Minute No. 729
Report - Standing Policy Committee on Protection and Community Services - July 10, 2006

Item No. 3 Protective Head Gear in City-Owned Arenas and Skating Rinks
File PR-2.1

COUNCIL DECISION:

Council concurred in the recommendation of the Standing Policy Committee on Protection and Community Services and adopted the following:

1. That the City strongly recommend the use of protective headgear (ice hockey helmets) during public skating for all age groups in City-owned arenas and outdoor skating rinks, as outlined in Option 1 contained in the report of the Acting Director of Community Services dated June 29, 2006.

2. That the Chief Administrative Officer be delegated the authority to approve corporate sponsorships, in partnership with related agencies and organizations, in order to support promotional and educational strategies designed to further encourage voluntary helmet use.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report - Standing Policy Committee on Protection and Community Services - July 10, 2006

DECISION MAKING HISTORY:

Moved by Councillor Steeves,
That the recommendation of the Standing Policy Committee on Protection and Community Services be adopted by consent.

Carried

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On July 19, 2006, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Protection and Community Services and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On July 10, 2006, the Standing Policy Committee on Protection and Community Services concurred in the administrative recommendation and submitted the matter to the Executive Policy Committee and Council.

STANDING COMMITTEE RECOMMENDATION:

On November 8, 2004, the Standing Policy Committee on Protection and Community Services referred the matter to the Administration for further research and analysis, and to report back on (but not limited to) the following:

1. The reasons/rationale as to why the community groups/municipalities named in the administrative report dated October 7, 2004, recommend the use of protective head gear (helmets) for public skating.

2. What percentage of skaters under eighteen (18) years of age are currently not wearing protective head gear.

3. Whether there is any data/statistics available from medical health facilities on the percentage of head injuries arising from skating accidents.

4. Provide options regarding safety regulations for public skating and associated uses at all City-owned indoor arenas, as well as means of encouraging voluntary compliance, for consideration by the Standing Policy Committee on Protection and Community Services.

Report - Standing Policy Committee on Protection and Community Services - July 10, 2006

DECISION MAKING HISTORY (continued):

EXECUTIVE POLICY COMMITTEE:

On October 20, 2004, the Executive Policy Committee requested the Standing Policy Committee on Protection and Community Services to reconsider the administrative report dated October 7, 2004, which outlined the proposed use of protective head gear in City-owned arenas, and that in the interim, no changes be made to the current administrative regulations.

STANDING COMMITTEE RECOMMENDATION:

On October 14, 2004, the Standing Policy Committee on Protection and Community Services concurred in the administrative recommendation and received as information the report dated October 7, 2004, pertaining to protective head gear in City-owned arenas.

On February 10, 2003, the Standing Policy Committee on Protection and Community Services requested that the Administration work in partnership with the General Council of Winnipeg Community Centres (GCWCC) to develop and recommend a policy regarding safety regulations for public skating and associated uses at all City owned indoor arenas for consideration by the Standing Policy Committee on Protection and Community Services.

RE: Protective Head Gear in City-Owned Arenas and Skating Rinks

FOR SUBMISSION TO: Standing Policy Committee on Protection and Community Services

ORIGINAL REPORT SIGNED BY: Clive Wightman, Acting Director Community Services Department

REPORT DATE: June 29, 2006

RECOMMENDATION:

1. That the City strongly recommend the use of protective headgear (ice hockey helmets) during public skating for all age groups in City-owned arenas and outdoor skating rinks, as outlined in Option 1.

2. That the Chief Administrative Officer be given delegated authority to approve corporate sponsorships, in partnership with related agencies and organizations, in order to support promotional and educational strategies designed to further encourage voluntary helmet use.

Report Summary

Key Issues:

- There are 30 City-owned indoor arenas with 15 operated by the City of Winnipeg, 3 operated under private contracts and 12 operated by Community Centres. In addition the City has 214 outdoor skating rinks.

- The Community Services Department, Community Development and Recreation Services Division, currently operates under the following guidelines respecting helmet use in its programs:
    - Helmets are required for all participants in Learn to Skate programs, with the exception of higher figure skating levels.
    - Helmets are recommended for all children during Public Skate programs.

- In Community Centre operated arenas which may also provide Learn to Skate and/or Public Skate programs, the regulations differ between locations. However the majority of community centre operated arenas do have a requirement for helmet usage for various age groups during both skating activities.

- During casual and contract usage in arenas, helmet usage is governed by the respective organizing sport association, officials, coaches and respective league representatives.

- In November 2004, the Standing Policy Committee on Protection and Community Services requested additional research be completed on the issue of protective head gear in order to develop options to consider for implementation. This research and related background rationale has been prepared in consultation with the Medical Health Officer (MHO) of the Winnipeg Regional Health Authority (WRHA) and is included in Appendix one of this report.

- This Administrative Report outlines three options for consideration as follows:

  Option 1: That the City of Winnipeg strongly recommend the use of protective head gear (ice hockey helmets) during public skating for all age groups in City-owned arenas and outdoor skating rinks. (Recommended option)

  Option 2: That the City of Winnipeg mandate the required use of protective head gear for children nine years of age and under during Public Skate Programs and associated use in all City-owned indoor arenas and outdoor skating rinks.

  Option 3: That the City of Winnipeg mandate the required use of protective head gear for children sixteen years of age and under during Public Skate Programs and associated use in all City-owned indoor arenas and outdoor skating rinks.

- The Administration recommends that Option 1, as outlined above, be approved for implementation. The General Council of Winnipeg Community Centers (GCWCC) also endorses Option 1 as the preferred option. This recommended option is based on the following key research and rationale:

  - A review of the data available indicated that the frequency of head injuries occurring while participating in recreational ice skating is relatively low compared to other more common recreational activities.
  - To date, five minor head injury incidents involving children have been reported to City staff at indoor arenas since 2001.
  - A City study indicated that 78% of children currently wear helmets during public skating.
  - Nine major municipal recreation jurisdictions across Canada currently recommend helmet use during public skating. One jurisdiction (Toronto) has a mandatory requirement that children (6 years and under) must wear a CSA hockey helmet during public skating.

