Koriyama City Safe Community Steering Committee

Traffic Safety Task Force Activity Report



Presenter: Kenji Abe, Chair

Reasons for creating Traffic Safety Task Force (1)

Traffic accident deaths rank second place in various age groups.

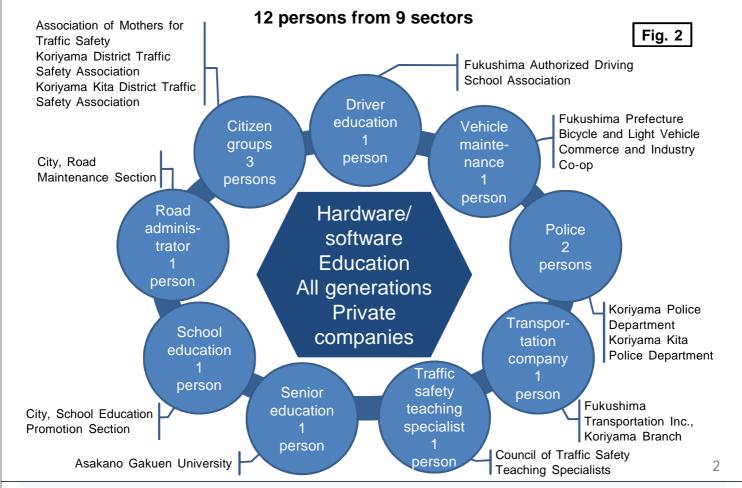
Number of deaths by causes other than illness Total of deaths between FY2009 and 2015 $\dot{\mbox{}}$

Fig. 1

| Age group | 1st place | | 2nd place | | 3rd place | |
|------------------|-------------|---------------|------------------------|------------|---------------------------------------|---------------|
| Ages 0-9 | Suffocation | 3 neonlei | Traffic accident | 2 people | Falls/tumbles | 1 person |
| Ages 0-3 | Surrocation | | Drowning/near-drowning | 2 people | | |
| Ages 10-19 | Suicide | 10 people | Traffic accident | 4 people | Traffic acciden | _ |
| Ages 20-29 | Suicide | 70 people | Traffic accident | 7 people | in death as ag victim increase | |
| Ages 30-39 | Suicide | 70 people | Traffic accident | 9 people | Poisoning | 2 people |
| Ages 40-49 | Suicide | 92 people | Traffic accident | 17 people | Suffocation | 5 people |
| Ages 50-59 | Suicide | 106 people | Traffic accident | 18 people | Drowning | 9 people |
| Ages 60-69 | Suicide | 78 people | Traffic accident | 21 people | Suffocation | 16 people |
| Ages 70-79 | Suicide | 47 people | Suffocation | 35 people | Traffic accident | 32 people |
| Ages 80-89 | Suffocation | 96 people | Falls/tumbles | 39 people | Drowning/near-drowning Suicide | 33 people |
| Age 90 and older | Suffocation | 46 people | Falls/tumbles | 19 people | Drowning/near-drowning | 7 people |
| Total | Suicide | 511 people | Suffocation | 212 people | Traffic accident | 132 people |

Source: Koriyama City Health Department "FY2009 to 2015 Demographic Statistics (Report on Causes of Death)"

Composition of Traffic Safety Task Force



History of activities (1)

Fig. 3

| | | | | ` ' Fig. 3 |
|--------------|-----------|--------------|-----------------------------------|--|
| Ses- sion | i Dale I | | Purpose | Outline of activity |
| 1 | | July 8 | Training, confirmation of data | Safe Community training Confirmation of data from FY2014 community diagnosis |
| 2 | | August 4 | Study of subjective challenges | Study of each member's subjective challenges |
| 3 | ק | September 15 | Study of objective challenges | Understanding characteristics of injuries and accidents from data |
| 4 | FY2015 to | October 13 | Extraction of priority challenges | Confirmation of problem categories and relation to data |
| 5 | o 2016 | November 10 | Extraction of priority challenges | Positioning of challenge priority |
| 6 | | December 14 | Study of direction and targets | Study of environment, education, and restrictions |
| 7 | | January 18 | Review of actual | Confirmation of current measures, their use and improvements |
| 8 | | February 15 | measures | Study of new partnership and cooperation |
| | | | 1 | |

