

SBX (Snowboard Cross)

Ski Mountaineering

Where is ANDORRA?

EUROPE

SOUTH OF FRANCE
NORTH OF SPAIN



ABOUT ANDORRA:

LITTLE STATE WITH 71.700 RESIDENTS

468 SQUARE KM (ONE/THIRD SURFACE OF FUKUJIMA AREA)

AVERAGE ALTITUDE 2000 mts

LANGUAGE : CATALAN

CURRENCY : EURO

ORIGINAL NAME OF ANDORRA = AL DARRA (FOREST)

NACIONAL SPORT: SNOW SPORTS



ANDORRA

SKI AREAS

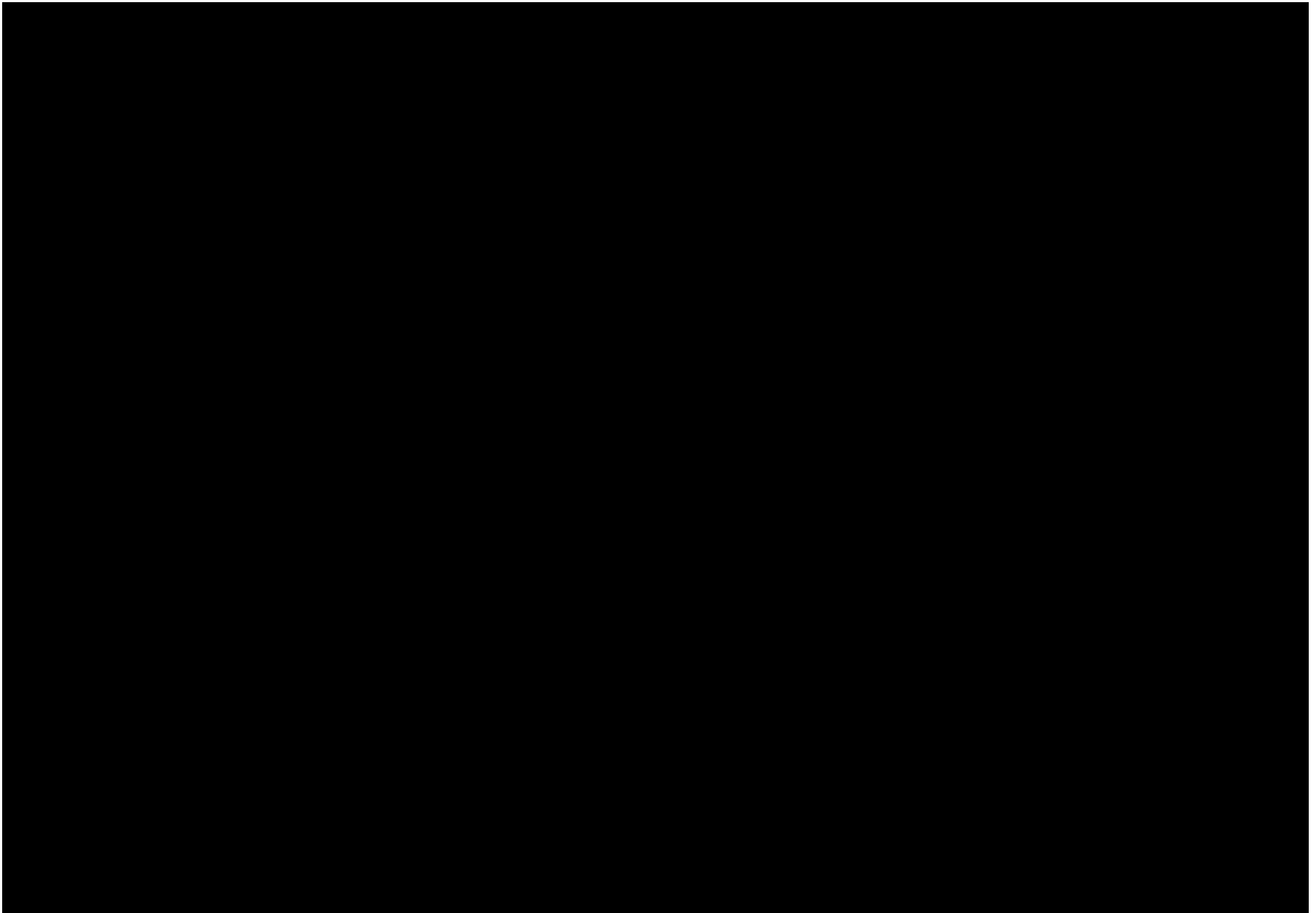
