

AIHS Alberta Program in Youth Sport & Recreational Injury Prevention



UNIVERSITY OF CALGARY

CIHR Safe to Play

Youth Ice Hockey Concussion Studies

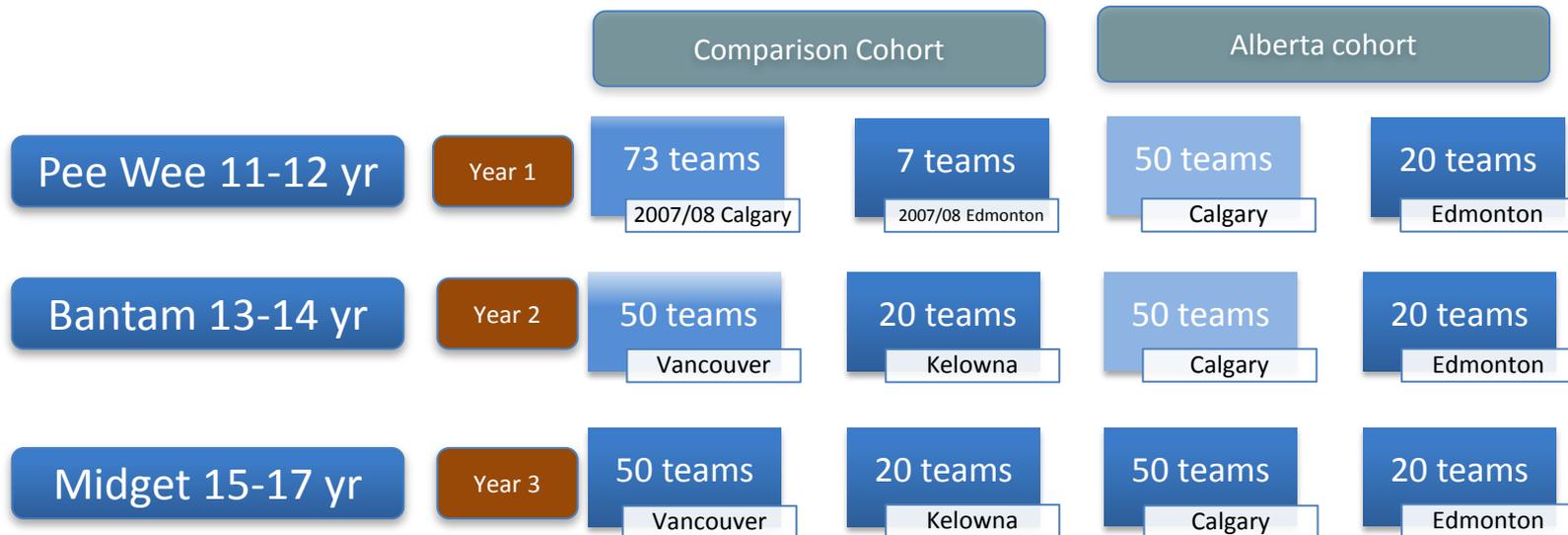


Sport Injury Prevention
Research Centre
UNIVERSITY OF CALGARY



AIHS Alberta Program – Hockey Study

Objective: To evaluate the risk of concussion associated with rules of the game including body checking policy and head contact rule enforcement



METHODS:

- Concussion and Injury Surveillance
- Baseline testing - SCAT3 + Clinical (vestibular, cervical, neurocognitive)
- On-ice Hockey Canada Skills
- Video analysis

Preliminary results 2013/14 (game)

Pee Wee Alberta

n=1108

BC allowed

2007-08

(upper 70%)

Pee Wee Alberta

n= 590

BC allowed

2011-12

(lower 70%)

Pee Wee Alberta

n=602

BC not allowed

2013-2014

(All)

Overall Injury

18.86 injuries per
100 players

Concussion

6.59 concussions
per 100 players

Overall Injury

17.12 injuries per
100 players

Concussion

11.36 concussions
per 100 players

Overall Injury

8.31 injuries per
100 players

Concussion

3.99 concussions
per 100 players

All Injury: IRR = **0.48** (95% CI; 0.35 – 0.68)

Concussion: IRR = **0.35** (95% CI; 0.22 – 0.55)

Baseline (annually-start of season)

Preseason
Baseline
Questionnaire

Functional:
Hockey Canada
Skills Testing

Safe to Play

OBJECTIVE: To establish best practice in the prevention, early diagnosis, and management of sport-related concussion in youth.

Baseline (annually– at the start of the hockey season AND following concussion)

SCAT3

ImPACT

Clinical: Vestibular,
Cervical, Dynamic
Visual Acuity

Psychosocial:
BASC-2 &
BRIEF

Concussion Risk
Awareness &
Beliefs Q., Food
Frequency Q.

Robotic:
KINARM

Throughout the year (collected by a Team Designate)

Weekly
Exposure
Sheets

Injury
Report
Forms

INJURY

Within 24 hrs.,
@1, 3, 6 mos.

Neuroendocrine

@ initial follow-up, RTP, and 3 months

Clinical tests
(vestibular, cervical,
dynamic visual acuity
KINARM, SCAT3, ImPACT)

Questionnaires

International Sport Concussion

Building on the International Olympic Committee (IOC) Research Centres Network

- Calgary – Hotchkiss Brain Institute
 - W. Meeuwisse
- Melbourne – Florey Institute
 - P. McCrory
- + Qatar, Oslo, Cape Town

- Functional imaging and biomarker focus



Cattonline.com currently provides two free online concussion toolkits: the Concussion Clinical Toolkit for Medical Professionals and the Concussion Awareness Training Toolkit for Parents, Players, and Coaches.

Both websites provide up-to-date education, tools and resources to help prevent, recognize, treat and manage concussions as well as support decreasing the impact of concussion when they do occur.

These resources are updated on a monthly basis and will provide the latest evidence on how to deal with concussions.



Medical Professionals

Learn the latest care and management of patients who have sustained a concussion. This includes a 40 minute online course that both physicians and nurses can take, as well as in-office assessments, printable resources for both the physician and patient, video commentary by experts and case studies.



Parents, Players, and Coaches

Learn how to recognize and respond to a concussion and manage a player's recovery through a variety of web-based tools and resources. This includes a 30 minute online course as well as printable resources, online videos and additional handouts for parents.



Educators

Available Fall 2014

S Babul et al 2014 UBC



Sport Injury Prevention
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IOC Research Centre



Talisman



HOTCHKISS BRAIN INSTITUTE



HOCKEY CALGARY

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