

INJURY INJURY DATA COLLECTION PROGRAM 2000-2001

FACT SHEET

When a review of the Injury Data Collection Program (IDCP) is done, there are several factors that should be considered:

- The total number of players, registered and non-registered in Ontario.
- The total number of games played and therefore the exposure of each player to ice time over the entire hockey season.
- 1,802 injury forms received during 2000-01 reporting period

Ontario Registration Figures for 2000-2001

Registered Players..... 225,442

- The Hockey Development Centre would like to acknowledge the support of the Dr. Tom Pashby Sports Safety Fund for providing assistance in the areas of education and prevention of hockey-related injuries.



INTRODUCTION

In 1987, the Hockey Development Centre for Ontario (HDCO) and the Ministry of Tourism and Recreation committed themselves to the long-term planning and implementation of safety programs for hockey. Research of various types has been completed over the past fourteen years with many recommendations either implemented already or included in the HDCO Safety Strategy. This Safety Strategy is the basic framework of planning for safety by the HDCO.

Over the past fifteen years it has become increasingly apparent that statistical information is essential for planning, monitoring and implementing programs for hockey in Ontario. Unless detailed injury data can be gathered, many misconceptions and opinions will enter into the decision making process. Therefore, it is the HDCO's mandate that hockey in Ontario requires an on-going, statistically sound Injury Data Collection Program (IDCP).

The HDCO Safety and Research and Trainers Committees developed an Injury Data Collection Program that has several advantages over previous studies:

- The IDCP is administered on a yearly basis.
- Involvement is province-wide, including all minor hockey associations.
- Yearly reports are produced, which are meaningful and comprehensive for the grassroots hockey association and volunteers.
- The IDCP will assist in verifying other hockey-related studies.

METHODOLOGY

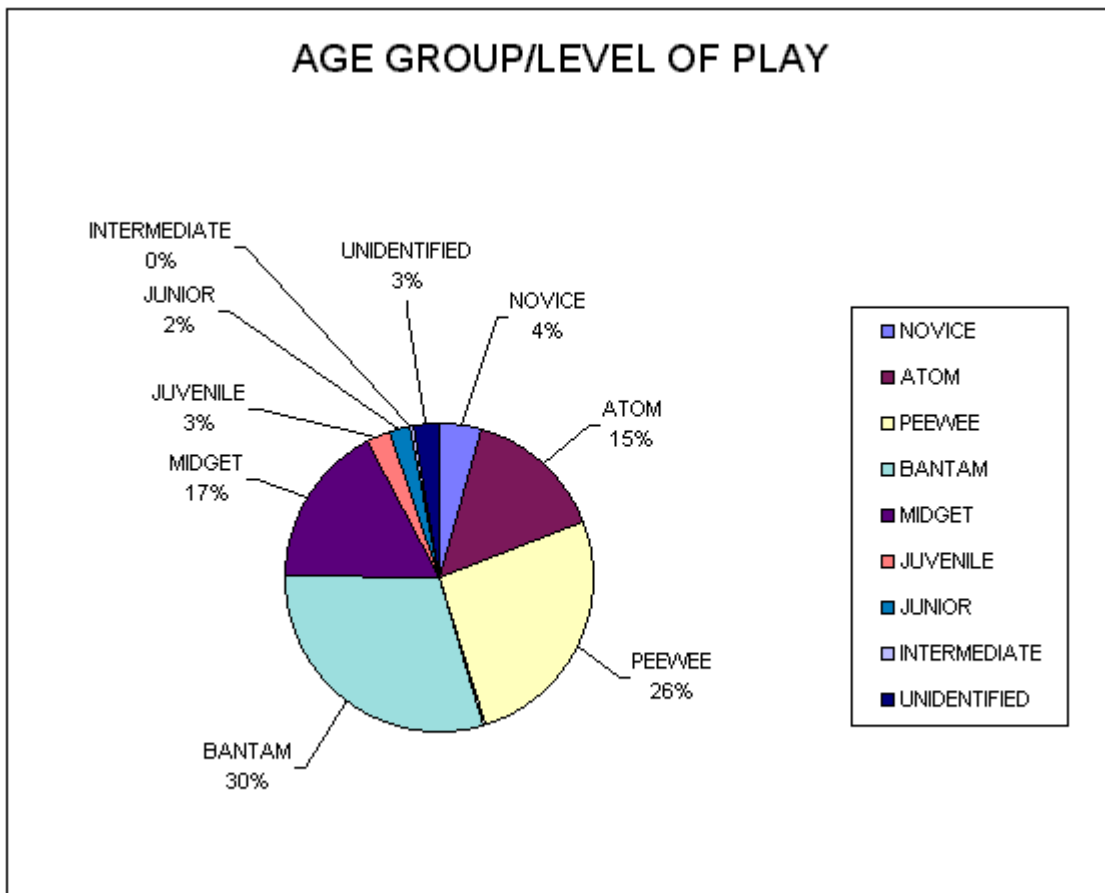
Through consultation with the HDCO Board of Directors, Safety Research Committee, Trainers Committee and the Ministry of Tourism, Culture and Recreation, a methodology was established. This methodology includes the mass distribution of injury data collection forms through the ten member association offices, development clinics specifically the Hockey

Trainers Certification Program. Reporting periods are from September 1st to May 1st, with all reports being tabulated at the HDCO office.