- Option 1 would enable a consistent guideline to be established for protective head gear use that applies to all City-owned arenas and outdoor skating rinks. This

consistent guideline is important from a liability and insurance perspective. Interpreting, monitoring and enforcing inconsistent standards in different arenas would necessitate additional risk management requirements. Legal Services has confirmed that all City of Winnipeg arenas, including those operated by Community Centres, are all subject to the same terms and conditions, as all are city-owned owned facilities on City property. The GCWCC is supportive of this consistent approach.

- A comprehensive implementation plan would be developed in consultation with partnership organizations such as the General Council of Winnipeg Community Centres and the Winnipeg Regional Health Authority (MHO). This implementation plan would include a sponsorship strategy to aid in promoting helmet use, as well as, an annual review process to evaluate the effectiveness of this approach.

Implications of the Recommendation(s):

General Implications

( ) None

(X) For the organization overall and/or for other departments

(X) For the community and/or organizations external to the City

( ) Involves a multi-year contract

Comment(s): This report recommends a consistent guideline for all City owned arenas and outdoor skating rinks regarding helmet use.

Policy Implications

(X) No

( ) Yes

Comment(s):

Regulatory Implications

(X) None

( ) Eliminates or reduces regulatory impact

( ) Proposes regulatory impact

Comment(s):

Environmental Implications

(X) No

( ) Yes

Comment(s):

Human Resources Implications

(X) No

( ) Yes

Comment(s):

Financial Implications

(X) Within approved current and/or capital budget

( ) Current and/or capital budget adjustment required

Comment(s): An expenditure in the amount of $12,500 would be required for communications, including signage and promotions related to implementing the report recommendations contained within Option 1. Of this amount $2,500 would be allocated from within the existing Department operating budget and an additional amount of $10,000 would be generated with the development of a sponsorship strategy.

Report

REASON FOR THE REPORT:

On November 8, 2004 the Standing Policy Committee on Protection and Community Services referred the matter back to administration for further research and analysis and to report back on (but not limited to) the following:

1. The reasons/rationale as to why the community groups/municipalities named in the administrative report dated October 7, 2004 recommend the use of protective head gear (helmets) for public skating.
2. The percentage of skaters under eighteen (18) years of age who are currently not wearing protective head gear.
3. Whether there is any data/statistics available from medical health facilities on the percentage of head injuries arising from skating accidents.

4. Provide options regarding safety regulations for public skating and associated uses at all City-owned indoor arenas as well as means of encouraging voluntary compliance, for consideration by the Standing Policy Committee on Protection and Community Services.

Council approval is required for delegated authority to pursue corporate sponsorships specific to the promotion of voluntary helmet usage.

HISTORY:

In January 2003, a child in rural Manitoba died as a result of a child/adult collision that took place during public skating at an indoor arena. The child was not wearing any protective head gear at the time of the incident. Due to the increased public attention to the matter of safety in arenas, the Community Services Department was asked to review the regulations currently in place regarding use of helmets in City-owned arenas.

On February 10, 2003 the Standing Policy Committee on Protection and Community Services approved a motion to have the Administration collaborate with the General Council of Winnipeg Community Centers (GCWCC) to develop recommendations for consideration by Committee, related to safety regulations for public skating and associated uses at all City-owned arenas.

On October 14, 2004, the Standing Policy Committee on Protection and Community Services concurred in the Administrative recommendation and received as information the report dated October 7, 2004, pertaining to protective head gear in City-owned arenas.

On October 20, 2004 the Executive Policy Committee requested the Standing Policy Committee on Protection and Community Services to reconsider the administrative report dated October 7, 2004, and that in the interim, no changes be made to the current administrative regulations.

On November 8, 2004 the Standing Policy Committee on Protection and Community Services referred the matter back to Administration for further research and analysis and to report back on (but not limited to) the following:

1. The reasons/rationale as to why the community groups/municipalities named in the administrative report dated October 7, 2004 recommend the use of protective head gear (helmets) for public skating.
2. The percentage of skaters under eighteen (18) years of age who are currently not wearing protective head gear.
3. Whether there is any data/statistics available from medical health facilities on the percentage of head injuries arising from skating accidents.

4. Options regarding safety regulations for public skating and associated uses at all City-owned indoor arenas as well as means of encouraging voluntary compliance, for consideration by the Standing Policy Committee on Protection and Community Services.

DISCUSSION:

The Community Services Department currently requires that all participants in Learn to Skate programs wear helmets (with the exception of Figure Skating above the introductory and basic levels). The use of helmets at City operated public skating sessions is currently recommended for children but is not mandatory.

In other City-owned, Community Centre operated arenas, the guidelines related to helmet usage differ between locations. The majority, however, have rules requiring helmets for various age groups during both Learn to Skate classes and Public Skate programs.

Research Findings

Research efforts were focused on examining the risk of sustaining a head injury during public skating and reviewing other municipal jurisdictions and community organizations guidelines with respect to helmet use during public skating.

Full research findings are detailed in Appendix One. Key highlights include:

- The number of incidents of ice skating head injuries report to City staff at City of Winnipeg indoor arenas is low (approximately 78% of children under 18 currently wear a helmet).
- A two week study conducted at City of Winnipeg indoor arenas indicated that voluntary compliance of helmet use during public skating is high.
- According to the Manitoba CHIRPP (Canadian Injury Reporting and Prevention Program) database, recreational ice skating head injuries (excluding hockey) represented 0.02% of all injuries reported over a twelve year period.
- According to the Canadian CHIRRP database, recreational ice skating head injuries (excluding hockey) represented 0.22% of all injuries reported over a seven year period.
- Three surveys of municipal jurisdictions conducted during the period 2003-2006 indicate that the mandated use of helmets during public skating in other Canadian municipal jurisdictions is limited.

    - Currently 9 major municipal recreation jurisdictions across Canada recommend helmet use during public skating

- One major jurisdiction (Toronto) has a mandatory requirement that children (6 years and under) must wear a CSA hockey helmet during public skating.

- Three municipal recreation jurisdictions within Manitoba do not have requirements with respect to helmet use during public skating, while one jurisdiction (Dauphin) mandates helmet use during public skating for individuals less than 18 years of age.