2 MAIN SKIING AREAS WITH 8 SKI RESORTS

200 SLOPES (300 km)

1.400 SNOW CANNONS

SKI ALTITUDE: 1.300m to 2625m

ARCALÍS-VALLNORD-ANDORRA



MEDICAL CENTERS IN 2 SKI AREAS

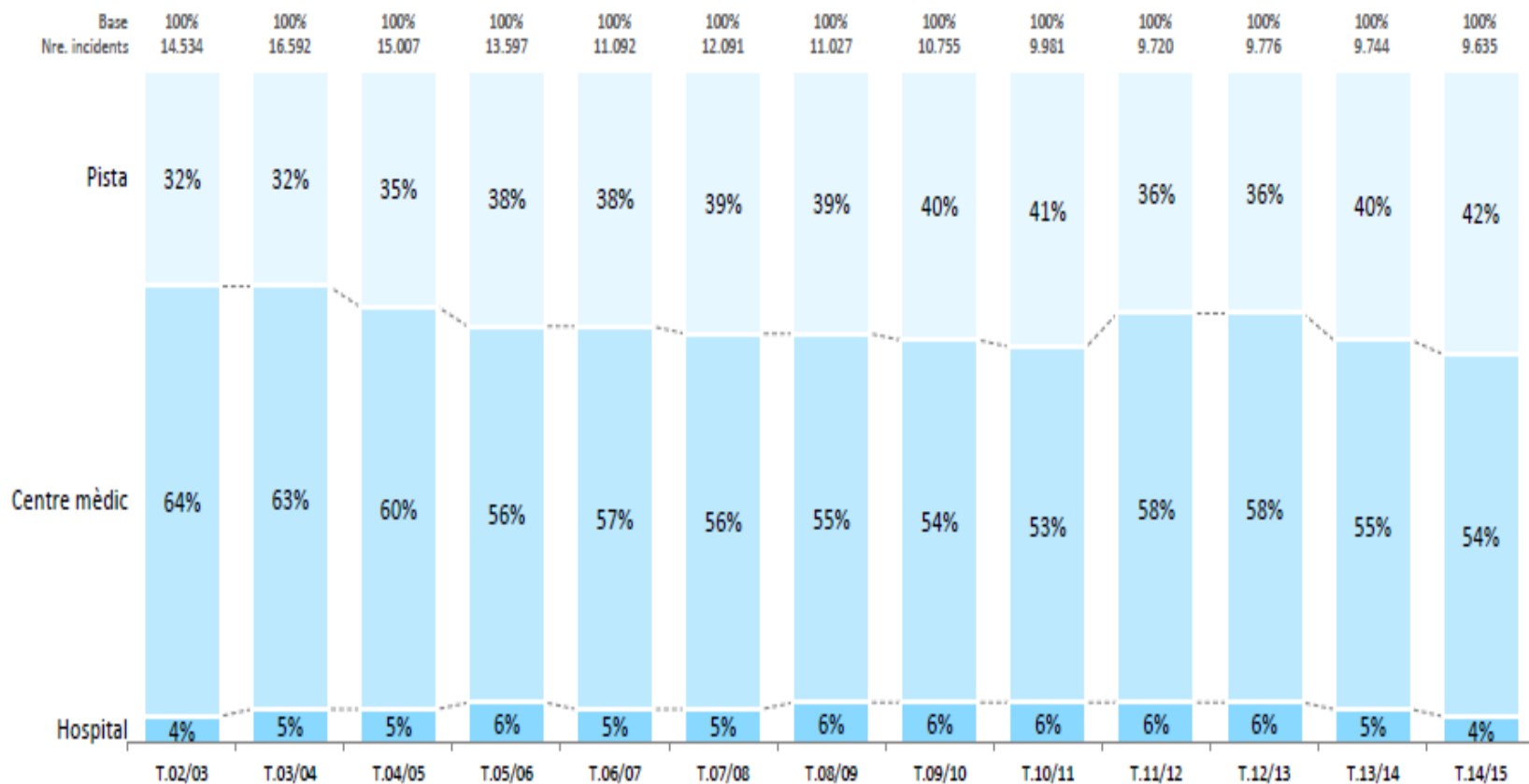
VALLNORD SKI AREA HAS 3 MEDICAL CENTERS

- ORDINO-ARCALÍS
- PAL
- ARINSAL

GRAND VALIRA SKI AREA HAS 5 MEDICAL CENTERS

- PAS DE LA CASA /GRAU ROIG (2)
- SOLDEU/EL TARTER (3)