All completed forms are date entered using a specific data entry screen developed in Microsoft Access and Excel database applications. Reports are available online at www.hdco.on.ca

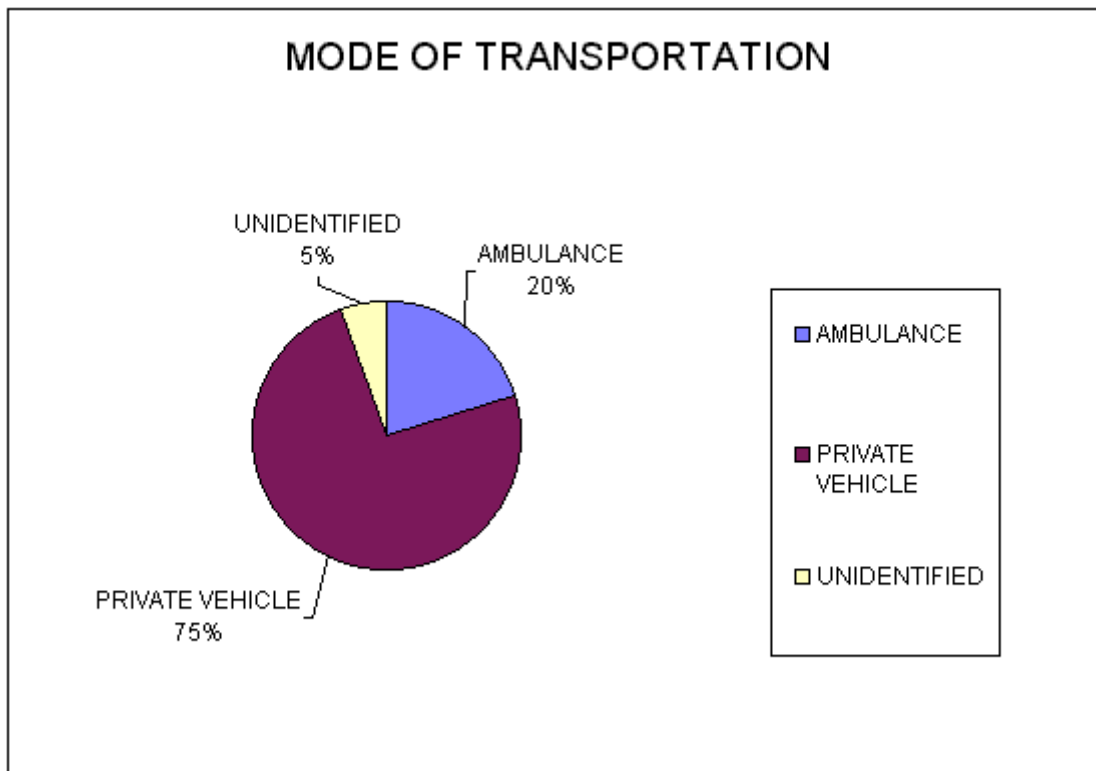
Age Group

NOVICE	81	4.50%
ATOM	265	14.71%
PEEWEE	471	26.14%
BANTAM	540	29.97%
MIDGET	304	16.87%
JUVENILE	46	2.55%
JUNIOR	42	2.33%
INTERMEDIATE	2	0.11%
UNIDENTIFIED	51	2.83%
TOTAL	1802	