- The General Council of Winnipeg Community Centres (GCWCC) has indicated that helmet use by children during public skating is required at seven indoor community centre arenas and recommended at five other locations. The mandatory age requirement for helmet use differs between community centre locations.
- The rationale presented by those organizations who recommend the use of protective headgear, as opposed to mandating helmet use, include the following:
  - Most service providers encountered difficulty with enforcing the use of helmets with older age groups.
  - Organizations expressed risk management concerns with respect to enforcement expectations.

Options for Helmet Use Guidelines:

Based on research findings, Administration has developed three options for guidelines regarding helmet use for recreational skating in all City-owned indoor ice arenas and skating rinks, as follows:

Option 1: That the City of Winnipeg strongly recommend the use of protective head gear (ice hockey helmets) for all age groups during public skating in City-owned arenas and outdoor skating rinks. (Recommended option)

Rationale:

- Nine of ten major municipal recreation jurisdictions across Canada currently recommend helmet use during public skating.
- The National and Provincial injury statistics for this activity indicate that the frequency of head injuries occurring while participating in recreational ice skating is relatively low as compared to other more common recreation related activities.
- A relatively high compliance exists in terms of children currently wearing helmets.
- A low level of incidents reported suggests a safe environment currently exists within the programs as a result of strong supervisory skate patrol to participant ratios, adequate, overall participant skill level and effective, well understood on-ice rules and regulations.

Option 2: That the City of Winnipeg mandate the required use of protective head gear for children nine years of age and under during Public Skate Programs and associated use in all City-owned indoor arenas and outdoor skating rinks.

Rationale:

- This age group represents the majority of total recreational ice skating (excluding hockey) head injuries reported through the CHIRPP database. Young children injured while skating tend to injure their heads most commonly (about 90% of injuries) likely due to their body size, proximity to ice and top heavy centers of gravity.

Option 3: That the City of Winnipeg mandate the required use of protective head gear for children sixteen years of age and under during Public Skate Programs and associated use in all City-owned indoor arenas and outdoor skating rinks.

Rationale:

- Expanding the requirement of Option 2 to include children ages 11-16 captures the peak ages for ice skating injuries. Teens are injured less frequently but of those injured, data indicates the highest proportion of concussions and more serious head injuries likely due to increased speed and body mass.

A detailed analysis of the strengths, weaknesses, opportunities and threats for each of the options presented is identified through a S.W.O.T. analysis in Appendix 2.

General Council of Winnipeg Community Centres

The Community Services Department has collaborated with the General Council of Community Centres (GCWCC) in the review of protective head gear (helmet use) regulations regarding public skating and associated uses at City-owned indoor ice arenas and skating rinks. Input was also received from the Public Works Department, Winnipeg Regional Health Authority (MHO) and Legal Services Division of Corporate Services Department.

A mandated requirement for helmet use presently exists for varying age groups at seven Community Center indoor arena locations. Representatives of selected Community Centers and WRHA (MHO) have requested consideration be given to maintaining this requirement at existing locations. However, Administration recommends that consistent guidelines be applied for all City-owned arenas and skating rinks presently included within the City's liability and insurance coverage. Interpreting, monitoring and enforcing inconsistent standards in different arenas would necessitate additional risk management requirements. Legal Services has confirmed that all City of

Winnipeg arenas, including those operated by Community Centres, are all subject to the same terms and conditions, as all are city-owned owned facilities on City property. The GCWCC is also supportive of a consistent approach. As such, those community centres who currently have some level of mandated requirements would be adjusting their rules such that helmet use would be strongly recommended for all ages, in order to ensure consistent guidelines in all City-owned arenas and skating rinks.

Third Party Responsibilities

As it relates to other associated user groups in City-owned arenas, organized sport associations such as hockey and ringette, have regulations in place regarding the requirement for protective equipment including helmets. Any other 3rd party casual user such as birthday parties, special events and contract recreation leagues would be subject to the same guideline as proposed in this report.

Implementation Strategy

Implementation of the approved recommendation would commence with the start of the Fall 2006 Public Skate sessions. The Department would begin a promotional campaign in order to advise the public and all current users of the guidelines related to protective headgear use. The development of relevant educational, promotional and communication materials will be a key component of the plan. The financial resources required for these materials could be generated through the existing operating budget complimented by a sponsorship strategy developed in partnership with related agencies and organizations, such as the Winnipeg Regional Health Authority, IMPACT, the General Council of Winnipeg Community Centres, and Sport Manitoba. It is proposed that a total budget of $12,500 be established by utilizing $2,500 from the existing Department operating budget and $10,000 from potential sponsorship initiatives. Expenditures would include the preparation of promotional and communication materials, upgrading signage and developing educational campaigns. In addition, there will be opportunities for highlighting potential supports to address individual or family access issues which may be preventing a further increase in voluntary helmet use.

The plan would include an annual review process to evaluate the effectiveness of this approach as it relates to increasing the voluntary use of helmets during public skating in all City-owned arenas.

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Financial Impact Statement

Date: June 29, 2006

Project Name:

Protective Head Gear in City-Owned Arenas & Skating Rinks

First Year of Program 2006

	2006	2007	2008	2009	2010
Capital					
Capital Expenditures Required					
Less: Existing Budgeted Costs					
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal					
Debt - External					
Grants (Enter Description Here)					
Reserves, Equity, Surplus					
Other - Enter Description Here					
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ 12,500				
Less: Incremental Revenue/Recovery	10,000				
Net Cost/(Benefit)	$ 2,500	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	2,500				
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments:

It is proposed that a total budget of $12,500 be established by utilizing $2,500 from the existing Department operating budget and $10,000 from potential sponsorship initiatives. Expenditures would include the preparation of promotional and communication materials, upgrading signage, and developing educational campaigns.

