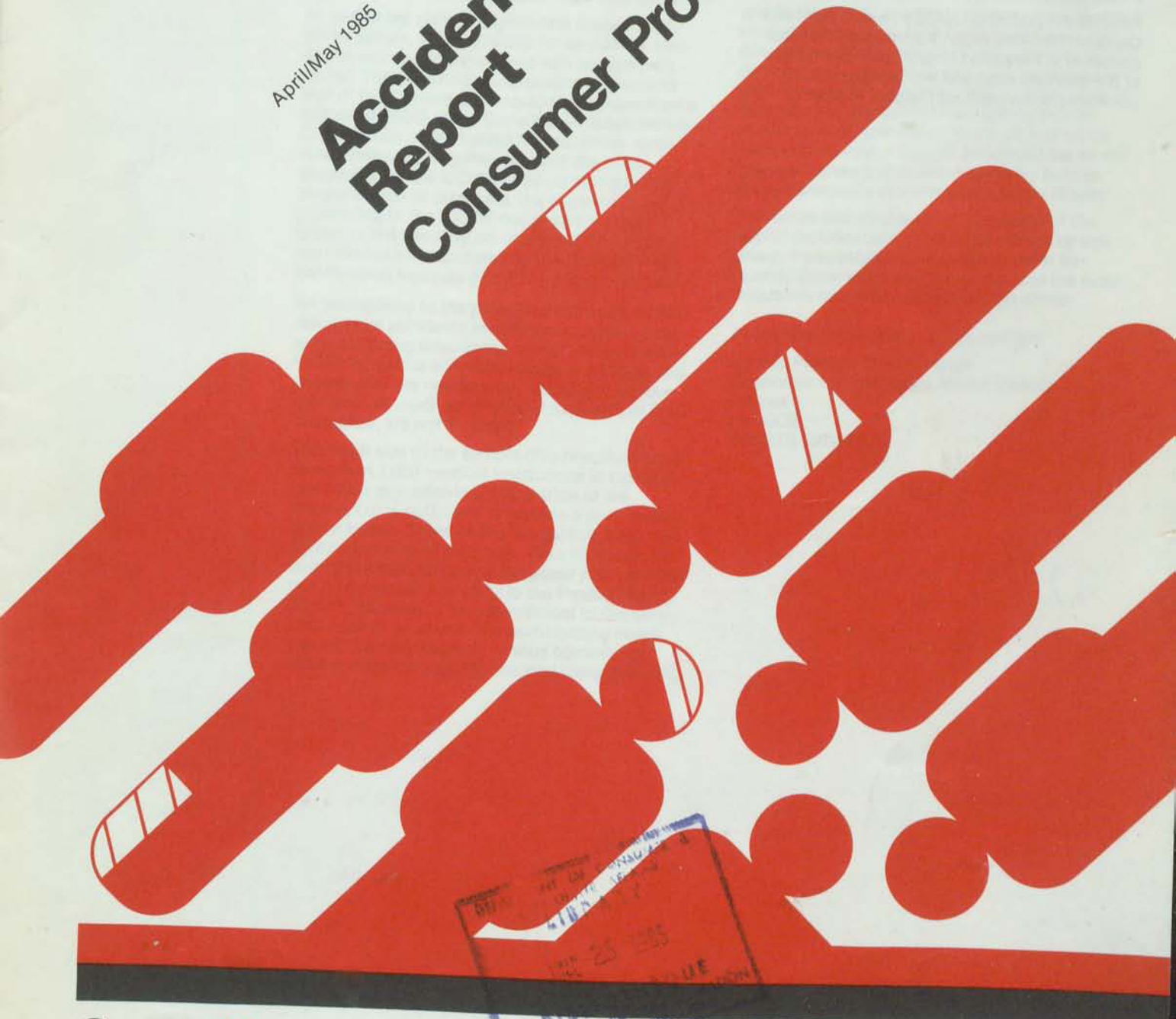
April/May 1985

Accidental Injuries Report Consumer Products



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Introduction

The Canadian Accident Injury Reporting and Evaluation (CAIRE) project was initiated by the Product Safety Branch of Consumer and Corporate Affairs Canada in January 1982. The objective of the project is to provide a data bank of information on accidents and injuries, which in turn will help organizations concerned with product safety to establish priorities and evaluate programs.

Reports are published twice a year, in April and October. The April report summarizes the data collected in the period from April to September of the previous year, and the October report summarizes the previous October to March.

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Methodology

Five hospitals are participating in the data collection:

Isaac Walton Killam Hospital, Halifax, N.S.
Montreal Children's Hospital, Montreal, Quebec
Toronto Hospital for Sick Children, Toronto, Ontario
Pasqua Hopital, Regina, Saskatchewan
Prince George Hospital, Prince George, B.C.