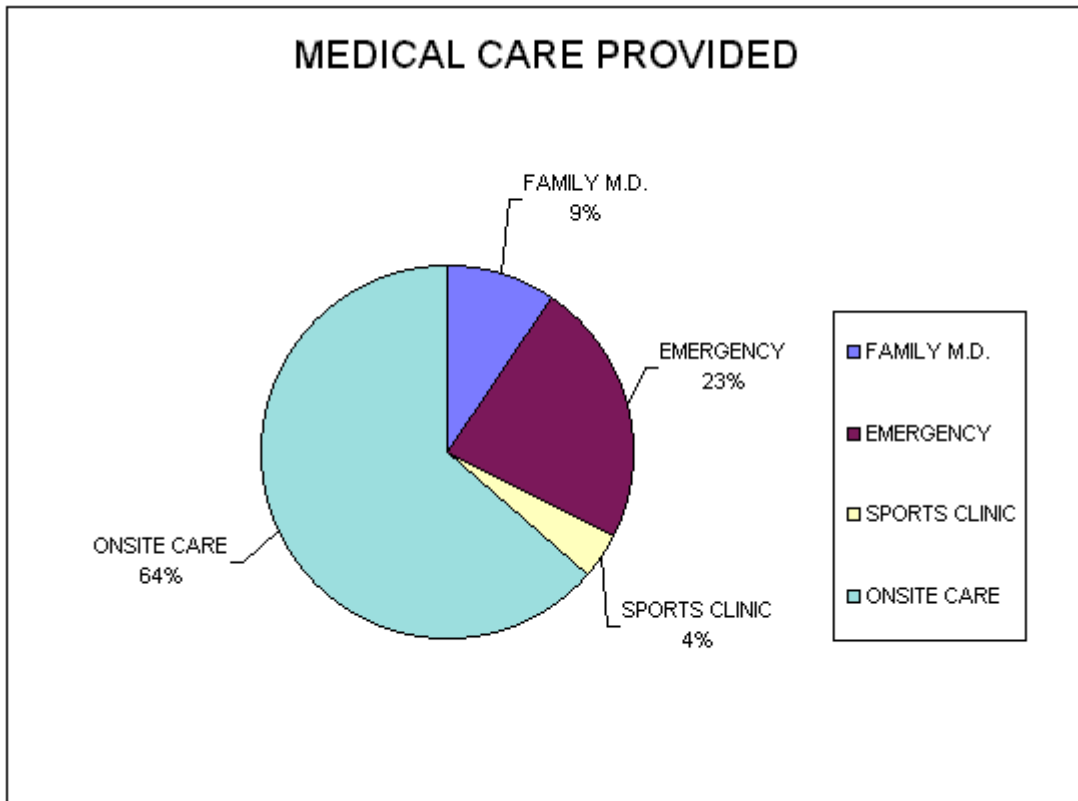


Mode of Transportation

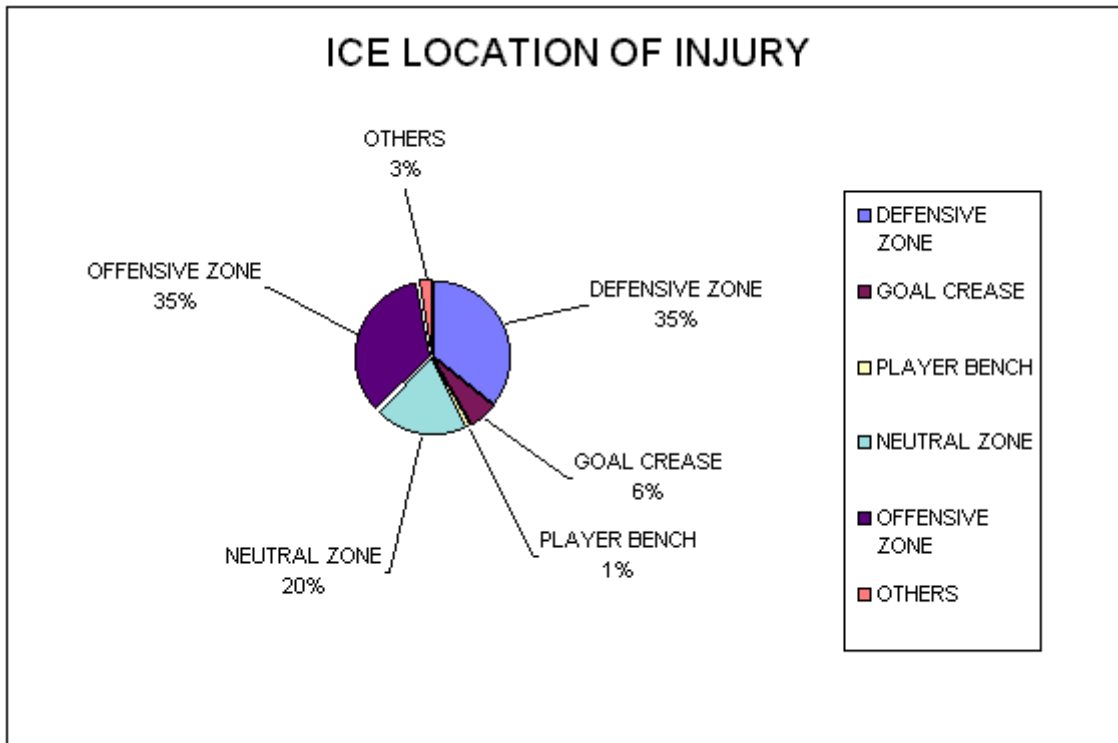
AMBULANCE	238	20.31%
PRIVATE VEHICLE	870	74.23%
UNIDENTIFIED	64	5.46%
TOTAL	1172	