Cindy Fernandes
Acting Manager of Finance and Administrative Services

IN PREPARING THIS REPORT THERE WAS:

Internal Consultation With and Concurrence By:

- Public Works Department
- Corporate Services Department, Legal Services Division

External Consultation With:

- General Council of Winnipeg Community Centers
- Winnipeg Regional Health Authority (WRHA), Medical Health Officer (MHO)
- Canadian Municipal Jurisdictions
- Injury Prevention Centre of Children's Hospital (Impact)
- Skate Canada
- Ontario Recreation Facilities Association Inc. (ORFA)
- Health Canada

THIS REPORT SUBMITTED BY:

Department: Community Services
Division: Community Development and Recreation Services
Prepared by: Gerald Mirecki, Dale Karasiuk and Kathy Knudsen
File No.

Winnipeg
Community Services Department

Appendix 1

Ice Skating Head Injuries Research Report

APRIL 2006

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Research Objectives

- to determine the risk of sustaining a head injury during public skating
    - to review the number of ice skating head injury incidents at City of Winnipeg arenas
    - to determine the percentage of skaters under eighteen (18) years of age that are currently not wearing protective head gear in City of Winnipeg Community Services Department public skating programs
    - to gather recreational ice skating injury data/statistics in order to compare the occurrence of recreational ice skating head injuries sustained by children with the occurrence of other injuries sustained by children
- to review other municipal jurisdictions and community groups' guidelines (i.e., mandatory or recommended) with respect to helmet use during public skating
- to understand the reasons/rationale why other community groups/municipalities recommend the use of protective head gear (helmets) for public skating

Summary

- Based on data available, the risk of sustaining a head injury from ice skating during public skating appears to be low.
    - The number of incidents of ice skating head injuries reported to City staff at City of Winnipeg indoor arenas is low.
        - Between January 1, 2001 and March 31, 2005, 13 ice skating head/face injury incidents were recorded by Community Services Department staff. Five of these incidents involved children less than 18 years of age.
    - A two week study conducted at City of Winnipeg indoor arenas indicated that voluntary compliance of helmet use during public skating is high.
        - During this study, it was determined that 78.39% of children under eighteen years of age DO wear helmets during public skating.
    - Manitoba and Canadian statistics from the Canadian Injury Reporting and Prevention Program (CHIRPP) database imply that the number of reported recreational ice skating head injuries sustained by children is low compared to all other types of reported injuries sustained by children. However, this analysis cannot be directly interpreted as recreational ice skating being "safer" than other childhood activities. The number of injuries that occur is a combination of the risk of injury and the time spent doing the activity. Since children spend much less time recreationally ice skating than other common childhood activities (i.e., bike riding, playing on playground equipment), the number of injuries would be expected to be lower.
        - Injury data for ice skating head injuries from medical facilities is limited and the data from the Canadian Injury Reporting and Prevention Program (CHIRPP) database that is analyzed in this report is to be interpreted with caution.
- Three surveys of municipal jurisdictions were conducted during 2003-2006. Based on the most recent survey findings, the mandated use of helmets during public skating at other municipal jurisdictions is limited across Canada.

- Ten major municipal recreation jurisdictions across Canada were contacted. Currently, nine jurisdictions recommend helmet use during public skating; whereas, one jurisdiction (Toronto) has a mandatory requirement that children (6 years and under) must wear a CSA hockey helmet during public skating.

- Four Manitoba recreation municipal jurisdictions were contacted. Currently, three jurisdictions do not have requirements with respect to helmet use during public skating; whereas, one (Dauphin) mandates helmet use during public skating for individuals less than 18 year of age.

- Currently, the General Council of Winnipeg Community Centres (GCWCC) has indicated that helmet use by children during public skating is required at seven indoor community centre arenas and recommended at five. The mandatory age requirement for helmet use differs between community centre locations.

- Based on surveys conducted in 2005 and 2006 and numerous other interviews, the reasons/rationale why most community groups/municipalities recommend the use of protective headgear (helmets) for public skating include the following:

    - Most service providers encountered difficulty with enforcing the use of helmets with older age groups relative to younger age groups.
    - Service providers indicated that there was no specific incident that influenced their decision to recommend helmet use.
    - The majority of service providers felt that their rules and standards concerning helmet use were 'logical'.
    - Organizations expressed risk management concerns with respect to enforcement expectations should mandatory use be in place.

Methodology

City of Winnipeg Community Services Department Ice Skating Data

From December 23, 2004 to January 4, 2005 (excluding December 24th and 25th) and from January 13th to 20th, 2005 Community Services Department staff observed the percentage of ice skaters that were not wearing helmets during public skating. This study was conducted in 14 city owned arena facilities. Furthermore, additional ice skating incident data was retrieved from departmental records.

Recreation Ice Skating Head Injury Data

In order to obtain Canadian health data regarding head injuries arising from skating incidents the following agencies were contacted:

- The Winnipeg Regional Health Authority (WRHA)
- The Injury Prevention Centre of Children's Hospital (IMPACT)
- The Public Health Agency of Canada (PHAC).

IMPACT and PHAC retrieved and provided the City of Winnipeg Community Services Department with Manitoba and Canadian ice skating injury data from the Canadian Injury Reporting and Prevention Program (CHIRPP).

Please Note:

With respect to the Manitoba CHIRPP data provided by the IMPACT, it should be noted that this data does not provide a complete count of injuries in Manitoba. These data are collected only from the emergency room of Winnipeg's Children's Hospital. Forms are completed for about 80% of children reporting to emergency. CHIRPP data is known to be biased toward the minor injuries – severely injured children are often missed. CHIRRP data are mostly useful for describing general patterns of injury (age, gender, injury type, and body part) and general comparisons to other injury types. Absolute numbers should be noted with caution.[1]

In terms of the Canadian CHIRRP data provided by the PHAC, it is important to note that the injuries described do not represent all injuries in Canada, but only those seen at the emergency departments of the 14 hospitals in the CHIRPP network. Since the bulk of CHIRPP data comes from the pediatric hospitals, which are in major cities, injuries suffered by the following people are under-represented in the CHIRPP

[1] Source: IMPACT

database: older teenagers and adults, who are seen at general hospitals; native people; and people who live in rural areas.[2] The primary focus of CHIRPP is to track the types of injuries for children and youth 19 years of age and younger.[3]

Additional comparative health data were also obtained from a study conducted at Ohio State University (Department of Pediatrics), the Canadian Institute of Health Information, and the US National Safe Kids Campaign.