As part of the patient registration procedure at the hospitals, all admissions for accidental injuries involving consumer products are specially coded. The product coding used is identical to that of the National Electronic Injury Surveillance System (NEISS) of the Consumer Product Safety Commission of the United States. At the same time, data including the nature of the injury (according to the ICD-9N code on international classification of diseases), the cause of injury (according to the ICD-9E code), and the age group of the casualty are collected. These data are collated and tabulated by the Hospital Medical Records Institute (HMRI) on a quarterly basis.

All admissions to the participating hospitals that result from accidents involving consumer products, including emergency cases, are reported to HMRI. Industrial and work-related accidents, and injuries that are not directly related to a consumer product, such as long-term exposure to toxic chemicals, are not included.

The small size of the sample (five hospitals out of more than 1,000 medical institutions in Canada) precludes any reliable extrapolation of the results, but is sufficient to provide a good indication of trends. Three of the five participating hospitals specialize in child care. This increases the bias of the sample from a statistical point of view, but is of particular interest to the Product Safety Branch, because of its commitment to the safety of children's products. The participating hospitals are representative of various community sizes and are strategically located geographically.

The NEISS code used to classify products divides the range of consumer products into some 1,000 classifications. Some of these are very specific, for example, waffle irons, and others much more general, such as stairs and steps. The codes referring to sports injuries are intended to be used only when sports equipment is involved, but, in practice, it is difficult to distinguish between injuries inherent to the sport and those related to the equipment used. In a more general sense, the mention of a product does not imply that the product caused the accident, but only that the product was associated with the accident. To define the cause of an accident requires a detailed investigation into its circumstances and environment, as well as the nature of the injury. Special investigations of this type are initiated whenever necessary to meet the requirements of the Product Safety Branch.

The tables and diagrams in this edition of the Report include the number of accidents by age group, those products or activities most frequently associated with accidents, and the most frequently occurring injuries by age group.

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CAIRE Highlights — Summer 1984

- Although the total number of accidents reported from the five hospitals was almost identical to that of the summer of 1983, nearly 58 per cent of the accidents involved the "top 20" products or activities, an increase of four per cent from 1983.
- The order of products within the top 10 remains very similar to 1983 with bicycles topping the list, and stairs and steps second.
- On a year-round basis, bicycles are now almost equal with stairs and steps as the product most frequently involved in accidents. However, while accidents involving stairs and steps are mostly to the youngest and oldest age groups, children in the 5-14 age groups are, not surprisingly, most vulnerable to bicycle accidents.
- In spite of a general increase in bicycle-related accidents, the number of bicycle accidents to children in the two-to-four age group has decreased. This may be due to the publicity given to the potential dangers of child carriers on bicycles and the consequent improvements made in design, together with greater caution being applied in their use.
- The number of incidents involving drugs and medications has increased considerably, and these products are now 13th on the list with 322 reported accidents. Suicides and deliberate overdoses are not included in the data collected. Over 40 per cent of the accidents occurred to children in the two-to-four age group.
- The number of accidents recorded for all the age groups under 15 has increased slightly, but the number of inpatients in the 10-14 age group has increased by 23 per cent over last summer. No particular reason can be found for this significant change.
- The types of injuries recorded continue to concentrate on head wounds, which are particularly prevalent among the younger age groups. In fact, head injuries occur in more than a quarter of all reported accidents and this figure rises to 37 per cent for children under 10 years of age. Older accident victims tend to have wounds to upper limbs, and sprains and strains.
- Some 84 per cent of all victims have injuries that can be classified into the 14 types included in table 2.

Figure 1
Number of Accidents by Age Group

April 1984 - September 1984

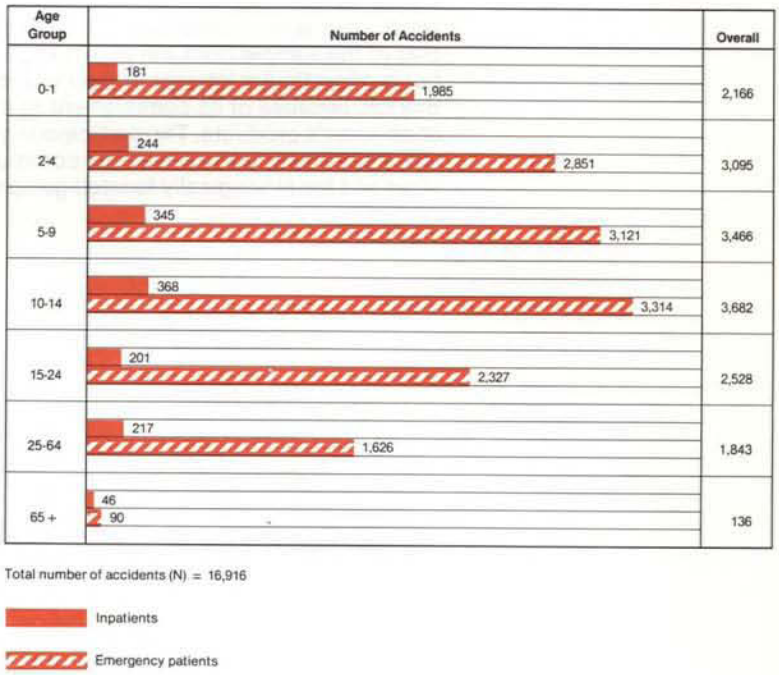

Table 1
Top 20 Products or Activities Involved in Accidents by Age Group
April 1984 — September 1984