THERE IS JUST ONE MAIN HOSPITAL, LOCATED IN ANDORRA LA VELLA



Andorra SKI statistics between 2003-2015 :

Total ski passes sold in the last 13 years: **30 Millions**

Total injuries : **153.551**

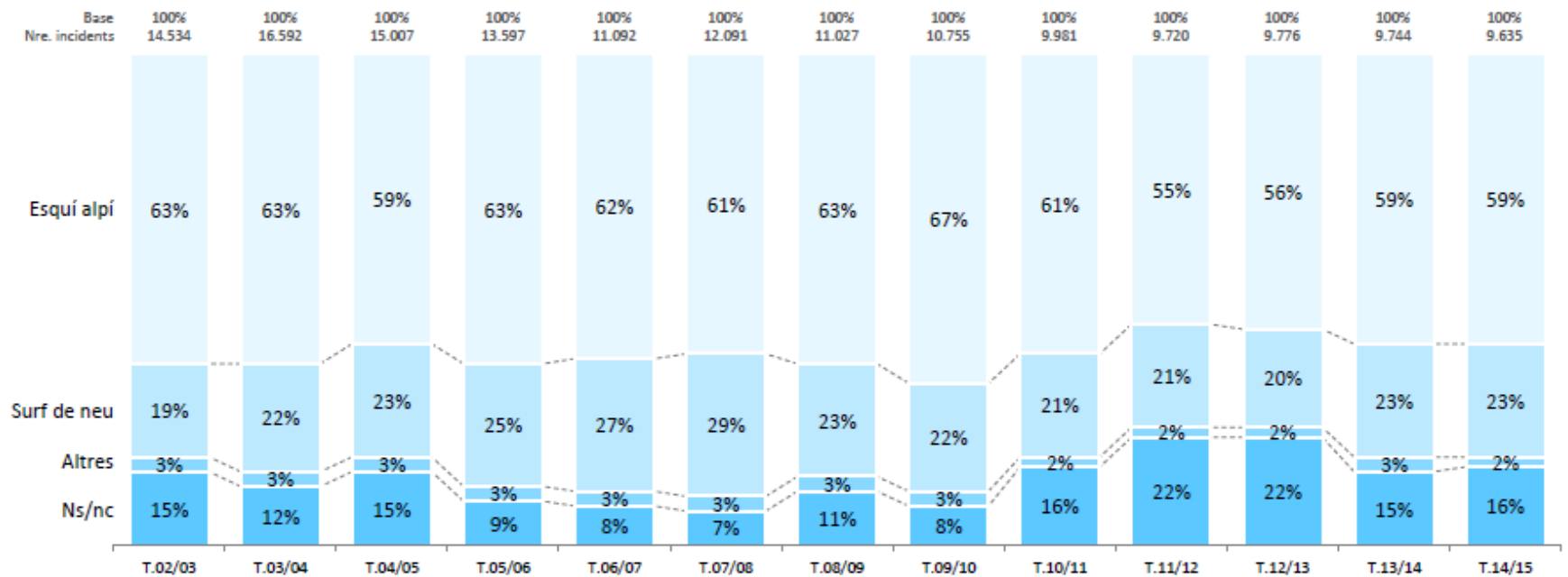
INDEX: **5‰**

2015

2.347.876 SKI PASSES SOLD

9.635 INJURIES

Index: 4 ‰



3% INJURIES CAUSED WITH LESS COMMON SNOW SPORTS

LESS COMMON SNOW SPORTS

- SPEEDRIDE**
- SNOW BIKE**
- ADAPTED SKI**

SPEEDRIDE



SPEEDRIDE TANDEM



How SpeedRide looks like



SNOWBIKE



POL ESPARGARÓ MOTO-2 WORLD CHAMPION



ARTIC SNOWBIKE



CLASSIC SNOWBIKE



ADAPTED SKI



ADAPTED SKI





ADAPTED SKI IN ORDINO-ARCALÍS



COMMON INJURIES OF LAST 3 YEARS (2013-2015):

SPEEDRIDE (3.480 Riders – 41.760 Flights)

6 POLITRAUMA INJURIES:

TRAUMATIC BRAIN INJURY (TBI), LOW LIMB FRACTURES, CHEST TRAUMA.