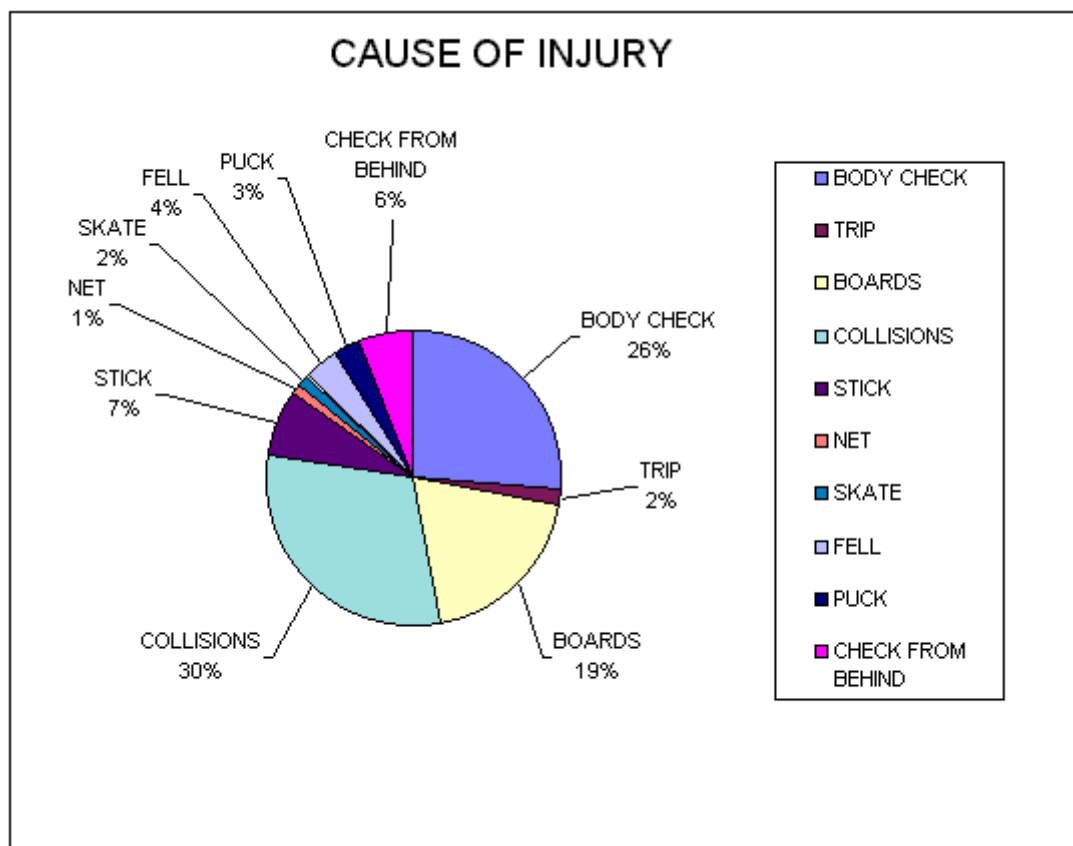
CATEGORY	NUMBER	PERCENTAGE
Medical Care Provided		
FAMILY M.D.	65	9.33%
EMERGENCY	162	23.24%
SPORTS CLINIC	26	3.73%
ONSITE CARE	444	63.70%
TOTAL	697	



CATEGORY	NUMBER	PERCENTAGE
Ice Location of Injury		
DEFENSIVE ZONE	619	35.95%
GOAL CREASE	103	5.98%
PLAYER BENCH	11	0.64%
NEUTRAL ZONE	345	20.03%
OFFENSIVE ZONE	597	34.67%
OTHERS	47	2.73%
TOTAL	1722	



CATEGORY	NUMBER	PERCENTAGE
Cause of Injury		
BODY CHECK	645	26.45%
TRIP	41	1.68%
BOARDS	460	18.86%
COLLISIONS	747	30.63%
STICK	171	7.01%
NET	27	1.11%
SKATE	37	1.52%
FELL	92	3.77%
PUCK	73	2.99%
CHECK FROM BEHIND	146	5.99%
TOTAL	2439	