History of activities (2)

Fig. 4

| Session | FY2016 | Purpose | Outline of activity | | |
|----------------------|--------------------|---|--|--|--|
| 9 | May 23 | Study of actual | Modifications to utilize existing programs | | |
| 10 | June 7 | measures | Study of new partnership and cooperation | | |
| 11 | July 12 | Study of actual | | | |
| 12 | August 4 | measures and | Study of activity indicator and performance indicator Identification of insufficient data | | |
| 13 | October 27 | additional data | identification of insufficient data | | |
| Preliminary guidance | November 8 to 9 | | Activity report, advice from examiners | | |
| 14 | November 25 | Review of preliminary guidance Exchange of opinions with Shoshi High School students | Confirmation of advice, study of response Opinions about traffic safety during commute to/from school | | |
| 15 | December 8 | Review of | | | |
| 16 | January 11 | preliminary guidance | Confirmation of advice, study of response | | |
| 17 | January 19 | Study of potus! | Preparation of Traffic Accident Hotspot Intersection Map | | |
| 18 | February 14 | Study of actual measures and additional data | Confirmation of partnership with Child Safety Task Force | | |
| 19 | March 10 | auditional data | Preparation of Traffic Accident Hotspot Intersection Map | | |

History of activities (3)

Fig. 5

| Session | FY2017 | Purpose | Outline of activity |
|---------|--------------|--|--|
| 20 | May 18 | Study of performance indicators | Study of performance indicators and performance indicators |
| 21 | June 15 | Study of performance indicators | Study of survey details |
| 22 | July 3 | Study of actual measures | Preparation of leaflet to promote voluntary return of driver's license by the elderly |
| 23 | July 31 | Confirmation of performance indicators | · Analysis of survey results |
| 24 | August 23 | Study of actual measures | Study of creating poster of Traffic Accident Hotspot Intersection Map |
| 25 | September 21 | Study of actual measures | Re-confirmation of traffic accident data |
| 26 | October 27 | Report at Promotion Council | · Report on activities related to program |
| 27 | | | |

Subjective studies 2nd Task Force meeting



Workshop was held. Members shared subjective opinions.

Subjective challenges and problems raised at this point - Main challenges are listed

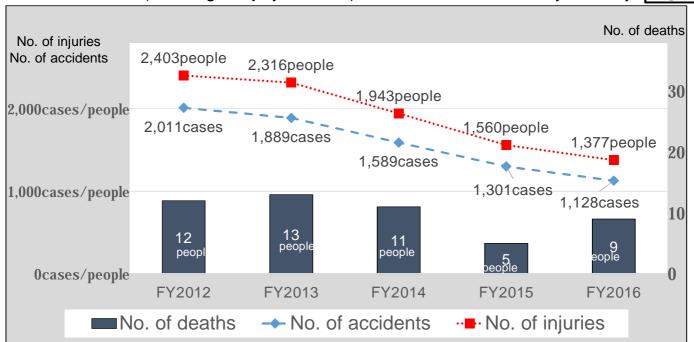
Fig. 6

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| Automobile driver's manners are bad | Concerns about elderly drivers; many accidents | |
|--|--|--|
| Bicycle rider's manners are bad | High frequency of traffic accidents in morning and evening | |
| White road lines are not visible in some places | Drivers not using turn signal, or are late to signal | |
| Increase call-outs for traffic safety for elderly people | Drivers using cell phones while driving are seen | |

Trends of traffic accidents (1) 10-year transition in Koriyama City

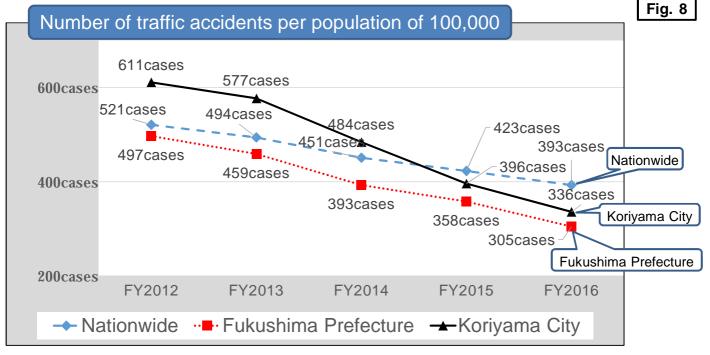
Traffic accidents (resulting in injury or death) are on the decline in Koriyama City. Fig. 7



Source: Koriyama Police Department, Koriyama Kita Police Department "White Papers on Traffic Safety FY2012 to 2016"

Traffic accidents have been on the decline in Koriyama City with a 44% drop from 2,011 cases in FY2012 to 1,128 cases in FY2016.



