

# Evolution of snowsports injuries in children

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# Evolution of snowsports injuries in children

Many studies have been published on injuries in snowsports, but few deal specifically on children

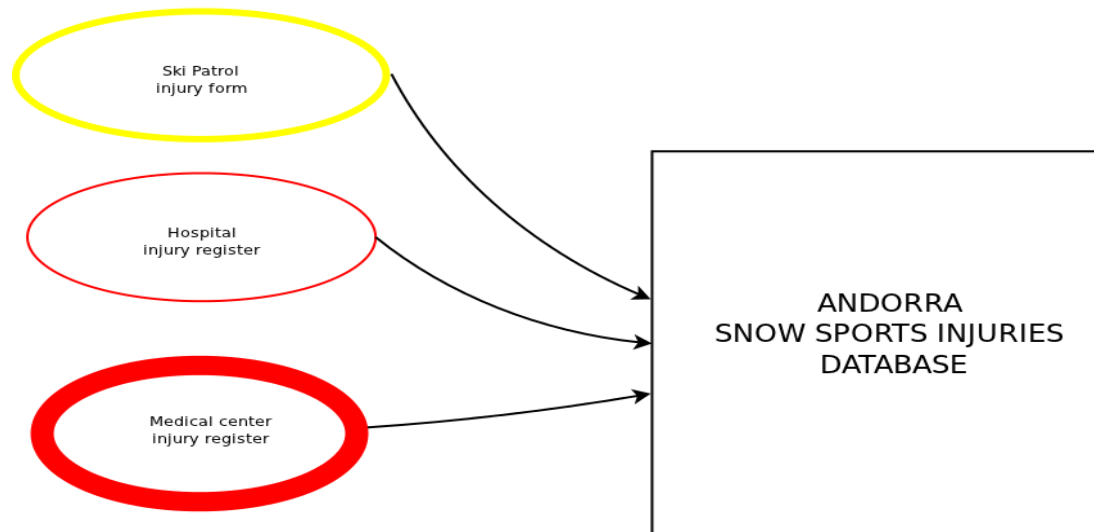
Epidemiologic studies must rely on a rigorous data collecting system

Understanding of injury epidemiology is the first step towards injury prevention



# Evolution of snowsports injuries in children

Since Ski season 2002-2003



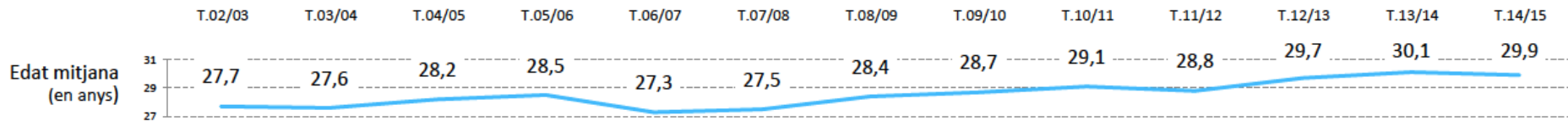
# Evolution of snowsports injuries in children

- the database contents actually information about 153.551 injured
- there's some subjectivity in some of the recorded items (sport level, precise cause of the injury...
- the population at risk is not well known
- (for some seasons interviews have been done but child are under represented)

