Koriyama City Safe Community Promotion Council

Traffic Safety Task Force Activity Report



Presenter: Kenji Abe, Chair

Background of Traffic Safety Task Force

Number of deaths by causes other than illness

Total of deaths from 2009 to 2015

Fig. 1

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Age group	1st plac	ce	2nd place	9	3rd place	e	
0 to 0 v o	Suffection	2 noonlo	Traffic accident	2 people	Falls or tumbles	1 people	
0 10 9 y.0.	Sunocation	3 people	Drowning or near-drowning	2 people			
10 to 19 y.o.	Suicide	10 people	Traffic accident	4 people	Traffic accid	dent	
20 to 29 y.o.	Suicide	70 people	Traffic accident	7 people	deaths rank second in a	ked a wide	
30 to 39 y.o.	Suicide	70 people	Traffic accident	9 people	<pre>/ range of ag]</pre>	cond in a wide nge of age groups	
40 to 49 y.o.	Suicide	92 people	Traffic accident	17 people	Suffocation	5 people	
50 to 59 y.o.	Suicide	106 people	Traffic accident	18 people	Drowning or near- drowning	9 people	
60 to 69 y.o.	Suicide	78 people	Traffic accident	21 people	Suffocation	16 people	
70 to 79 y.o.	Suicide	47 people	Suffocation	35 people	Traffic accident	32 people	
80 to 89 y.o.	Suffocation	96 people	Falls or tumbles	39 people	Drowning or near- drowning	33 people	
90 y.o. and older	Suffocation	46 people	Falls or tumbles	19 people	Suicide Drowning or near- drowning	33 people 7 people	
Total	Suicide	511 people	Suffocation	212 people	Traffic accident	132 people	

Source: Koriyama City Health Department "Demographic Statistics (Report on Causes of Death)"

Composition of Traffic Safety Task Force



Identifying challenges from data (1)

Change in situation of traffic accident (personal injury) incidents

Fig. 2



Source: Koriyama Police Department, Koriyama Kita Police Department "White Paper on Traffic Safety FY2014 to 2020"

Traffic accidents in Koriyama City have been on a downward trend, decreasing from 1,589 in 2014 to 679 in 2020. This is a decrease of about 57% over the past six years.

Identifying challenges from data (2) Comparison with national and prefecture levels

Trends of number of traffic accidents (accidents resulting in injury or death) per 100,000 population



Source: National Police Agency "Police White Papers FY2014 to 2020", Fukushima Prefecture Police Headquarters, Koriyama Police Department, Koriyama Kita Police Department "White Paper on Traffic Safety FY2014 to 2020"

Until 2014, Koriyama had more accidents than national and Fukushima Prefecture. However, the number fell below the national level in 2015 and has continued downward.

Fig. 3

Identifying challenges from data (3)

Number of deaths or injuries by the parties involved

Fig. 4

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Koriyama City FY2020



Identifying challenges from data (4)

Characteristics of traffic accidents in Koriyama City

Fig. 5

No.	Characteristics	Within Koriyama Police Department jurisdiction	Fukushima Prefecture
1	Rate of accidents within intersection	64.2%	26. 8%
2	Rate of accidents by youth drivers	13. 5%	11. 9%
3	Rate of bicycle accidents	13.9%	9. 0%
4	Rate of nighttime accidents	32.2%	26. 8%
5	Rate of head-on collisions	33. 1%	26. 7%

Source: National Police Agency, Koriyama Police Department "FY2020 White Paper on Traffic Safety", Characteristics of traffic accidents

Five Characteristics



We will focus on accidents within intersection and bicycle accidents

Identifying challenges from data (5)

Age groups with a high rate of bicycle accidents (Koriyama)



Source: Koriyama Police Department "Situation of traffic accidents (involving bicycles)"

The number increases greatly for 1st-year high school students and then gradually declines.

