

Advisory Opinion

Promoting Data Collection and Utilization to Reduce Childhood Injuries



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Science Council of Japan

**Subcommittee on Child Development and
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Subcommittee on Child Development and Environment Committee on Clinical Medicine of Science Council of Japan (SCJ)

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YUKAWA Katsumi	(Associate Member)	Professor, Faculty of Human Sciences, Sophia University
YOSHINO Hiroshi	(Associate Member)	Professor emeritus at Tohoku University, Visiting professor, Akita Prefectural University

The following staff members were responsible for administration and research in this opinion.

SCJ Office	MASUKO Noriyoshi	Director, Division for Scientific Affairs I (until April 2023)
	NEGORO Kyoko	Director, Division for Scientific Affairs I (since May 2023)
	YAMADA Hiroshi	Deputy Director, Division for Scientific Affairs I (until March 2023)
	WAKAO Kimiaki	Deputy Director, Division for Scientific Affairs I (since April 2023)
	SAKUMOTO	Official, Division for Scientific Affairs I (until March 2023)

Asuka

OKIYAMA Kiyomi Unit Chief, Division for Scientific Affairs I (since April 2023)

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Abstract

1. Background of the Advisory Opinion

One of the biggest threats to children's health is unintentional injuries, which must be prioritized, like disease. Childhood injuries are greatly influenced by the environment in which they grow up. Therefore, in the 25th session of the Subcommittee on Child Development and Environment, of the Science Council of Japan, we decided to express our opinions on how to create an injury prevention system by examining the ripple effects of the previous recommendations, clarifying current issues, and taking into account recent trends such as digital transformation and artificial intelligence.

2. Current Issues

Since the previous recommendations, measures have been taken, including establishing the Consumer Affairs Agency, starting injury data collection, and developing several safety standards. However, the number of serious injuries has not shown a decreasing trend, although the number of deaths is decreasing. One of the reasons for this is that no national department is in charge of dealing with all injuries to children, and it is prohibitively difficult to take a scientific approach based on reliable open data and promote effective measures under a strong command post based on scientific findings. In particular, no public database is available to monitor the number of injuries resulting in serious injuries, which is a significant impediment to scientific activities.

On the other hand, the departments with jurisdiction over traffic accidents and occupational accidents have been respectively established to collect injury data, analyze it, devise countermeasures, set targets, and numerically evaluate the effects of such countermeasures taken. These data show that the number of fatalities and injuries has decreased yearly, confirming the effectiveness of the countermeasures. It is necessary to establish and implement effective measures for childhood injuries and build a system to evaluate the effectiveness of these measures. We have decided to issue our opinions on establishing a new child-centered injury prevention system.

3. Opinions

(1) Establishment of a department in the Child and Families Agency that is involved in all accidents involving children

The Safety Division of the Child and Families Agency should be responsible for providing a bird's eye view of all matters related to children's accidents, instructing each department to investigate, making requests and recommendations, and appointing a person to act as an auditor of all aspects of children's safety.

(2) Establishment of a system for continuous collection of injury information and conversion to open data

The Fire and Disaster Management Agency's data on accident conditions during first-aid transport, the data collected by the Japan Sports Promotion Center's Disaster Mutual Aid Benefit System, and the injury databases of the Consumer Affairs Agency and the National Consumer Affairs Center's network of medical institutions should all be made available free of charge so that academic activities can be widely conducted. In addition, accident scene investigation data held by the Public Prosecutor's Office should also be made available for prevention purposes regarding those cases other than criminal ones. If necessary, this should be promoted through legislation or a cabinet decision.

(3) Establish a department and research institute to analyze injury data on an ongoing basis

The Safety Division of the Child and Families Agency should continuously analyze and evaluate injury data on children obtained from various organizations by collecting such data in one place or using distributed data utilization technology. As for epidemiological data on daily life, emergency transport data from the Fire and Disaster Management Agency can be used. As for school accidents, data on disaster mutual aid benefits collected by the Japan Sports Promotion Center can be used. In the long term, a Comprehensive Analysis Center for Everyday Life Accidents (tentative name) should be established to perform analysis and research functions similar to those of the Comprehensive Analysis Center for Traffic Accidents for

traffic accidents. The Comprehensive Analysis Center for Everyday Life Accidents should promote research, train researchers, and collaborate with international organizations such as the World Health Organization (WHO).

(4) Collection of behavioral data by age and location (product) of children and creation of a database

A database of daily activities should be developed for products and environments in which accidents have occurred so that measures to improve products and environments can be studied. Collection of these data should also be conducted by the Comprehensive Analysis Center for Everyday Life Accidents.

(5) Promotion of local injury prevention projects and development of safe products and environments

While preparing the basic information described above, specific injury prevention activities should be conducted in each region. In this case, individual injuries should be targeted, and evaluation items and their target values should be determined and evaluated. In addition, cooperation with local universities, local councils for child accident prevention, and non-profit organizations should be encouraged to promote these injury prevention activities. The government should promote the development of safe products and environments and establish a system that facilitates the development of injury prevention activities in the community.

(6) Improvement of abstract contents of injury prevention information into concrete ones that are easy to act upon, and adoption of effective methods using social media and other media as communication channels

Guidelines and notices with abstract expressions should be improved, and communication should be devised to be easy to use at school sites and households. In addition, whether or not they are being communicated should be investigated and continually improved. Social media should also be actively utilized as a communication channel.

(7) Enactment of the Basic Law on Measures against Accidents in Daily Life (tentative name)

A Basic Law on Measures for Everyday Life Accidents should be enacted to promote injury prevention activities. The Law should cover all injuries and all ages, excluding traffic and industrial accidents.