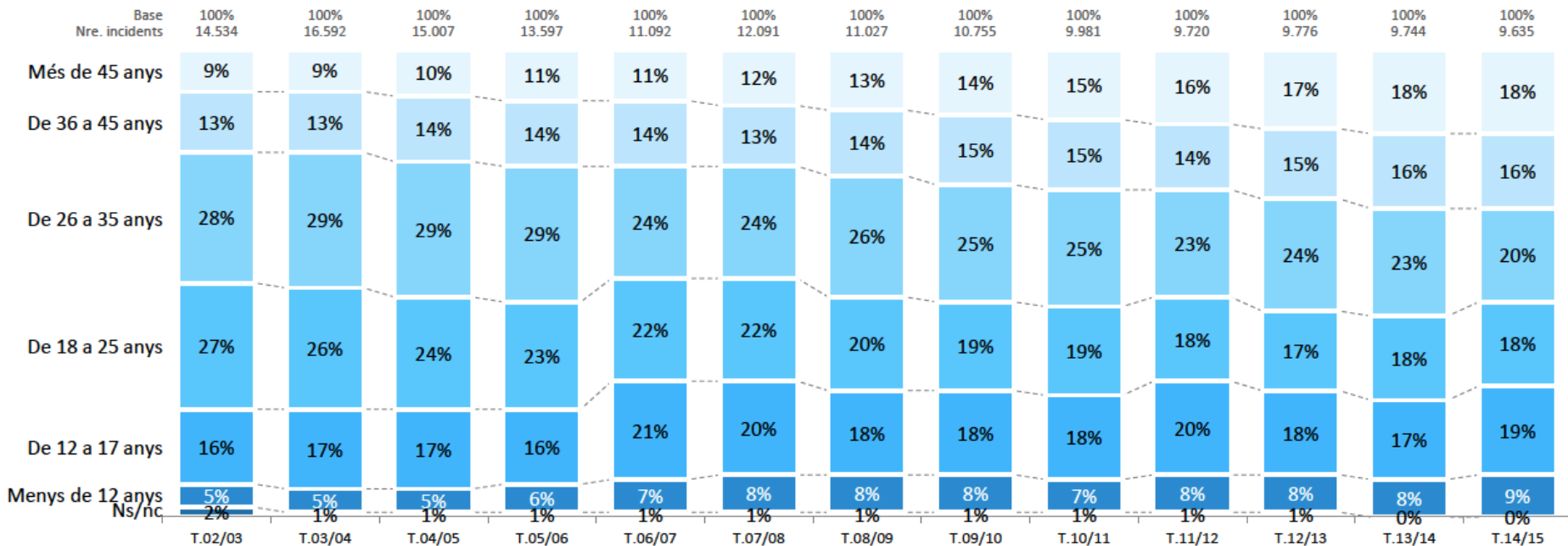


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- The mean age of the skier/snowboarders in the andorran ski areas has slightly increased along this period



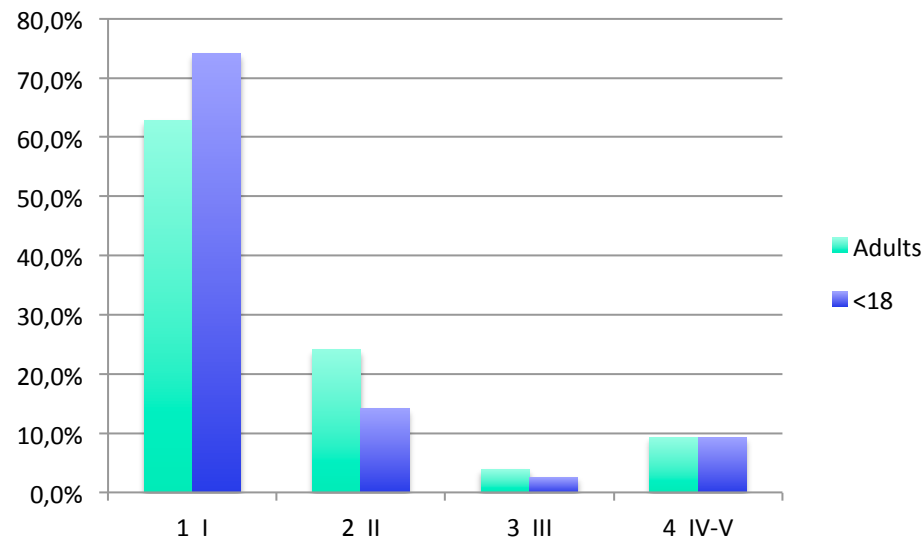
# Evolution of snowsports injuries in children