GCWCC

In March 2003 and September 2005, the GCWCC reviewed its helmet use requirements for public skating. Twelve community centres currently have indoor ice skating arena facilities.

Other Community Groups/Municipalities Data

In March 2003, ten Canadian municipal recreation service providers and three local private/non-profit service providers were contacted by telephone in order to determine their rules (if any) with respect to the use of protective headgear for public skating.

In February 2005, the six municipal jurisdictions and the 3 private/non-profit organizations that were surveyed in 2003 that had rules for the use of protective head gear for public skating were re-contacted by telephone in order to determine the reasons/rationale as to why the use of protective head gear for public skating is recommended.

In addition, Skate Canada, the Ontario Recreation Facilities Association Inc., and Health Canada were consulted in order to determine their rules and guidelines with respect to the use of protective headgear for public skating.

In February 2006, ten major recreational municipal jurisdictions and four Manitoba recreational municipal jurisdictions were contacted in order to update information with respect to helmet use requirement during public skating.

[2] Source: Public Health Agency of Canada

[3] Public Health Agency of Canada (October 24, 1997). CHIRPP – A Unique Source of Child Injury Information. Retrieved February 23, 2005, from http:www.phac-aspc.gc.ca/injury-bles/chirp/chrpb_e.html

Analysis

City of Winnipeg Community Services Department Ice Skating Incident Data

In a study (n= 2749) conducted during a two-week period in 2004/2005, Community Services Department staff determined that 78.39% of children under 18 years of age DO wear helmets during public skating at City of Winnipeg indoor arenas.

- Therefore, 21.61 % of children under 18 years of age do not wear helmets during public skating.

Furthermore, Community Services Department summary incident data for ice skating injuries indicate the following for the period commencing January 1, 2001 to March 31, 2005:

- 16 incident reports were filed
  - 13/16 of these reports were related to the head or face
    - 5 of the 13 incidents involved children under 18 years of age
      - 2 of the 5 children were not wearing helmets

Recreational Ice Skating Head Injury Data

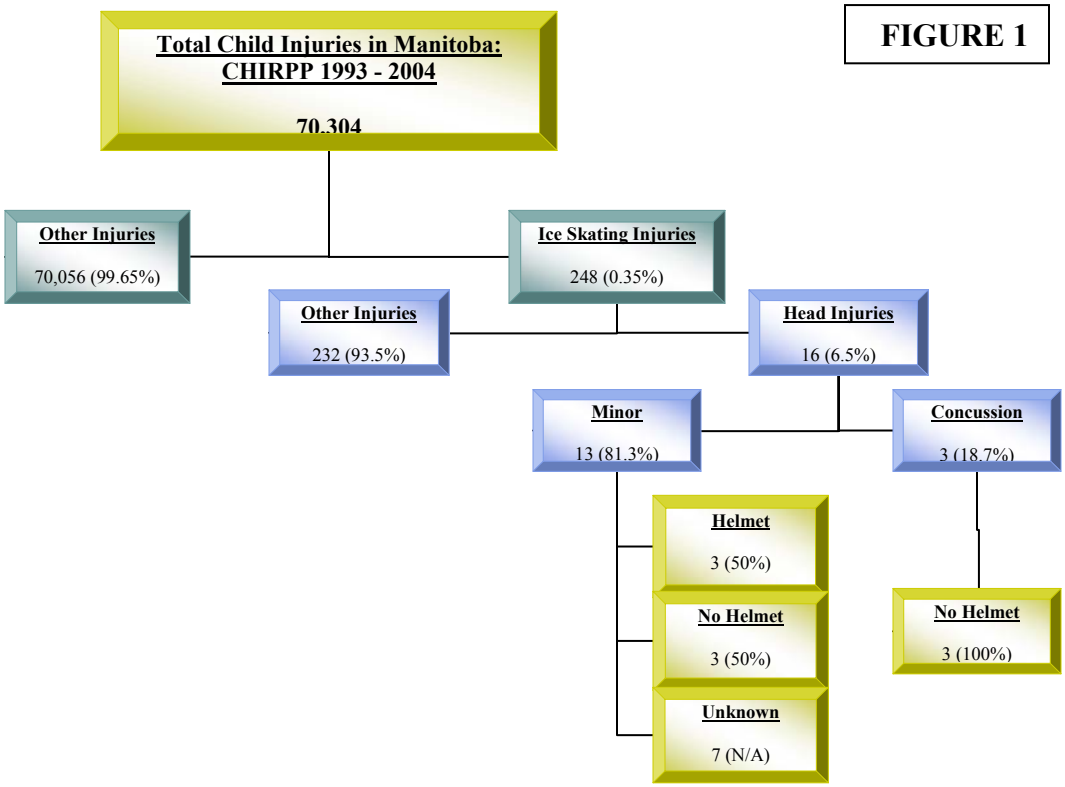
In this analysis Manitoba and Canadian CHIRRP database statistics are analyzed in order to compare the number of reported ice skating head injuries to the total number of reported injuries suffered by children. Also, the incidence of ice skating head injuries is compared to the number of injuries associated with other recreational activities injuries such as cycling, in-line skating, roller skating, skateboarding, etc.

Head Injury Incidents From Ice Skating (Excluding Hockey) - Manitoba Statistics[4]

[4] Manitoba head data included 'minor head injuries' and concussions for children 16 years of age and under.

The Injury Prevention Centre of Children's Hospital, Health Sciences Centre in Manitoba CHIRPP database indicates that there were a total of 70,304 child injuries in Manitoba from January 1, 1993 to December 31, 2004. Of these injuries, 248 or 0.35% were related to ice-skating. Of the 248 ice-skating injuries, 16 were head injuries, which included 3 concussions and 13 minor head injuries. The 16 head injuries associated with ice skating represents 0.02% (16/70,304) of all child injuries reported. All 3 children who suffered concussions were not wearing helmets. Of the 13 children who obtained minor head injuries, 3 reported wearing a helmet, 3 reported not wearing a helmet and helmet use was unspecified for the other 7 children (see figure 1).[5]

FIGURE 1



[5] Source: The Injury Prevention Centre of Children's Hospital (IMPACT)

Head Injury Incidents From Recreational Ice Skating (Excluding Ice Hockey) - Canadian Statistics[6][7]

Chart 1.0 indicates that there were 1719 recreational ice skating head injuries from 1997 to 2003.[8] Recreational ice skating head injuries accounted for 0.22% of all injuries reported in the CHIRPP database.[9] Chart 2.0 further details the types of head injuries suffered by ice skaters. Please note that ice skaters suffered 124 concussions during this time period.