ADAPTED SKIING (< 1 X 1000 SKI PASSES SOLD)

3 INJURIES:

- CHEST TRAUMA WITH RIBS FRACTURES- COLLARBONE FRACTURE – COLLES WRIST FRACTURE.

- FATAL ACCIDENT WITH CHEST-ABDOMINAL TRAUMA

- CHEST TRAUMA WITH RIBS FRACTURE + PNEUMOTHORAX + SCAPULAR FRACTURE

SNOWBIKES (> 2 X 1000 SKI PASSES SOLD)

2 INJURIES OF NON-SEVERE PROGNOSIS

MECHANISM OF INJURY:

Collision with natural obstacle

Collision with installation

Collision with an other ski-snow user

FREQUENT INJURIES:

HIGH ENERGY IMPACT TRAUMA

- High speed

- Heavy material (snowbike-adapted ski- paragliding)

Speedride injury



LESS COMMON COMPETITIONS

FREERIDE

SBX (Snowboard Cross)

SKI MOUNTAINEERING

FREERIDE



FREERIDE



FREERIDE WORLD TOUR 2015 ARCALÍS-ANDORRA

FREERIDE WORLD TOUR 2016 ARCALÍS-ANDORRA INJURIES

67 PARTICIPATING RIDERS

3 INJURIES

1 TRAUMA BRAIN INJURY (WITH LOSS OF CONSCIOUSNESS)

1 FACIAL TRAUMA WITH TEETH FRACTURES

1 KNEE INJURY

SBX FIS WORLD CUP 2014 ARCALÍS-ANDORRA



SBX FIS WORLD CUP 2014 ARCALÍS-ANDORRA



SBX FIS WORLD CUP 2014 ARCALÍS-ANDORRA



SBX FIS WORLD CUP 2014 ARCALÍS-ANDORRA



SNOW BOARD CROSS (SBX) WORLD CUP 2014

ARCALÍS –ANDORRA INJURIES

120 PARTICIPATING RIDERS

5 INJURIES:

- 2 SEVERE TRAUMA BRAIN INJURY (WITH LOSS OF CONSCIOUSNESS)
- 1 ANKLE FRACTURE
- 1 KNEE INJURY
- 1 NON-SEVERE CONTUSION

ISMF WORLD CUP 2016 ARCALÍS-ANDORRA



category/sin-categorizar/?lang=es

Kilian JORNET WORLD CHAMPION SKIRUNNING & ULTRASKI





ISMF WORLD CUP 2016 FONT BLANCA-ANDORRA

INTERNATIONAL SKI MOUNTAINEERING FEDERATION (ISMF)

WORLD CUP 2016 ARCALÍS-ANDORRA INJURIES

302 PARTICIPATING RIDERS

5 INJURIES:

1 SEVERE HYPOTHERMIA (WITH LOSS OF CONSCIOUSNESS)

1 FRACTURED TIBIA AND FIBULA

1 FRACTURED FIBULA MALLEOLI

1 ANKLE LIGAMENT INJURED

1 WITH TWO FROZEN FINGERS

CONCLUSIONS / TO END IT UP:

LESS COMMON SNOW SPORTS

- 3% of all Injuries in winter sports.**
- Knee and upper limb injuries, are not the most frequent.**
- The main risk factors are speed and collisions.**
- Polytraumatized patients are the most frequent.**
- There are more people injured and with more severe lesions than in classic snow sports (alpine ski and snowboard).**

SPECIAL THANKS TO SKI PATROLS





VALLNORD ARCALIS
ANDORRA

THANK YOU ALL
FOR YOUR KIND
ATTENTION

FONT BLANCA 2016

16-01
Individual Arcalis

17-01
Vertical Arinsal



ISMF WORLD CUP

An aerial photograph of five skiers descending a steep, snow-covered mountain slope. The skiers are wearing blue and red racing suits and are in various stages of descent. The snow is bright white with some rocky patches visible. The text is overlaid in the center of the image.

Us hi esperem a tots!
WE HOPE TO SEE YOU ALL THERE!