children (under 12) represent 9%      the teenagers (12-17)      19%



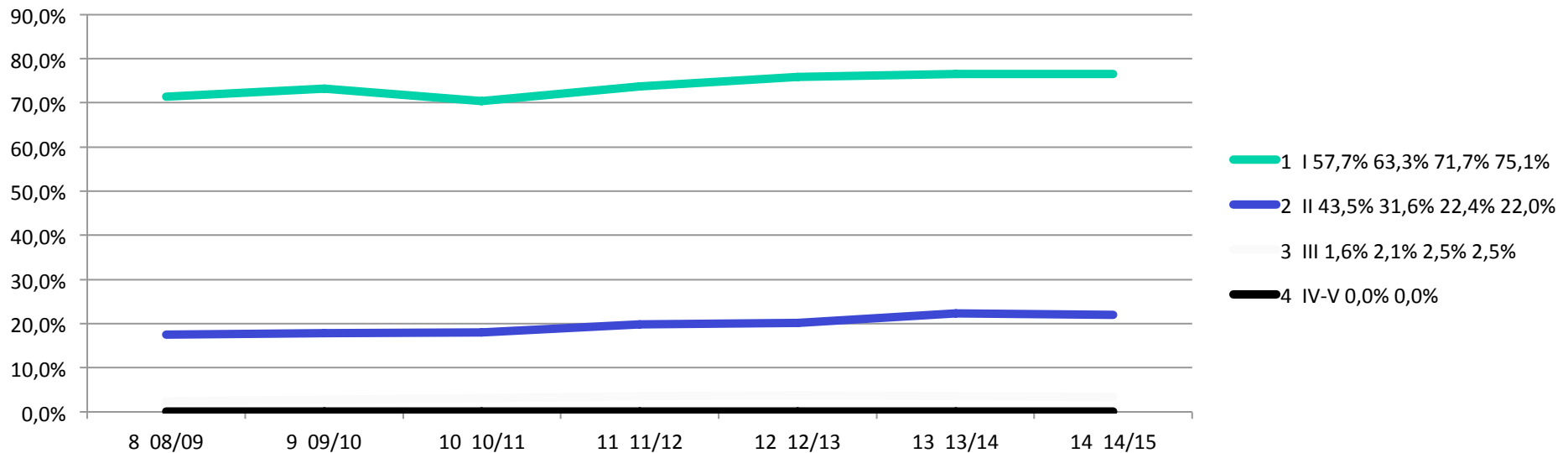
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Injury severity (AIS score) adults vs < 18



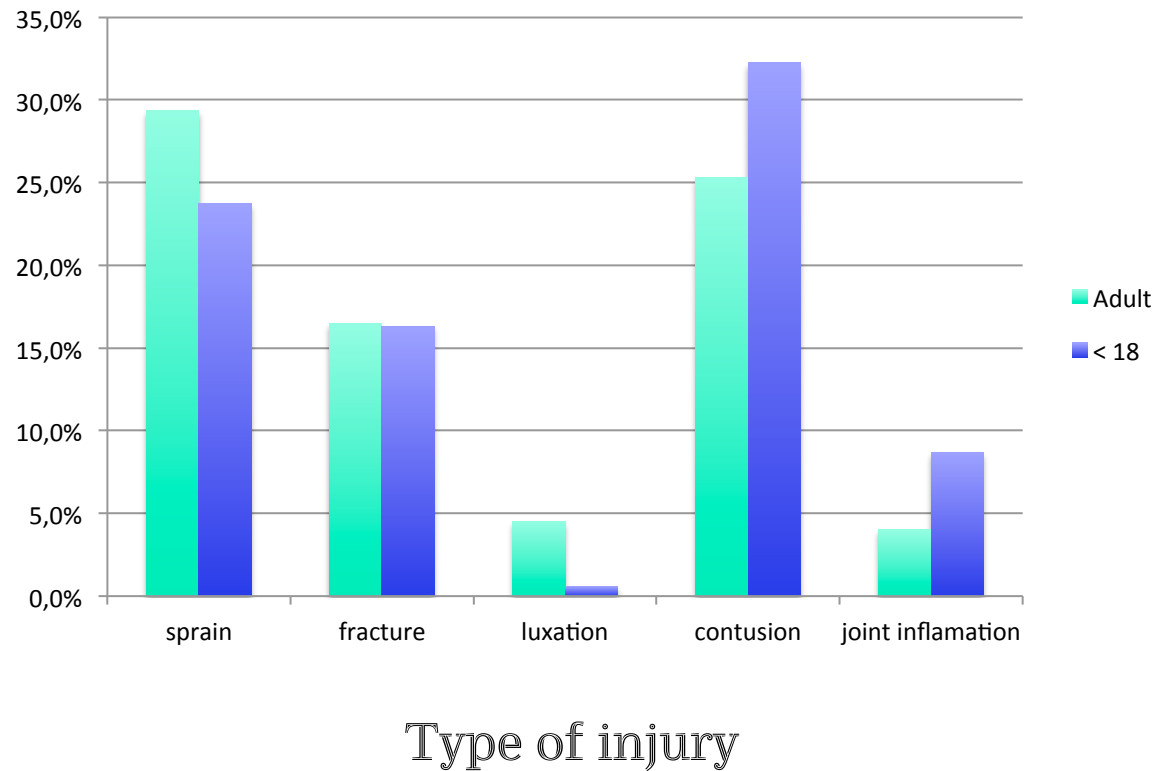
# Evolution of snowsports injuries in children