Chart 1.0 Total Number of Head Injuries Associated with Recreational Ice Skating Canada CHIRPP Statistics (1997 - 2003)

YEAR	COUNT	Per 10 000 CHIRPP Cases	Ice Skating Head Injuries as a % of Total Injuries
1997	298	25.53	0.26%
1998	278	24.84	0.25%
1999	259	23.50	0.24%
2000	263	22.85	0.23%
2001	225	19.48	0.19%
2002	231	19.62	0.20%
2003	165	17.04	0.17%
TOTAL	**1719**	**Average**	**0.22%**

[6] Injury data were obtained from the database of the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), Public Health Agency of Canada.

[7] Head injury data includes superficial injuries, open wounds, fractures, sprains/strains, nerve muscle, eye injuries, dental, soft tissue, minor head, concussion, and intracranial injuries.

[8] The Canadian ice skating head injury data is specific to recreation ice skating; hockey has been excluded. These statistics are based are data from January 1, 1997 to October 31, 2003.

[9] Canadian CHIRPP statistics indicated that recreation ice skating head injuries accounted for 0.22% of all injuries reported; whereas, the Manitoba CHIRPP statistics indicated that recreation ice skating head injuries accounted for 0.02% of all injuries reported. This difference may be explained by how 'head injuries' were defined in each study. (The head injury definition used in the Canadian study was more comprehensive than the definition used in the Manitoba study as discussed in the report.) Furthermore, the Manitoba study included children 16 years of age and younger; whereas, the Canadian study included children and adults.

Chart 2.0 - Type of Head Injuries Associated with Recreational Ice Skating - Canada CHIRPP Statistics (1997-2003)

Type of Head Injury	Total	%
SUPERFICIAL	148	8.61%
OPEN WOUND	876	50.96%
FRACTURE	25	1.45%
SPRAIN/STRAIN	1	0.06%
NERVE/MUSCLE	1	0.06%
EYE INJURY	13	0.76%
DENTAL	66	3.84%
SOFT TISSUE	1	0.06%
MINOR HEAD	456	26.53%
CONCUSSION	124	7.21%
INTRACRANIAL	8	0.47%
TOTAL	**1719**	**100.00%**

With respect to age, Chart 3.0 demonstrates that most recreational ice skating head injuries were suffered by children 5- 14 years of age (i.e., 1406 or 81.79%). Children 5-9 years of age suffered the majority of ice skating head injuries (i.e., 54.62%) followed by children 10-14 years of age (27.17%).

Chart 3.0 - Total Number of Ice Skating Head Injuries by Age
Canada CHIRPP Statistics (1997-2003)

AGE	COUNT	PERCENT
<1 YR	1	0.06%
1YR	1	0.06%
2-4 YRS	154	8.96%
Subtotal	**156**	**9.08%**
5-9 YRS	939	54.62%
10-14 YRS	467	27.17%
Subtotal	**1406**	**81.79%**
15-19 YRS	77	4.48%
>= 20 YRS	80	4.65%
Subtotal	**157**	**9.13%**
Total	**1719**	**100.00%**

In a separate but similar study, chart 4.0 below identifies the number of ice skating head injuries among 1 – 19 year olds from April 1, 1990 to March 31, 1994.[10] Similar to the previous study most head injuries were suffered by ice skaters 5-9 years of age followed by children who were 10-14 years of age.

Chart 4.0 - Total Number of Ice Skating Head Injuries
(Concussions and Minor Head Injuries)
Canada CHIRPP Statistics - April 1, 1993 to March 31, 1994

AGE	COUNT	PERCENT
1-4YRs	4	5.06%
5-9 YRS	44	55.70%
10-14 YRS	24	30.38%
15-19 YRS	7	8.86%
TOTAL	**79**	**100.00%**

Head Injury Incidents from Other Recreation Activities - US Study Comparative

[10] Public Health Agency of Canada. The Chirpp Sampler. Issue 3 November 1994. Retrieved February 24, 2005, from http://www.phac-aspc.gc.ca/publicat/chirpp-schirpt/03nov94/iss3_e.html

McGeehan, Shields, and Smith (2004) studied recreational injuries, especially head injuries, among ice-skaters, skateboarders, roller skaters, and in-line skaters, in order to determine the need for helmet use during recreational ice-skating by children.[11] The setting for this study was a large, urban, academic, children's hospital. Over a 31 month period, 419 consecutive children were evaluated for skating related injuries. Highlights from this study include the following:

- The proportion of head injuries among ice skaters was greater than that observed for participants in other types of skating (i.e., skateboarding, roller-skating, and in-line skating), for which helmet use is recommended and often required.
    - Ice skaters sustained injury to the head in 20.0% of cases, and the most frequent type of head injury among ice-skaters was a laceration.
- The type of injuries associated with each recreational skating activity suggest that ice-skaters and skateboarders may fall differently (i.e., backward and sideways) than in-line and roller skaters (forward). As a result, ice-skaters may not be able to use their arms to stop them from falling.

McGeehan, Shield, and Smith concluded that children should wear a helmet during recreational ice-skating.

Overall Injuries from Recreational Activities - Canadian Study Comparative

The Canadian Institute for Health Information (CIHI) reports that in 2002-2003 there were 6,113 sports and recreation related injury hospitalizations in Ontario.[12] This study further indicates that the leading causes of sports and recreational injury hospitalization were cycling (21%), falls from playground equipment (10%), hockey (8%), all terrain vehicle incidents (8%), snowmobile incidents (6%), ski/snowboard incidents (6%), ice skating (5%), animal riding (4%), other sports (4%), fall from tree(3%), skateboards(3%), rollerblades (3%), soccer(3%), football/rugby(2%), and scooters (2%).