Main methods of commuting to school in Koriyama City

Junior high school -> Mostly walking High school -> Many bicycles



Source: Koriyama Police Department "Bicycle accidents involving junior high and senior high students" Tabulation from January 1, 2014 to December 31, 2020

There are many accidents inside intersections.

There are many head-on collisions.

Identifying challenges from data (7) Changes in number of traffic deaths (Koriyama)

Approx. half of traffic accident deaths in Koriyama City involve the elderly.



Source: Koriyama Police Department, Koriyama Kita Police Department "White Paper on Traffic Safety FY2014 to 2020"

Fig. 8

Identifying challenges from data (8)

Severity of traffic accident injury requiring emergency transport in Koriyama City by age



Source: Koriyama Regional Fire-Defense Union " 2014 to 2020 Emergency Transport Data (National tables)" Identifying challenges from data (9)

Number of accidents in Koriyama City by road type



Priority challenges and priority targets based on data

Challenge 1: There are many bicycle accidents involving senior high students.

(Source: Identifying challenges from data (5), (6))

Challenge 2: Accidents involving elderly people are often serious.

(Source: Identifying challenges from data (7), (8))

Challenge 3: There are many accidents at intersections. (Source: Identifying challenges from data (8))

Priority target: High school students, elderly, areas around intersections



*SS method: Scared Straight (method to re-enact accident in front of students so that they visually see the hazards). 13

Re-examination of activity indicators and performance indicators

Feedback from Injury Surveillance Committee	 Understand the changes in citizens' behavior and awareness following measures taken so far Review of techniques Incorporation of Internet survey As it is difficult for the Task Force to improve the hardware, data-based proposals should be made to road administrators to request improvements to the structure of intersections with many accidents. In addition to checking the number of accidents at intersections, the details of accidents should be examined. We should focus on the impact of Covid-19 (positive and negative aspects)
Studies by Task Force	 Holding traffic safety classes using stuntman is difficult due to expenses. Distribution of the DVDs as educational material on traffic safety is difficult as there is an issue with distributing copies. The installation of caution signs at intersections is dangerous as it could cause drivers to take their eyes off the road. How about conducting a questionnaire to understand the performance of all activities (changes in citizen's behavior and awareness)? How about conducting a questionnaire over the Internet?

Re-examination of activity indicators and performance indicators

Priority challenge (1)

	Priority challenges	Activity indicator	Short-term performance indicator	Mid-term performance indicator	Long-term performance indicator	
Inges		Number of Traffic Accident Hotspot Intersection Map distributed				
e cha	There are many bicycle accidents involving senior high	Number of traffic safety classes (SS method) held	students' traffic safety awareness	Same as short-term performance indicator	accidents involving senior high students	
Befor	students.	Number of educational materials (DVD on SS method, etc.) distributed	g. · · · · ·			
	Activity indicators that were changed to active be conducted, leading school students' awar	t were difficult to conduct ty indicators that could to changes in high reness and behavior.	Short-term and changed after re (Performance of	mid-term performance eviewing activity indic each activity is meas	e indicators ators sured)	
	Priority challenges	Activity indicator	Short-term performance indicator	Mid-term performance indicator	Long-term performance indicator	
anges		Number of Traffic Accident Hotspot Intersection Map distributed (students)	High school students' recognition of accident hotspots			
After cha	There are many bicycle accidents involving senior high students.	Distribution of leaflets promoting traffic accident prevention and purchase of bicycle insurance	High school students' awareness of the	Changes in high school students' traffic safety awareness	Number of bicycle accidents involving senior high students	
students.		Street campaigns promoting prevention of bicycle accidents involving high school students	dangers of bicycle accidents			

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Re-examination of activity indicators and performance indicators