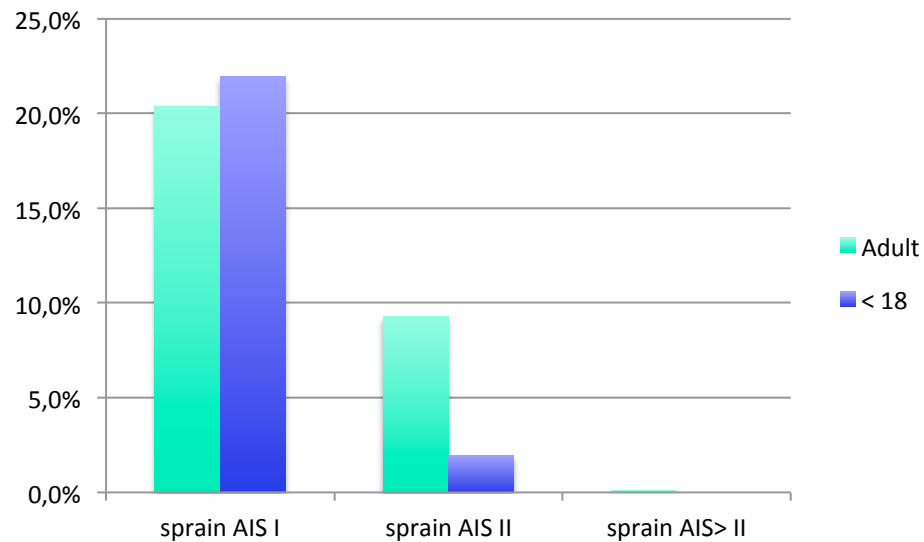
No significant changes in the severity (AIS score)



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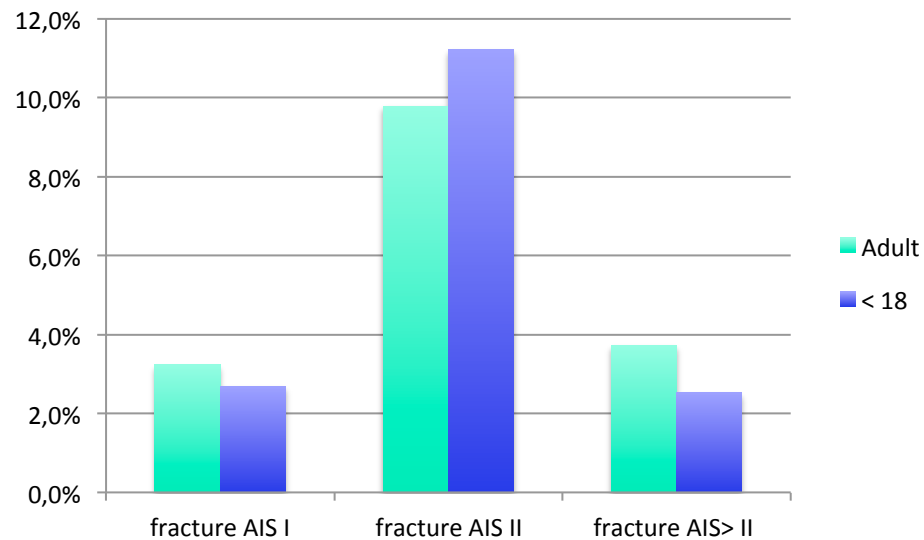
# Evolution of snowsports injuries in children