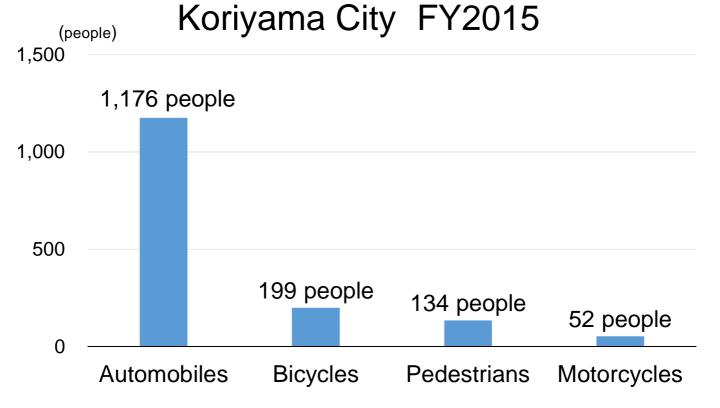


Source: National Police Agency, Koriyama Police Department, Koriyama Kita Police Department "White Paper on Traffic Safety"

Until FY2014, Koriyama City had more accidents than nationwide and Fukushima Prefecture levels, but had fewer accidents than nationwide in FY2015.

Trends of traffic accidents (3) Number of casualties by parties concerned

Fig. 9



Source: FY2015 White Paper on Traffic Safety (Fukushima Prefecture, Fukushima Prefecture Police Headquarters)

Trends of traffic accidents (4) Characteristics of traffic accidents in Koriyama City

Traffic accidents in Koriyama City has several characteristics that have a higher rate than Fukushima Prefecture.

Fig. 10

| No | Characteristics | Within Koriyama Police Department jurisdiction | Fukushima Prefecture |
|----|--|---|-------------------------|
| 1 | Rate of accidents <u>inside intersection</u> is high | 44.8% | 35.6% |
| 2 | Rate of accidents by youth drivers is high | 17.2% | 15.9% |
| 3 | Rate of persons injured while riding bicycle is high | 14.7% | 10.2% |
| 4 | Rate of nighttime accidents is high | 31.3% | 27.6% |
| 5 | Rate of <u>head-on collisions</u> is high | 32.0% | 25.5% |

Source: National Police Agency, Koriyama Police Department "FY2015 White Paper on Traffic Safety", Characteristics of traffic accidents

The Task Force members had common experiences with the five characteristics.

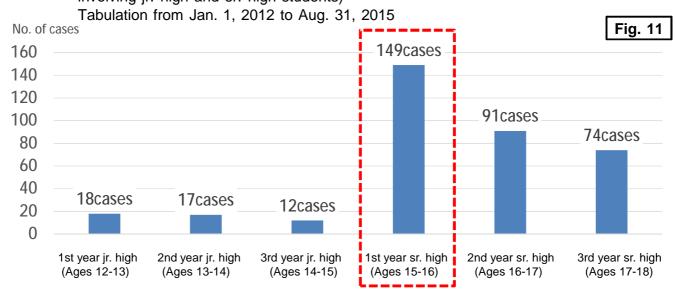


They had close-call accidents with bicycles ridden by senior high school students.

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Trends of traffic accidents (5) Age groups with high rate of bicycle accidents (Koriyama City)

Bicycle accidents in Koriyama City (number of accidents involving jr. high and sr. high students)



Source: Koriyama Police Department "Bicycle accidents involving elementary to sr. high students"

The number increases greatly for accidents involving 1st year sr. high students, and then gradually declines.