Priority challenge (2)

es	Priority challenges	Activity indicator	Short-term performance indicator	Mid-term performance indicator	Long-term performance indicator
chang		Number of traffic safety classes for the elderly held	Changes in elderly person's traffic safety awareness	Samo as short form	Number of traffic
Before	Accidents involving elderly people are often serious	Number of promotions to encourage elderly to voluntarily return driver's license	Number of driver's licenses voluntarily returned by the elderly	performance indicator	accidents involving the elderly
	Since nighttime acc elderly are increasi of reflectors was ac indicator	cidents involving the ng, the distribution ided to the activity	Short-term ar indicators we adding activit (Performance	nd mid-term perfor are added or chang by indicators of each activity is	mance ed after measured)
	Priority challenges	Activity indicator	Short-term performance indicator	Mid-term performance indicator	Long-term performance indicator
lges		Number of traffic safety classes for the elderly held	Changes in elderly person's traffic safety awareness		
After char	Accidents involving elderly people are often serious	Number of promotions to encourage elderly to voluntarily return driver's license	Number of driver's licenses voluntarily returned by the elderly	Changes in elderly person's traffic safety awareness	Number of traffic accidents involving the elderly
		Number of nighttime reflectors distributed to the elderly	Rate of elderly who wear nighttime reflectors		

Re-examination of activity indicators and performance indicators

distributed (companies)

Priority challenge (3)

	Priority challenges	Activity indicator	Short-term performance	Mid-term performance	Long-term performance	
	, 0	-	indicator	indicator	indicator	
langes		Number of caution signs, etc., installed	Number of traffic accident hotspots where			
PIOLE CL	There are many accidents at intersections.	Number of road signs improved	the environment was improved	Same as short-term performance indicator	Number of traffic acciden at intersections	
ň		Number of surveys conducted at intersections	Number of improvements proposed to road administrators			
	conduct were can of "Traffic Accide conducted in prio added (Distributio	nceled and distribution ent Hotspot Map," prity challenge (1) was on to companies)	indicators of activity ind (Performan measured)	changed after revie icators ice of each activity	is	
Ś	Priority challenges	Activity indicator	Short-term performance indicator	Mid-term performance indicator	Long-term performance indicator	
cnange	There are many accidents at	Number of surveys conducted at intersections	Number of improvements proposed to road administrators	Number of intersections improved following proposals	Number of traffic accidents	
Alter	intersections.	Number of Traffic Accident Hotspot Intersection Map	Citizens' recognition of accident hotspots	Changes in citizens' traffic safety awareness	at intersections	



Current initiatives: Nation, Prefecture, Police, City, Community level

		Nation, Prefecture, Police	City	Community level
Priority challenge	Improve environment	Improvement of ro	ad environment	Inspection of school routes
(1) Bicycle accidents involving senior high	Rules and penalties	Enforcement of traffic laws and regulations		
students	Education and awareness-promotion	Training for malicious offenders	Traffic safety class	Instruction of school route safety
Priority challenge	Improve environment	Improvement of ro	ad environment	Mimamori-watching activities
(2) Accidents involving	Rules and penalties	Enforcement of traffic laws and regulations		
to be serious	Education and awareness-promotion	Training when renewing driver's license	Traffic safety class Promotion of support car subsidy	Reminders within family
Priority challenge	Improve environment	Improvement of ro	oad environment	Understanding of dangerous spots
(3) There are many	Rules and penalties	Enforcement of traffic laws and regulations		
intersections.	Education and awareness-promotion	Training when renewing driver's license	Traffic safety class	Street campaigns



Direction (1)

There are many bicycle accidents involving senior high students. There are many accidents at intersections.

Distribution of traffic safety hotspot maps (high school students)

Raise awareness of traffic safety

Priority target

High school students, around intersections

Initiative (1) (8)



Details

- Updated "Traffic Accident Hotspot Map" created in 2017.
- · Collaborated with Koriyama Police Department to tabulate data on personal injuries between 2016 and 2019.
 - Task Force reviewed and improved the design.

Result

 10,000 copies were created and distributed to elementary, junior high, senior high, special needs schools, and companies in the City.

• A questionnaire was conducted at three high schools in the City to understand the changes in the students' awareness and actions after reading the map.