Type of injury: sprains / severity



# Evolution of snowsports injuries in children

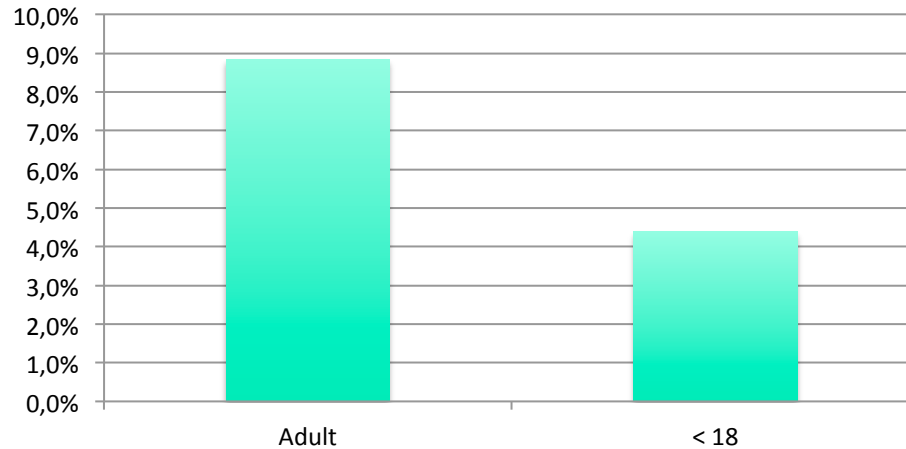


Type of injury: fractures / severity



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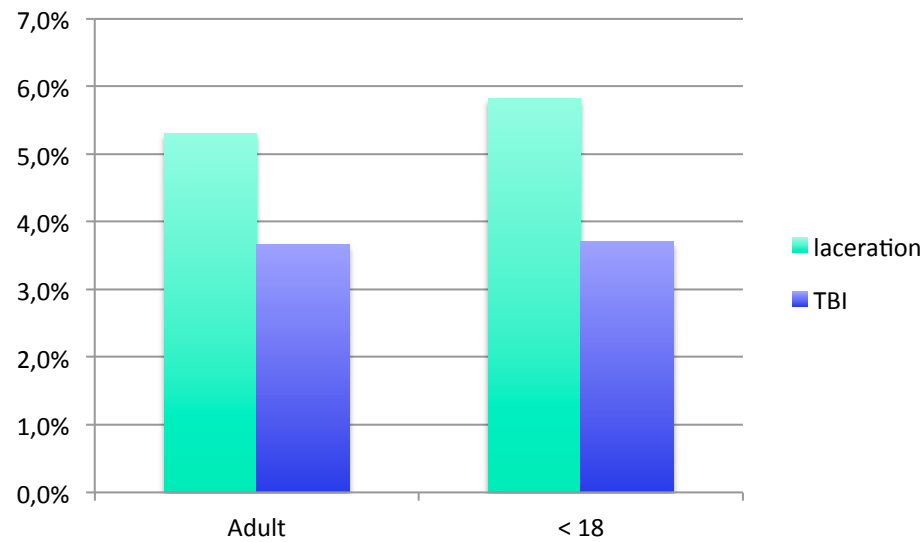
## meniscal injury