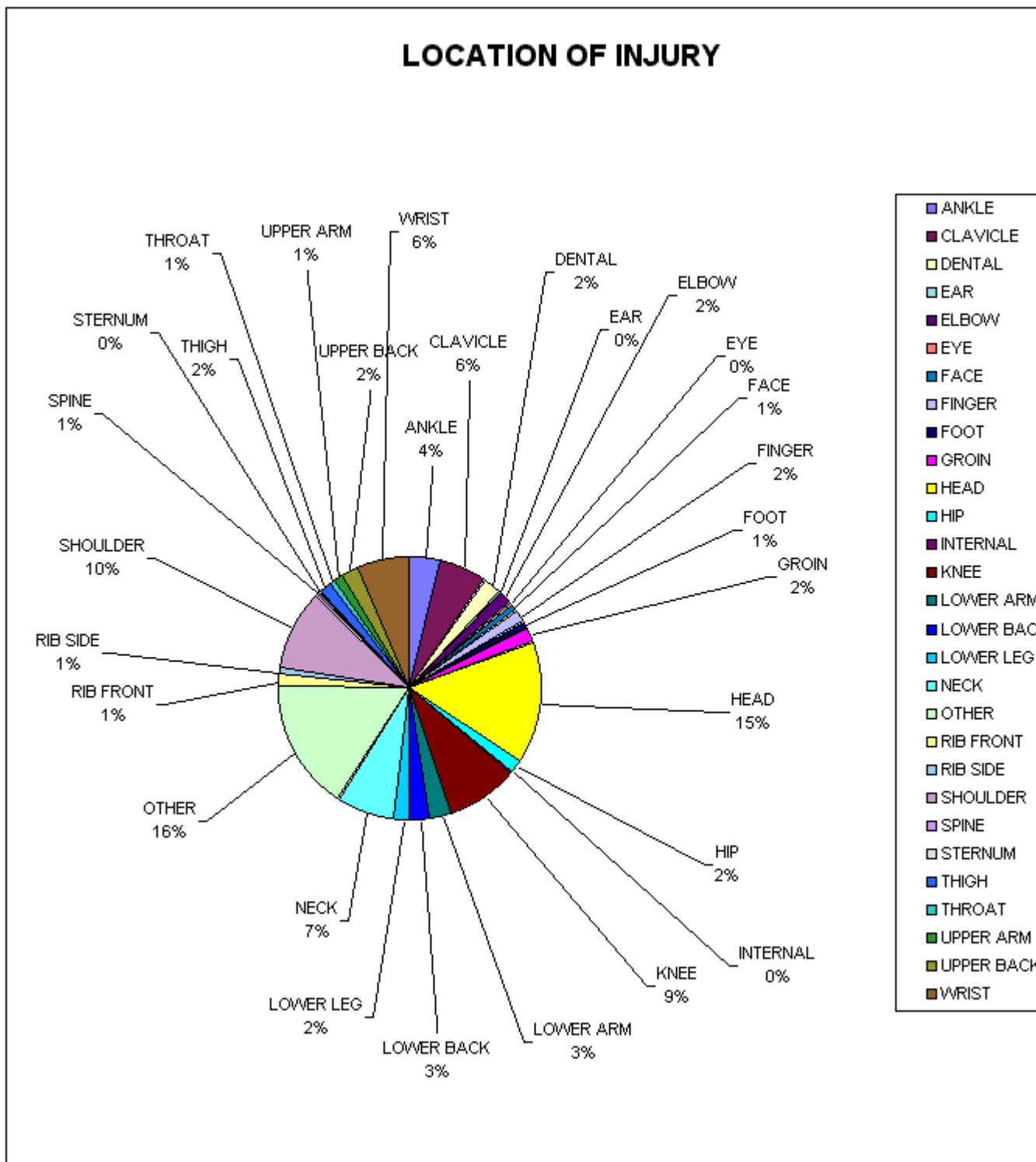


CATEGORY	NUMBER	PERCENTAGE
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Location of Injury

ANKLE	78	4.33%
CLAVICLE	117	6.50%
DENTAL	41	2.28%
EAR	5	0.28%
ELBOW	32	1.78%
EYE	7	0.39%
FACE	20	1.11%
FINGER	30	1.67%
FOOT	21	1.17%
GROIN	35	1.94%
HEAD	298	16.55%
HIP	30	1.67%
INTERNAL	8	0.44%
KNEE	172	9.55%
LOWER ARM	54	3.00%
LOWER BACK	50	2.78%
LOWER LEG	37	2.05%
NECK	137	7.61%

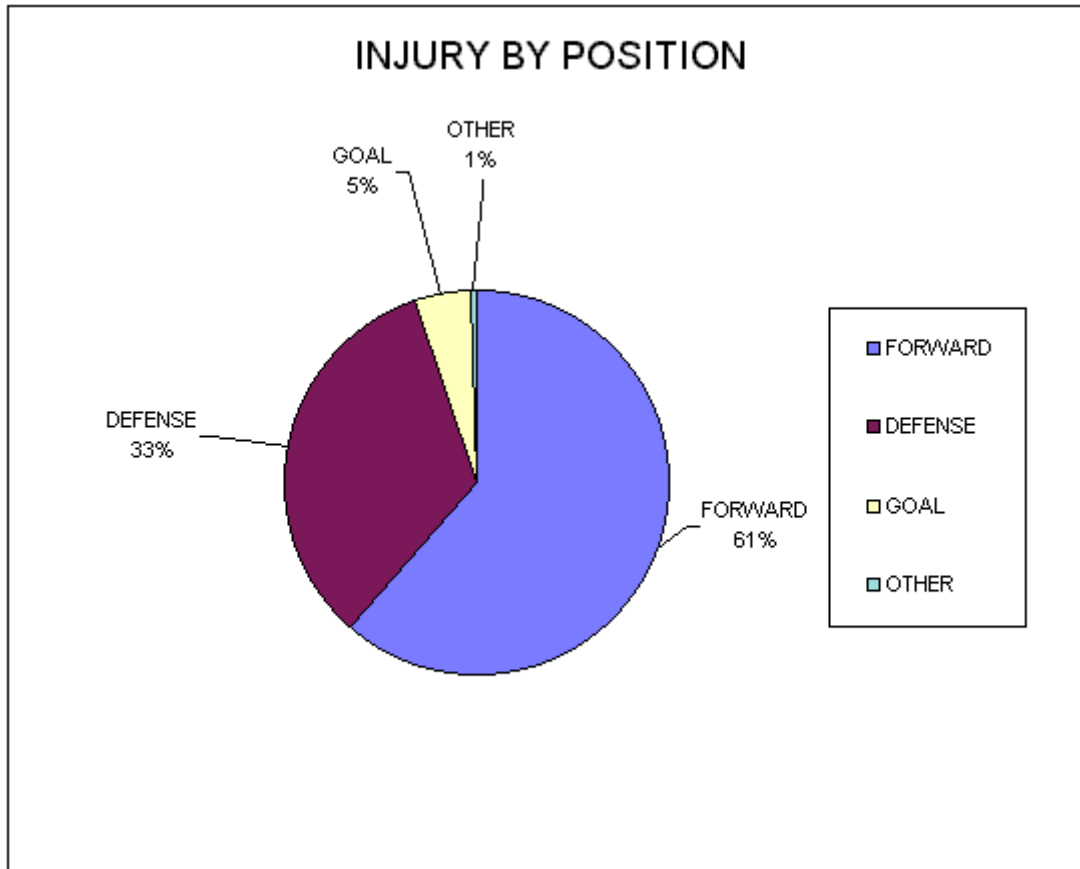
OTHER	327	18.16%
RIB FRONT	29	1.61%
RIB SIDE	19	1.05%
SHOULDER	196	10.88%
SPINE	11	0.61%
STERNUM	2	1.57%
THIGH	30	1.67%
THROAT	15	0.83%
UPPER ARM	18	1.00%
UPPER BACK	47	2.61%
WRIST	127	7.05%
TOTAL	1801	