Questionnaire of companies is schedules

Priority challenge (1)
Direction (1)
Priority target
Initiative (2)

There are many bicycle accidents involving senior high students.

Raise awareness of traffic safety

High school students

Distribution of leaflets promoting traffic accident prevention and purchase of bicycle insurance







日報率はいて数率回加らり取されて来の片面です。日報率とゆりス、率を無加じているのとはりとす。 交通ルールを守るのはもちろんのことですが、日頃から自転車の整備や点検を行うとともに、万一に 乳自転車の保険に加入しましょう。



Details

• Provide information on the current status of bicycle accidents involving high school students in the City, rules for riding bicycles, and the importance of purchasing bicycle insurance.

• Promote the dangers of bicycle accidents to high school students.

Result

• 12,000 copies were created and distributed to elementary, junior high, senior high schools.

• A questionnaire was conducted at three high schools in the City.

• We were able to see the high school students' level of understanding.

Conduct questionnaire

Did the high school students' behavior or awareness change?

School



Photo: Entrance at cooperating school (Koriyama Higashi Highs School)

Initiative (1)

Questionnaire results Part 1 Use of bicycle

Respondents: High school students commuting within Koriyama City (3 schools, 466 students)



Approx. 80% (403 students) of 466 respondents use their bicycle

Source: Traffic Safety Task Force "Questionnaire on preventing traffic accidents (High school students) 2021"

Fig. 11

Questionnaire results Part 2 Awareness of traffic accidents

Approx. 80% of the students who looked at the map understand where are incident frequent occurrence places

Before looking at accident hotspot map



Q. Select the accident hotspots that you know about.

After looking at accident hotspot map

Fig. 12



Q. Did you understand intersections with many accidents looking at the "Traffic accident hotspot map?"

Questionnaire results Part 3 Awareness of dangers of bicycle accidents

Approx. 90% of the students who read the leaflet said their awareness of the dangers of bicycle accidents increased.

After seeing leaflets promoting traffic accident prevention and purchase of bicycle insurance



Q. Did your awareness of the dangers of bicycle accidents increased after reading the leaflet?

Source: Traffic Safety Task Force "Questionnaire on preventing traffic accidents (High school students) 2021"

Fig. 13

Questionnaire results Part 4 Changes in awareness of traffic safety

Approx. 90% of the students who looked at the map said their awareness of traffic accidents increased.



Q. Did your awareness of traffic accidents increase after learning about accident hotspots?

Source: Traffic Safety Task Force "Questionnaire on preventing traffic accidents (High school students) 2021"

Fig. 14



There are many bicycle accidents involving senior high students.

Raise awareness of traffic safety

High school students

Initiative (3)

Street campaigns promoting prevention of bicycle accidents involving high school students



Details

- During the Traffic Safety Campaign period, the Police and companies cooperated with street campaigns targeting high school students who ride their bicycle to school
- Instruction was given on safely riding bicycles, and leaflets calling for accident prevention were distributed



Participati

- Traffic Safety Task Force
- Police
- Mitsui Sumitomo Insurance Co., Ltd. (signed a comprehensive cooperation agreement with Koriyama City) Koriyama City

Activity results and evaluation

Priority challenge (1): There are many bicycle accidents involving senior high students

	Details of indicator [Measurement method]	Unit	2016	2017	2018	2019	2020
	Number of Traffic Accident Hotspot Intersection Map distributed (students)	copies	-	1,245	940	-	194
Results of activities	Distribution of leaflets promoting traffic accident prevention and purchase of bicycle insurance New	copies	_	-	12,550	12,400	12,300
	Street campaigns promoting prevention of bicycle accidents involving high school students New	times	_	-	_	_	1
Short-term	High school students' recognition of accident hotspots New	%	_	_	_		
performance indicator	High school students' awareness of the dangers of bicycle accidents New	%	_	-	-	_	-
Mid-term performance indicator	Changes in high school students' traffic safety awareness	%	_	_	_	_	-
Long-term performance indicator	Number of traffic accidents involving high school students	people	_	60	44	48	24

Priority challenge (2)
Direction (1)
Target
Initiative (4)

Accidents involving elderly people are often serious

Raise awareness of traffic safety

Elderly

Traffic safety classes for the elderly



Details

• Traffic safety classes for the elderly are held in cooperate with the Police.