Product/Activity	TOTAL		0-1		2-4		5-9		10-14		15-24		25-64		65+	
	Number (n)	* of N	Freq.	% of n.	Freq.	% of n.	Freq.	% of n.	Freq.	% of n.	Freq.	% of n.	Freq.	% of n.	Freq.	% of n.
Bicycles and accessories	2,092	12.3	22	1	177	8	841	40	750	36	245	12	53	3	4	*
Stairs or steps	1,205	7.1	354	29	323	27	126	10	164	14	111	9	89	7	38	3
Baseball	883	5.2	4	*	23	3	130	15	328	37	228	26	169	19	1	*
Doors	488	2.8	88	18	137	28	124	25	81	17	34	7	22	5	2	*
Football	455	2.6	1	*	2	*	12	3	159	35	239	53	42	9	—	—
Tables	445	2.6	144	32	177	40	60	13	30	7	16	4	16	4	2	*
Knives	428	2.5	4	1	23	5	52	12	68	16	133	31	141	33	7	2
Swings or swing sets	371	2.1	21	6	134	36	146	39	60	16	5	1	4	1	1	*
Beds	371	2.1	117	32	143	39	77	21	20	5	6	2	5	1	3	1
Nails, screws, carpet tacks	364	2.1	17	5	29	8	96	26	64	18	76	21	81	22	1	*
Hockey	350	2.0	—	—	8	2	47	13	137	39	127	36	31	9	—	—
Soccer	336	1.9	—	—	2	1	54	16	161	48	87	26	32	10	—	—
Drugs and medication	322	1.9	71	22	132	41	29	9	25	8	31	10	21	7	13	4
Chairs	295	1.7	84	28	114	39	43	15	24	8	9	3	17	6	4	1
Monkey bars/climbing apparatus	282	1.6	3	1	48	17	174	62	55	20	1	*	1	*	—	—
Slides and/or sliding boards	274	1.6	16	6	109	40	110	40	38	14	1	*	—	—	—	—
Fences or fence posts	220	1.3	4	2	30	14	92	42	64	29	22	10	8	4	—	—
Gymnastics	211	1.2	2	1	6	3	61	29	113	54	29	14	—	—	—	—
Basketball	198	1.1	—	—	—	—	10	5	90	45	85	43	13	7	—	—
Windows or window glass	181	1.0	18	10	42	23	31	17	28	15	34	19	27	15	1	1
TOTALS	9,771	58	970	10	1,659	17	2,315	24	2,459	25	1,519	16	772	8	77	0.78

*less than 0.5%

Relative percentage by age group as compared to the total number of accidents (N):

TOTALS	9,771	58	970	6	1,659	10	2,315	14	2,459	15	1,519	9	772	5	77	0.45

Total number of accidents (N) = 16,916

Table 2
Most Common Types of Injuries by Age Group
April 1984 — September 1984

Number of Injuries

Injury Type	Age Groups							
	TOTAL	0-1	2-4	5-9	10-14	15-24	25-64	65+
Open wound of head and neck, including face and eyes	2,824	485	932	758	330	155	158	6
Contusion with intact skin surface	1,917	266	310	365	436	333	184	23
Open wound of upper limb(s)	1,579	72	111	215	283	376	490	32
Sprain(s) and strain(s)	1,461	28	79	179	484	458	228	5
Fracture of upper limb(s)	1,253	39	130	363	487	134	94	6
Intracranial injury, excluding skull fractures	986	341	228	207	137	46	16	11
Superficial injury	913	129	155	251	216	120	41	1
Open wound of lower limb(s)	899	22	67	241	248	172	143	6
Poisoning(s) (drugs, medication)	540	110	255	31	37	67	33	7
Burn(s)	494	173	83	51	35	71	76	5
Fracture of lower limb(s)	481	33	64	72	151	65	82	14
Effects of foreign body entering through orifice	385	78	149	85	26	24	22	1
Fracture of skull	260	49	39	49	62	38	22	1
Concussion	208	23	72	71	49	25	6	2
TOTALS	14,200	1,848	2,634	2,938	2,981	2,084	1,595	120

Total number of accidents (N) = 16,916

Figure 2
Graph Displaying the Three Most Common Types of Injuries by Age Group
April 1984 — September 1984