Type of injury



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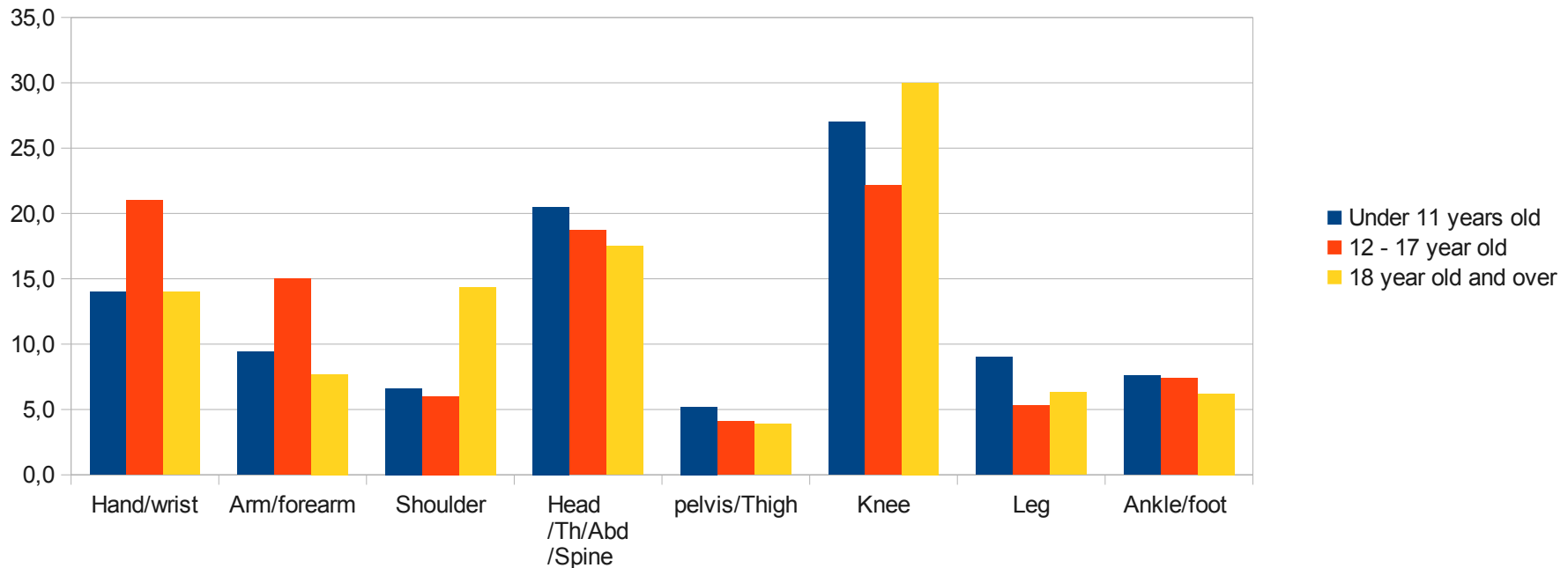