Please note: There is no control for the amount of time spent in the above activities, so the number of injuries does not represent risk of the activity per constant unit of time."

Overall Injuries from Recreational Activities - US Study Comparative

[11] McGeehan, J., Shields, B.J., Smith, A.G. (2004). Children Should Wear Helmets While Ice-Skating: A Comparison of Skating-Related Injuries. *Pediatrics*, 114, 124-128.

[12] Canadian Institute for Health Information, Ontario Trauma Registry Analytic Bulletin: Sports and Recreational Injury Hospitalizations in Ontario, 2002-2003. Toronto (ON): CIHI, 2004.

The US organization, National Safe Kids Campaign, reports the following statistics regarding recreation wheel activities injuries:

- In 2001, 134 children ages 14 and under died in bicycle-related crashes.
- In 2002, nearly 274,800 children were treated in hospital emergency room for bicycle-related injuries.
- In 2002 nearly 51,300 children ages 14 and under were treated in hospital emergency rooms for non powered scooter-related injuries
- In 2002 more that 60,100 children ages 5 to 14 were treated in hospital emergency rooms for skateboard-related injuries.
- In 2002 more that 13,700 children ages 5 to 14 were treated in hospital emergency rooms for ice-skating-related injuries.[13]

General Comments

The number of ice skating head injuries sustained by children is low compared to other types of injuries sustained by children. However, this cannot be directly interpreted as recreational ice skating being "safer" than other childhood activities. The number of injuries that occur is a combination of the risk of injury and the time spent doing the activity. Since children spend much less time recreationally ice skating than other common childhood activities (i.e., bike riding, playing on playground equipment), the number of injuries would be expected to be lower.

City of Winnipeg Community Centres

During March of 2003, the GCWCC reviewed community centre requirements with respect to helmet use during public skating at indoor arena facilities. This GCWCC review indicated following:

- 12 community centres currently have indoor arena facilities.
    - Eight community centres had rules requiring helmet use by children during public skating, 2 recommend helmets be worn, and 2 had no rules pertaining to helmets.

A review conducted by the GCWCC in September of 2005 revealed the following:

- 12 Community Centres currently have indoor arena facilities.
    - Seven community centres require helmet use by children during public skating.
        - Age requirements for this rule vary from all ages to children 12 years of age and under.

[13] National Safe Kids Campaign. Injury Facts. Retrieved February 24, 2005 from http://www.safekids.org/tier3_printable.cfm?content_item_id=9530&frolder_id=540

- Five community centres recommend helmet use by children during public skating.

Other Community Groups/Municipalities Data

During March and April of 2003 ten Canadian municipal recreation service providers including Burnaby, Edmonton, Calgary, Regina, Hamilton, Halifax, Selkirk, Brandon, Steinbach, and Dauphin and three local private/non-profit recreation organizations were contacted in order to determine what rules (if any) are implemented with respect to helmet use during public skating. The results of this survey included the following:

- None of the ten municipal organizations surveyed mandated the use of helmets during public skating.
  - Four of these jurisdictions had no rules.
  - Six of these jurisdictions recommended the use of hockey helmets.

- One of the private/non-profit local organizations mandated the use of hockey helmets for public skating for children 14 years of age and under.

- A 2005/06 study of the 6 municipal recreation service providers and the 3 local private/non-profit organizations that were previously surveyed in 2003, and who recommended the use of protective head gear (helmets) during public skating, were contacted in order to determine the reasons/rationale as to why the use of protective head gear (helmets) is recommended during public skating. The findings are generalized below:

  - Most service providers encountered difficulty with enforcing the use of helmets with older age groups relative to younger age groups.
  - Service providers indicated that there was no specific incident that influenced their decision to recommend helmet use.
  - The majority of these service providers felt that their rules and standards concerning helmet use were 'logical.'
  - Organizations expressed risk management concerns with respect to enforcement expectations should mandatory use be in place.

- In 2006 ten major municipal recreational service providers and four Manitoba municipal recreation service providers were contacted regarding helmet use requirements during public skating.

  - Nine major municipal recreation service providers including Vancouver, Burnaby, Edmonton, Calgary, Regina, Hamilton, Mississauga, Ottawa, and Halifax recommend helmet use for all ages during public skating.

- The City of Toronto indicated that a CSA approved hockey helmet is mandatory for children (6 years and under) and strongly recommended for all other ages during public skating.

- Three Manitoba municipal recreation service providers including Selkirk, Brandon, and Steinbach indicated that there was no policy.

- In 2005, the City of Dauphin changed its requirements. Helmet use is now required for individuals less than 18 years of age during public skating.

Other Community Groups

Skate Canada

CanSkate is Skate Canada's flagship learn-to-skate program. In its CanSkate Program Delivery Guide, Skate Canada indicates the following:

'Helmets are recommended for beginners of any age in the CanSkate program.'

Ontario Recreation Facilities Association Inc.

The Ontario Recreation Facilities Association Inc. (ORFA) is a provincially recognized, non-for-profit organization that is membership driven.[14] The Association is governed by the following mission statement: "…to strategically provide leadership in the professional development, promotion, awareness and enhancement of recreation facilitation." In the early 1990's, the ORFA provided signage to all arenas in Ontario recommending the use of helmets. The Township of Chapleau embraced this notion and took it one step further, making helmet use mandatory. This directive presented a number of problems as legal advice at that time indicated the mandatory use of any equipment meant that the **proper** use of that equipment had to be ensured. This meant that staff, the official representative of Council, had to verify the right helmets were being used (i.e. CSA approved) and that they were being used correctly. To meet this condition, additional staff would be necessary to personally inspect each helmet and patron entering the ice surface. Through this experience, the ORFA suggests using the term 'recommendation' over 'mandatory' to deflect some of the corporate legal exposure and enforcement concerns. As such, the ORFA's current Public Skating Guidelines document, strongly recommends the use of helmets for all public skating with no exception to age.