Result

2017	9 sessions
2018	10 sessions
2019	8 sessions
2020	0 sessions
	(because of Covid-19 pandemic)
*Tho o	loss organizare are planning to

*The class organizers are planning to conduct a questionnaire of the participants



Accidents involving elderly people are often serious

Raise awareness of traffic safety

Elderly

Promotion of voluntary return of driver's license by elderly





Details

• A leaflet giving an overview of the policy for voluntary return of driver's license and details for joining a traffic safety was created and distributed.

Result

- 13,000 copies created
- Distributed to the elderly at senior citizen clubs

Anticipated effect if elderly people voluntarily returned their driver's licenses increase

- Elderly drivers who are driving while uncertain will decrease, thereby leading to a decrease in traffic accidents.
- Family members of elderly people who have returned their driver's people will feel more relieved.
- Opportunities for elderly people to think about the voluntary return policy will increase.

As a result ...

Elderly people (ages 75 and older) who voluntarily returned their driver's licenses [Total from August 1, 2017 to August 31, 2021] 3,079 people

Of which, people who received bus/taxi tickets. [Total from August 1, 2017 to August 31, 2021] 2,670 people





Accidents involving elderly people are often serious

Raise awareness of traffic safety

Elderly

Initiative (6)

Distribution of nighttime reflectors to the elderly





三事が	このアンケー ミュニティ) を 啓 う後の、交通 感想をお聞か 1	トは、ケガや事だ を推進する「交通 するため実施する 事故防止策の更な	改のな (安全) 5もの なる充	 い安全 対策委員 です。 (です。 (です。) 	・安心な ¹¹ 会」が、 さめに、皆	(まちづく 高齢者の (様の率直	り(<u>セーフ</u>)皆様の交通 「な御意見や	i
	◆年齢(() 7				6	<u>é</u> d	~
問1 夜間:	:福島県内の が多いことを	高齢者の交通事 ご存じですか。	改は、	「歩行	中」が全	体の約4	副、昼間より	2
	1 知っていた	: 2 知らなか	った					
問2 るこ	:反射材を身 とにおいて有:	につけることは、 効であることをる	夜間	におい ですか	て自分の 。	存在を運	転手に知ら	Ż
	1 知っていた	2 知らなか	った					
問3	:今まで反射	材を活用したこと	とはあ	ります	か。			
	1 ある (問5	へ) 2 ない (問	4~)	3 分か	らない (根	月4へ)		
問4 用し	:高齢者の事 ようと思いま	故の起こりうる すか。	犬況((問1)	を知って	、これか	ら反射材を決	舌
	1 思う	2 思わない		3 分か	らない			
問5	: 啓発チラシ たか。	やアンケートを・	うけて	、交通	安全に対	する意識	が高まりま	ر
	1 はい	2 いいえ						
問6	: 交通安全に	関してご意見等が	があれ	ば御記	入くださ	L1.		
Γ								1

Details

• Reflectors and a leaflet on traffic safety for the elderly were distributed to elderly participating in the Iki-Iki Centenarian Exercises (Collaboration to Safety for Elderly Task Force)

Result

- August 2021 Exercise participants
 18 people
- A questionnaire was conducted on the spot to check for changes in the elderly behavior and awareness (Questionnaire for the elderly was conducted don paper)



change after reading the leaflet ortaking part in the questionnaire?Source: Traffic Safety Task Force

"Questionnaire on preventing traffic accidents (Elderly) 2021"