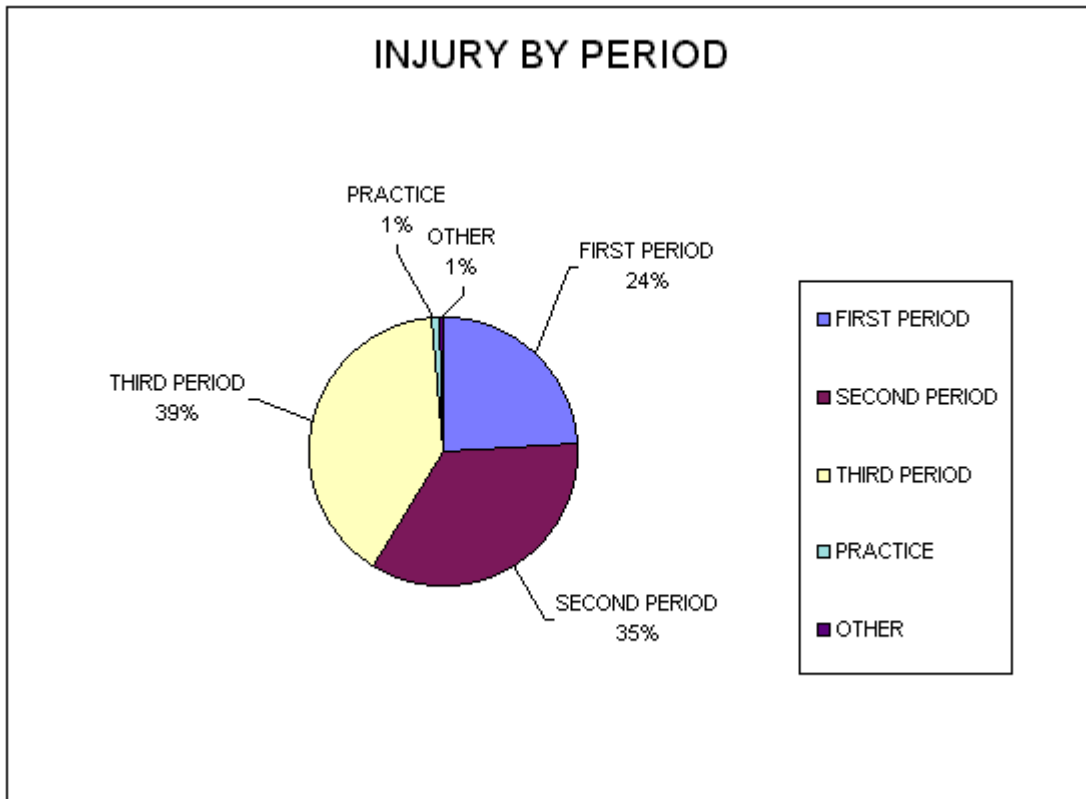
CATEGORY	NUMBER	PERCENTAGE
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Injury by Position		
FORWARD	1056	61.47%

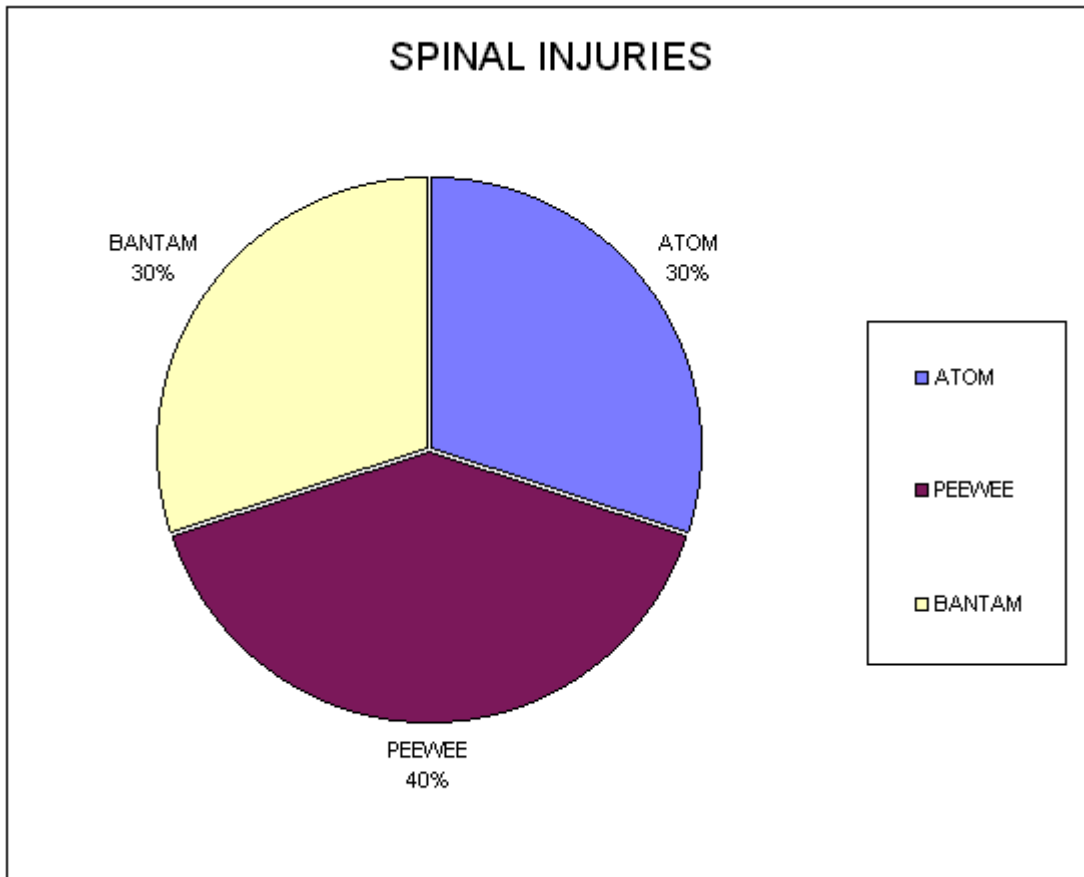
DEFENSE	571	33.24%
GOAL	80	4.66%
OTHER	11	0.64%
TOTAL	1718	