Type of injury

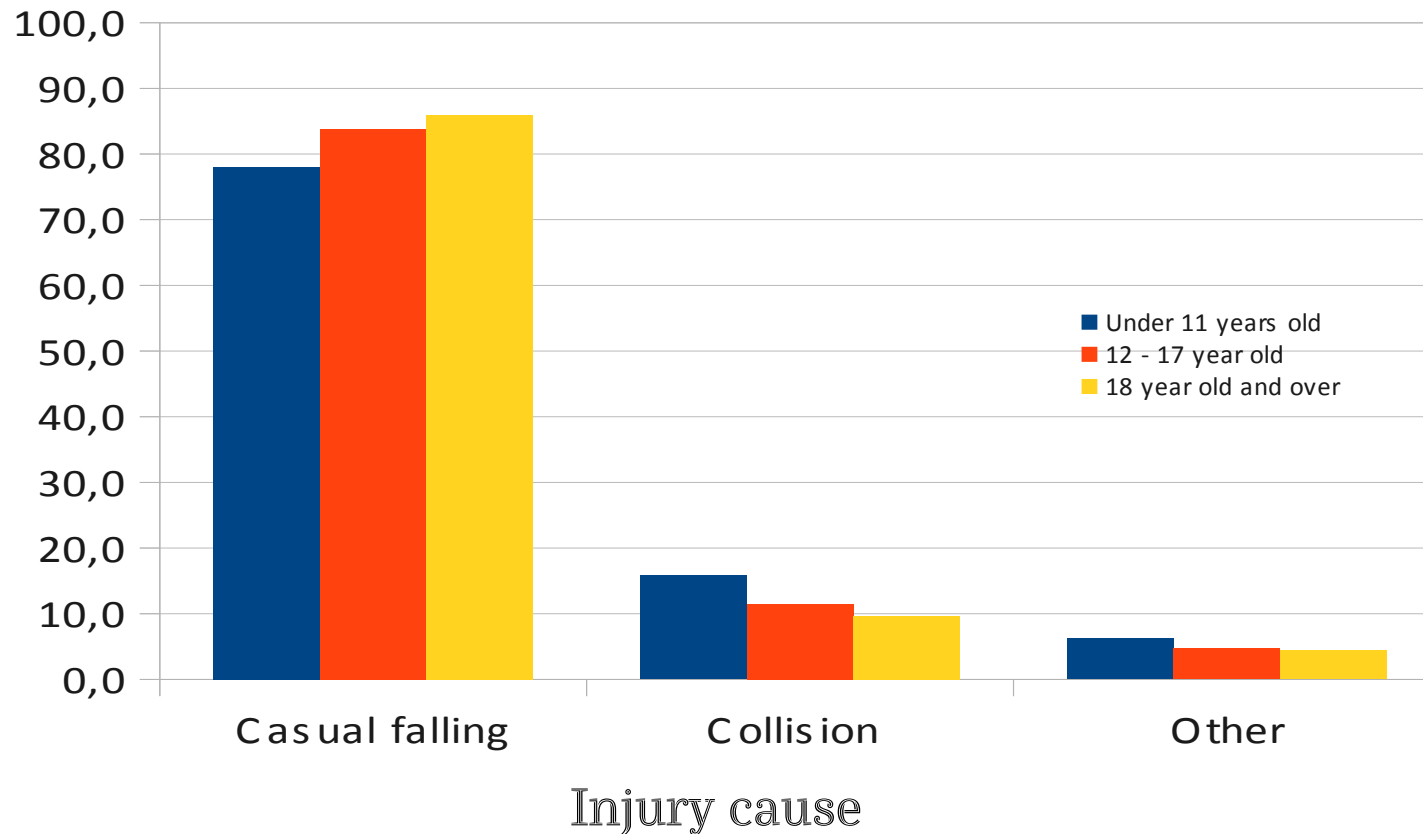


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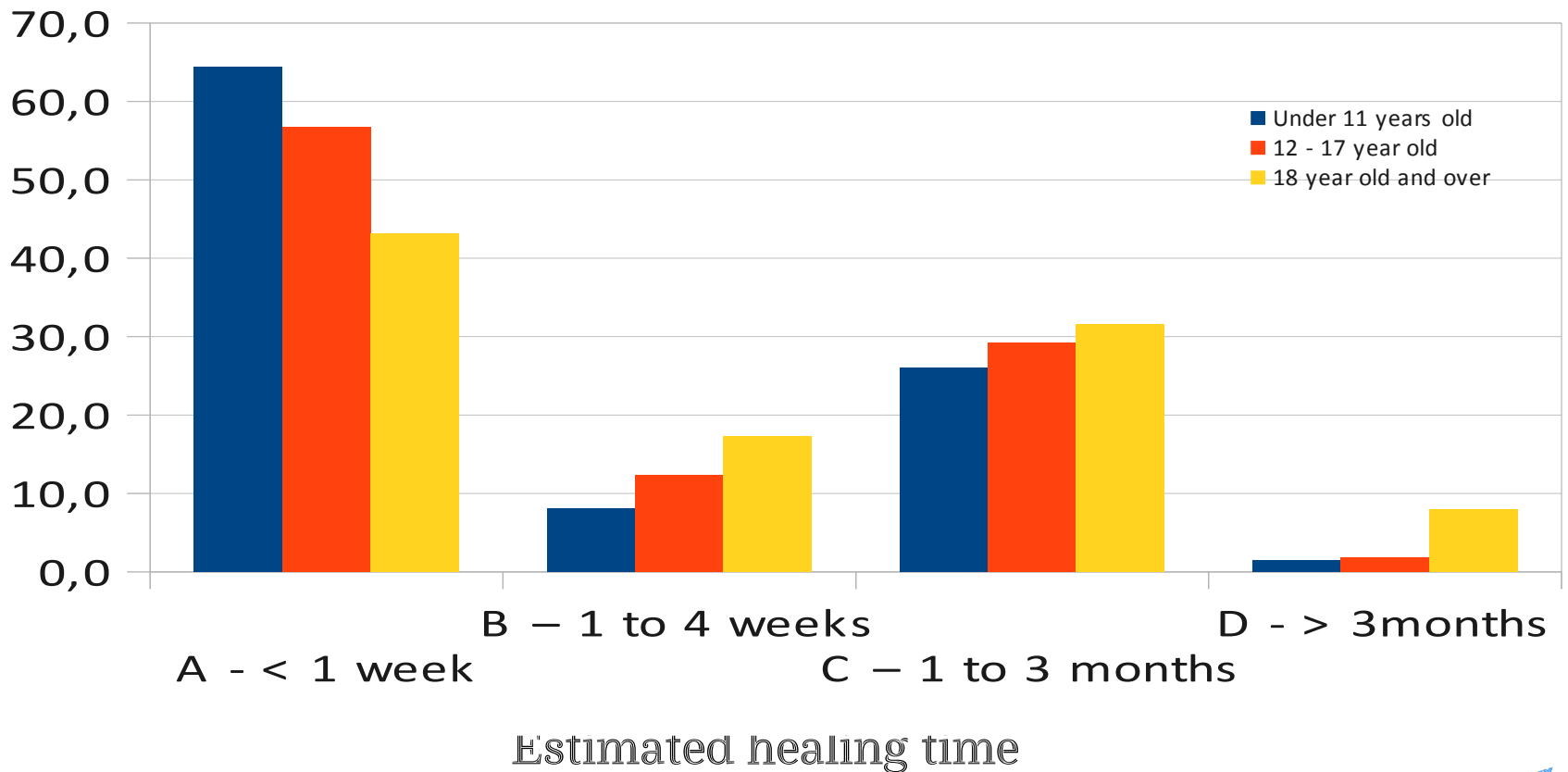
Injured Region