Activity results and evaluation

Priority challenge (2): Accidents involving elderly people are often serious

	Details of indicator [Measurement method]	Unit	2016	2017	2018	2019	2020
Results of activities	Number of traffic safety classes for the elderly held	times	_	9	10	8	0
	Number of promotions to encourage elderly to voluntarily return driver's license (Number of leaflets distributed)	copies	_	_	13,000	13,000	13,000
	Number of nighttime reflectors distributed to the elderly New	copies	_	_	_	_	-
Short-term performance indicator	Changes in elderly person's traffic safety awareness	Place	_	_	-	_	_
	Number of driver's licenses voluntarily returned by the elderly	people	-	359	856	1,197	1,073
	Rate of elderly who wear nighttime reflectors New	%	-	_	_	-	-
Mid-term performance indicator	Changes in elderly person's traffic safety awareness	%	—	—	_	_	-
Long-term performance indicator	Number of traffic accidents involving the elderly (White paper on traffic, etc.)	cases	191	229	198	200	155



There are many accidents at intersections.

Maintenance of environment

Around intersections

Initiative (7)

Survey of intersections



Kitada intersection



Haryu-nishi intersection



Details

• Conduct field survey of intersections with many accidents as shown on the traffic accident hotspot map

• Check traffic volume and visibility, etc., based on the details of actual accidents, and make recommendations to road administrators.

Result

- Kitada intersection
- Haryu-nishi intersection

Participating

 Traffic Safety Task Force Koriyama City

Activity results and evaluation

Priority challenge (3): There are many accidents at intersections.

	Details of indicator [Measurement method]	Unit	2016	2017	2018	2019	2020
Results of activities	Number of intersections investigated	Place	-	5	-	-	-
	Number of Traffic Accident Hotspot Intersection Map distributed (companies) New	copies	-	-	-	-	-
Short-term performance indicator	Number of improvements proposed to road administrators	Place	-	-	-	-	-
	Citizens' recognition of accident hotspots New	%	-	-	-	-	-
Mid-term performance indicator	Number of intersections improved following proposals	Place	-	-	-	-	-
	Changes in citizens' traffic safety awareness New	%	-	-	-	-	-
Long-term performance indicator	Number of traffic accidents at intersections (White paper on traffic, etc.)	cases	628	680	583	594	405

New initiatives (collaboration with Toyota Motors)

- From July 2021, Koriyama City and Toyota Motors have collaborated and started an initiative to reduce traffic accidents
- Upon the analysis of why certain places have more incidents than others, discuss about countermeasures to reduce incidents



Spots where many cares stop suddenly
Frequent traffic accident points



Fig. 16 Traffic flow velocity (vehicle speed) map

Found that, at the intersection which have incidents frequently, car drivers tend to put the brakes on suddenly.

On the other hand, there are also some intersections with a little number of incident where car drivers put the brakes suddenly

New initiatives (collaboration with Toyota Motors)

 To propose effective countermeasure, making analysis on speed and volume of the traffic as well as sudden brakes



Fig. 17 Traffic flow velocity (vehicle speed) map

Fig. 18 Traffic flow map

The intersection where the volume and speed of the traffic change tend to have more incidents. →Further research and analysis will be made ,then reflect to the improvement of the traffic environments

Current goals and future directions

Priority challenges	Current achievements	Future direction			
Challenge 1 There are many bicycle accidents involving senior high students.	 Updated traffic accident hotspot map Updated promotional leaflets Conducted street awareness-raising activities 	 Investigate and verify situation of accidents on traffic accident hotspot map Verify performance 			
Challenge 2 Accidents involving elderly people are often serious	 Held traffic safety classes Promoted voluntary return of driver's license by elderly Distributed reflectors 	 Raise awareness of traffic safety classes and voluntary return of driver's license Promotional activities to promote the use of reflectors 			
Challenge 3 There are many accidents at intersections.	 Conducted investigation of intersections Analyzed causes of accidents at intersections 	 Link investigation results to study for improving road environment 			

Thank you for listening.