Health Canada

When ice-skating outdoors, Health Canada in its Winter sports safety bulletin recommends the following:

[14] Ontario Recreation Facilities Association Inc. (Sept. 2001). Suggested Guidelines for Public Skating. Retrieved March 9, 2005 from http://www.orfa.com/Public%20Skating.pdf

'When skating: Children should wear a helmet.'[15]

[15] Health Canada. (March 2003). Winter Sports Safety. Retrieved March 7, 2005, from http://www.hc-sc.gc.ca/hecs-sesc/cps/pdf/winter.pdf

Appendix 2

S.W.O.T Analysis
Options for Helmet Use Guidelines

OPTION 1 (Administration Recommended Option)

THAT THE CITY OF WINNIPEG STRONGLY RECOMMEND THE USE OF PROTECTIVE HEAD GEAR (ICE HOCKEY HELMETS) FOR ALL AGES DURING PUBLIC SKATE PROGRAMS AND ASSOCIATED USE IN ALL CITY-OWNED INDOOR ARENAS AND OUTDOOR SKATING RINKS.

Reasoning/Rationale:

Based on the available research data and comparative information from local and national jurisdictions, there is limited evidence to support a mandated requirement for helmet use during public skating.

- Nine of ten major municipal recreation jurisdictions across Canada currently recommend helmet use during public skating.
- The National and Provincial injury statistics for this activity indicate that the frequency of head injuries occurring while participating in recreational ice skating is relatively low as compared to other more common recreation related activities.
- A relatively high compliance exists in terms of children currently wearing helmets.
- A low level of incidents reported suggests a safe environment currently exists within the programs as a result of strong supervisory skate patrol to participant ratios, adequate, overall participant skill level and effective, well understood on-ice rules and regulations.

Strengths	Weaknesses
• consistent guideline can be presented with the support of a promotional and educational sponsorship strategy. • reasoning and rationale based on research findings. • further encourages voluntary compliance rather than mandated requirements. • consistent with other recent safety initiatives including the extensive review of current practices. • consistent with 9 of 10 Canadian major municipal jurisdictions surveyed.	• some participants may disregard the strong recommendation for helmet use. • medical research regarding ice-skating head injuries is limited.
Opportunities	Threats
• ability to promote the added benefits of active living pursuits such as recreational ice-skating in any promotional/educational material. • may increase participation of teens who would not be in favour of wearing a helmet. • could result in standardized rules and regulations in all City-owned arenas.	• City may be perceived as not fully addressing safety concerns without a mandated requirement for helmet use. • cost of purchasing helmets may be prohibitive for some segments of the population. • the mandated requirement at seven Community Center locations will be removed which may result in less voluntary use of helmets.

OPTION 2

THAT THE CITY OF WINNIPEG MANDATE THE REQUIRED USE OF PROTECTIVE HEAD GEAR (ICE HOCKEY HELMETS) FOR CHILDREN NINE YEARS OF AGE AND UNDER DURING PUBLIC SKATE PROGRAMS AND ASSOCIATED USE IN ALL CITY-OWNED INDOOR ARENAS AND OUTDOOR SKATING RINKS.

Reasoning/Rationale:
This age group represents the majority of total recreational ice skating (excluding hockey) head injuries reported through the CHIRPP database. Young children injured while skating tend to injure their heads most commonly (about 90% of injuries) likely due to their body size, proximity to ice and top heavy centers of gravity. For those participants 10 years of age and over, it should be strongly recommended, through education and promotional materials, they wear protective headgear.

Strengths • adds additional level of safety regulations to protect children. • reinforces Departmental focus on safety initiatives.	Weaknesses • would bring additional supervisory and training expenditures at a minimum of $11,000 to ensure implementation and enforcement. • potential delays for the public entering the ice surface because they would be subject to visual inspection of helmets every time they enter/return to the ice surface. • extra requirement for determining/verifying age of participants. • enforcement will be difficult at outdoor rinks as there is no supervision.
Opportunities • ability to promote the added benefits of active living pursuits such as skating in any promotional/educational material. • could result in standardized rules and regulations in all City-owned arenas. • preferred option of WRHA, Medical Officer of Health.	Threats • costs of purchasing helmets may be prohibitive for some segments of the population. • currently no specific helmets are designed/approved for recreational ice skating use so can only recommend a particular type of helmet (Canadian Standard Association approved hockey helmet). • potential patron/staff conflicts if helmet is deemed not suitable. • may keep some children at advanced skill level away from public skating because they do not see the need for a helmet based on their individual expertise.

OPTION 3

THAT THE CITY OF WINNIPEG MANDATE THE REQUIRED USE OF PROTECTIVE HEAD GEAR (ICE HOCKEY HELMETS) FOR CHILDREN SIXTEEN YEARS OF AGE AND UNDER DURING PUBLIC SKATE PROGRAMS AND ASSOCIATED USE IN ALL CITY- OWNED INDOOR ARENAS AND OUTDOOR SKATING RINKS.

Reasoning/Rationale:

Expanding the requirement of OPTION 2 to include children ages 11-16 captures the peak ages for ice skating injuries. Teens are injured less frequently but of those injured they had the highest proportion of concussions and more serious head injuries when they do injure their head likely due to increased speed and body mass. For participants over age 16 it should be strongly recommended, through education and promotional materials, they wear protective head gear.

Strengths	Weaknesses
• adds additional level of safety regulations to protect children and youth up to 16yrs. • reinforces Departmental focus on safety initiatives.	• would bring additional supervisory and training expenditures at a minimum of $11,000 to ensure implementation and enforcement. • potential delays for the public entering the ice surface because they would be subject to visual inspection of helmets every time they enter/return to the ice surface. • extra requirement for determining/verifying age of participants. • additional difficulties to be encountered in enforcing the rules with this age group. • enforcement will be difficult at outdoor rinks as there is no supervision
Opportunities	Threats
• ability to promote the added benefits of active living pursuits such as skating in any promotional/educational material. • could result in standardized rules and regulations in all city owned arenas.	• costs of purchasing helmets may be prohibitive for some segments of the population. • currently no specific helmets are designed/approved for recreational ice skating use so can only recommend a particular type of helmet (Canadian Standard Association approved hockey helmet). • potential patron/staff conflicts if helmet is deemed not suitable. • may keep some children/youth at advanced skill level away from public skating because they do not see the need for a helmet based on their individual expertise.