# Evolution of snowsports injuries in children



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# Evolution of snowsports injuries in children

- wrist injuries are common in the group aged 12-17 (more snowboarders)
- snowsports injuries in children are less severe than in adults
- luxations and meniscal tears are uncommon in children
- children suffer more collisions than adults



# Evolution of snowsports injuries in children

- There are some consistent epidemiological evidences about snowsports injuries which have lead to prevention measures
- → helmet use: it's established that it decreases the incidence and severity of head injuries,
- As children are more prone to collisions and also head injuries **HELMET USE IS SPECIALLY USEFULL IN THIS GROUP**



# Evolution of snowsports injuries in children

HELMET USE CAN BE:

- DEVELOPPED BY MAKING IT MANDATORY
- ENCOURAGED BY DISCOUNTS IN SKIPASS PRICES
- ENCOURAGED IN RENTAL PACKS
- ENCOURAGED BY MIMETIC EFFECT (USE BY SNOWSPORTS PROFESSIONALS)



# Evolution of snowsports injuries in children

## WRIST PROTECTIONS

- WRIST INJURIES ARE VERY COMMON IN BEGINNER SNOWBOARDERS
- SOME WRIST PROTECTIONS REDUCE THE NUMBER OF WRIST INJURIES
- WRIST PROTECTIONS STANDARDS SHOULD BE DEVELOPED AND THEIR USE PROMOTED



# Evolution of snowsports injuries in children

## CHILDREN AND TEENAGERS

ARE ACCESSIBLE TO BEHAVIOURAL MEASURES:

- EDUCATIONAL TALKS OR VIDEO PROJECTIONS ABOUT SNOWSPORTS SAFETY ARE BENEFICAL ON INJURY RATES



# Evolution of snowsports injuries in children

WE HAVE MANY EPIDEMIOLOGICAL EVIDENCES  
ABOUT SNOW SPORT INJURIES IN CHILDREN AND  
THE WAY THEY CAN BE PREVENTED.

CHILDREN ARE VERY ACCESSIBLE TO PREVENTION  
MEASURES MAY IT BE THRU MATERIAL  
IMPROVEMENTS, OR THRU BEHAVIOURAL  
MESSAGES



# Evolution of snowsports injuries in children

WE CAN GO FURTHER BY IMPROVING OUR  
KNOWLEDGE OF SNOWSPORTS INJURIES RISK  
FACTORS, FOR THAT WE NEED TO IMPROVE OUR  
DATA COLLECTION,

- MAYBE WITH THE HELP OF SKI INSTRUCTORS AND  
SPORT TEACHERS,
- AND OF COURSE ESTABLISHING CONTROL GROUPS  
IN OUR EPIDEMIOLOGICAL STUDIES



# Thank you





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