Main methods of commuting to school in Koriyama City

Jr. high Mostly walking

Sr. high Mostly bicycle

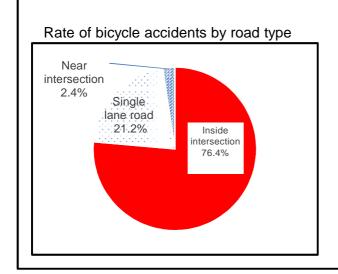
Trends of traffic accidents (6)

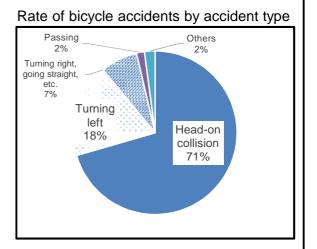
Characteristics of bicycle accidents involving jr. high and sr. high students (Koriyama City)

Bicycle accidents in Koriyama City (number of accidents involving jr. high and sr. high students)

Tabulation from Jan. 1, 2012 to Aug. 31, 2015

Fig. 12





There are many accidents inside intersections

There are many head-on collisions



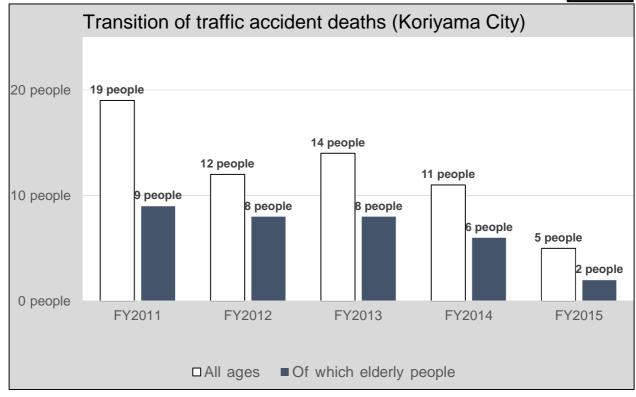
When compared to Fukushima Prefecture, the characteristics match accidents in Koriyama City

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Trends of traffic accidents (7)

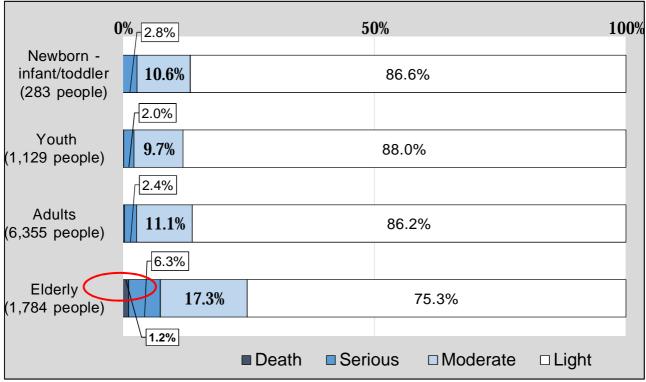
Deaths are declining, but the number of elderly people involved has not changed.

Fig. 13



Source: Koriyama Police, Koriyama Kita Police

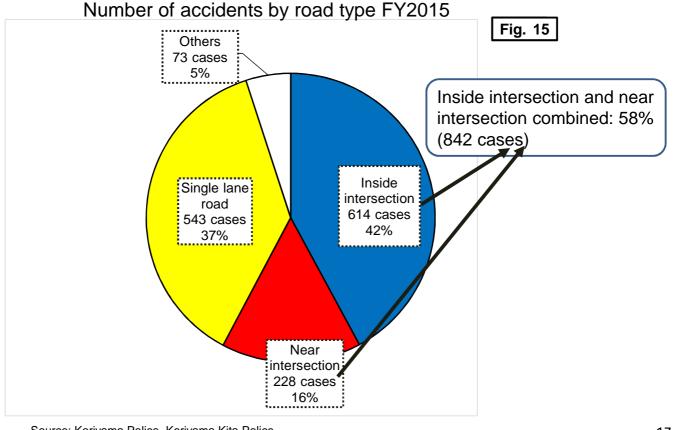
Severity of traffic accident injury requiring emergency transport in Koriyama City by age Fig. 14



Source: Koriyama Fire Department "FY2010-2016 Emergency Transport Data (national table)"

Trends of traffic accidents (8)