CATEGORY	NUMBER	PERCENTAGE
Injury by Period		
FIRST PERIOD	357	24.09%
SECOND PERIOD	513	34.62%
THIRD PERIOD	590	39.81%
PRACTICE	13	0.88%
OTHER	9	0.61%
TOTAL	1482	



CATEGORY	NUMBER	PERCENTAGE
Spinal Injuries		
ATOM	3	27.27%
PEEWEE	4	36.36%
BANTAM	3	27.27%
MIDGET	1	9.09%
TOTAL	11	



SPINAL PROFILE	2000-01	1999-00	(+/-)
7 Total Injuries Reported	11	7	57%

AGE GROUP

Atom	3	27.27%
Pee Wee	4	36.36%
Bantam	3	27.27%
Midget	1	9.09%
TOTAL	11	

POSITION PLAYED

Forward	3	27.27%
Defense	7	63.64%
Goaltender	1	9.09%
TOTAL	11	

PERIOD

1st	2	18.18%
2nd	2	18.18%
3rd	4	36.36%

Unidentified	3	27.27%
TOTAL	11	

OTHER RELATED INJURIES

Head	3	27.27%
Neck	2	18.18%
Ribside	3	27.27%
Unidentified	3	27.27%
TOTAL	11	

TYPE OF INJURY

Bruise	4	36.36%
Strain	5	45.45%
Unidentified	2	18.18%
TOTAL	11	

SYMPTOMS

Pain	6	54.55%
Loss of Feeling	2	18.18%
Unidentified	3	27.27%
TOTAL	11	

MECHANISM/CAUSE OF INJURY

Body Check	3	18.75%
Collision	5	31.25%
Boards	6	37.50%
Check from Behind	2	12.50%
TOTAL	16	

SPINAL PROFILE

POSITION ON ICE

Neutral Zone	1	9.09%
Defensive Zone	3	27.27%
Goal Crease	1	9.09%
Unidentified	6	54.55%
TOTAL	11	

TRANSPORTED TO HOSPITAL	10	
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MODE OF
TRANSPORTATION

Ambulance	5	45.45%
Private Vehicle	5	50.00%
TOTAL	10	

TIME LOST DUE TO INJURY

5 specified - 15 weeks

Previous Injury: Not specified

REVIEW

Increase of number of injuries reported

Defensemenn received 64% of this type of injury

36% of injuries received in 3rd period

37.50% of injuries caused from boards

DENTAL PROFILE	2000-01	1999-00	(+/-)
14 Total Injuries Reported	41	14	193%

AGE GROUP

Atom	3	7.32%
PeeWee	8	19.51%
Bantam	17	41.46%
Midget	8	19.51%
Juvenile	2	4.88%
Junior	2	4.88%
Unidentified	1	2.44%
TOTAL	41	

POSITION PLAYED

Forward	22	53.66%
Defense	11	26.83%
Goaltender	1	2.44%
Unidentified	7	17.07%
TOTAL	41	

PERIOD

1st	7	17.07%
2nd	12	29.27%
3rd	14	34.15%

Unidentified	8	19.51%
TOTAL	41	

OTHER RELATED INJURIES

Head	1	2.17%	
Other	45	97.83%	*jaw area, chin,
TOTAL	46		

ACTIVITY

Game	27	65.85%
Tournament/Exhibition/Playoff	12	29.27%
Practice	2	4.88%
TOTAL	41	

TYPE OF INJURY

Fracture	3	6.98%	
Sprain	1	2.33%	
Bruise	2	4.65%	
Laceration	1	2.33%	
Other	36	83.72%	*chipped, lost, broken, multiple teeth
TOTAL	43		1 concussion noted

DENTAL PROFILE

MECHANISM/CAUSE OF INJURY

Body Check	9	21.95%
Boards	3	7.32%
Collision	14	34.15%
Stick	7	17.07%
Net	1	2.44%
Fell on Ice	2	4.88%
Puck	4	9.76%
Check from Behind	1	2.44%
TOTAL	41	

POSITION ON ICE

Defensive Zone	13	31.71%
Neutral Zone	3	7.32%
Offensive Zone	17	41.46%
Goal Crease	3	7.32%

Player Bench	3	7.32%
Unidentified	2	4.88%
	41	

TRANSPORTED TO HOSPITAL

Other	4		
	31		*on-site care, dentist

MODE OF TRANSPORTATION

Private Vehicle	5
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REVIEW

Increase over previous year

Peewee, Bantam and Midget combined for 80.48% of total

Forwards received 22 or 53.66% of injuries

On-ice collision cited in 34.15% of cases reported

NECK PROFILE	2000-01	1999-00	(+/-)
	137	127	8%

137 Injuries Reported

AGE GROUP

Novice	12	8.76%
Atom	40	29.20%
PeeWee	43	31.39%
Bantam	27	19.71%
Midget	14	10.22%
Unidentified	1	0.73%
TOTAL	137	

POSITION PLAYED

Forward	75	54.74%
Defense	40	29.20%
Goaltender	14	10.22%
Unidentified	8	5.84%
TOTAL	137	

PERIOD

1st	21	15.33%
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2nd	45	32.85%
3rd	56	40.88%
Unidentified	15	10.95%
TOTAL	137	

OTHER RELATED INJURIES

Head	47	51.09%	
Throat	3	3.26%	
Upper/Lower Back	28	30.43%	
Other	14	15.22%	*Shoulder, chest, ribs, stomach
TOTAL	92		

TYPE OF INJURY

Strain	21	16.54%	
Sprain	15	11.81%	
Bruise	11	8.66%	
Laceration	4	3.15%	
Others	76	59.84%	*29 concussions reported, muscle spasms, severe bruising, soft tissue damage, bruised vertabrae
TOTAL	127		

SYMPTOMS

Pain	29	67.44%	
Loss of Feeling	1	2.33%	
Loss of Breath	4	9.30%	
Others	9	20.93%	*headache, tingling, stiffness dizziness, nausea, swelling,
TOTAL	43		

NECK PROFILE

MECHANISM/CAUSE OF INJURY

Body Check	37	20.00%
Trip	4	2.16%
Boards	34	18.38%
Collision	56	30.27%
Stick	16	8.65%
Net	4	2.16%
Fell	5	2.70%

Check from Behind	29	15.68%
Skate	42	22.70%
Puck	4	2.16%
TOTAL	185	

POSITION ON ICE

Defensive Zone	52	40.00%
Offensive Zone	47	36.15%
Neutral Zone	15	11.54%
Goal Crease	15	11.54%
Other	1	0.77%
TOTAL	130	

TRANSPORTED TO HOSPITAL

92

MODE OF TRANSPORTATION

Ambulance	62	67.39%
Private Vehicle	29	31.52%
Unidentified	1	1.09%
TOTAL	92	

REVIEW

Forwards received 54.74% of this type of injury

The offensive zone was the site of 40.00% of injuries

56 or 40.88% occurred in the 3rd period

Atom, PeeWee and Bantam age group combined for 80.30% of injuries

Head injuries represented 51.09 % of related injuries

Collisions highest mechanism of injury - 30.27%

HEAD PROFILE	2000-01	1999-00	(+/_)
298 Injuries Reported	298	235	27%

AGE GROUP	NUMBER	AGE %
Novice	22	7.38%
Atom	64	21.48%
PeeWee	81	27.18%
Bantam	68	22.82%
Midget	42	14.09%

Juvenile	5	1.68%
Junior	6	2.01%
Senior	1	0.34%
Unidentified	9	3.02%
TOTAL	298	

POSITION PLAYED

Forward	181	60.74%
Defense	83	27.85%
Goaltender	16	5.37%
Unidentified	18	6.04%
TOTAL	298	

PERIOD

1st	46	15.44%
2nd	93	31.21%
3rd	105	35.23%
Unidentified	54	18.12%
TOTAL	298	

OTHER RELATED INJURIES

Neck	47	72.31%
Dental	1	1.54%
Spine	3	4.62%
Face	1	1.54%
Upper Back	12	18.46%
Upper Arm	1	1.54%
TOTAL	65	

TYPE OF INJURY

Strain	6	2.01%
Fracture	2	0.67%
Sprain	8	2.68%
Bruise	7	2.35%
Laceration	8	2.68%
Other	267	89.60%
TOTAL	298	

*203 concussions reported,
whiplash,
headache, nausea, double
vision
loss of consciousness

HEAD PROFILE

SYMPTOMS

Pain	34	72.34%	
Heavy Bleeding	1	2.13%	
Loss of Feeling	1	2.13%	
Shortness of Breath	2	4.26%	
Other	9	19.15%	*disoriented, confusion
TOTAL	47		headache, blurred vision, dizziness

MECHANISM/CAUSE OF INJURY

Body Check	107	25.54%
Boards	80	19.09%
Collision	133	31.74%
Stick	13	3.10%
Net	7	1.67%
Fell on Ice	16	3.82%
Trip	8	1.91%
Puck	9	2.15%
Check from Behind	46	10.98%
TOTAL	419	

POSITION ON ICE

Defensive Zone	105	36.71%
Offensive Zone	85	29.72%
Neutral Zone	72	25.17%
Goal Crease	18	6.29%
Players Bench	1	0.35%
Other	5	1.75%
TOTAL	286	

TRANSPORTED TO HOSPITAL

162	56.64%
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MODE OF TRANSPORTATION

Ambulance	55	33.95%
Private Vehicle	107	66.05%
TOTAL	162	

REVIEW

Increase in number of injuries from previous
year

Atom, PeeWee, and Bantam age players represented 71.48% of injuries

Forwards were most injured 60.74%

Concussions were recorded as a related injury in 203 reports filed