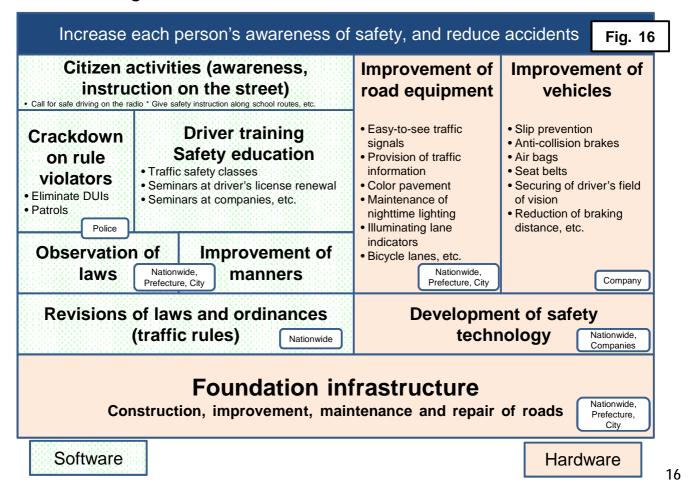
Situation of accidents by road type



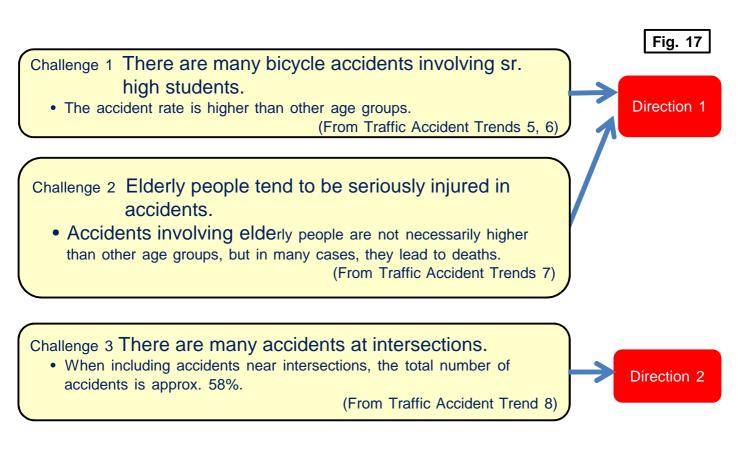
Source: Koriyama Police, Koriyama Kita Police

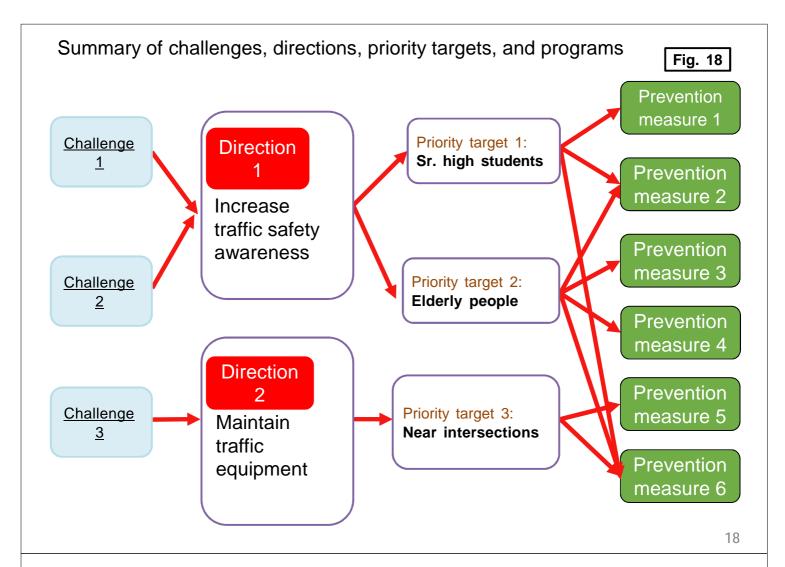
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Preventing traffic accidents with hardware and software



Current priority challenges





Current programs enforced by national government, prefecture, police

| | | | | 1 19. 10 |
|---|----------------------------|--|------------------------|-----------------------------------|
| | | Nationwide, Prefecture, Police | City | Community level |
| Priority challenge 1: | Improvement of environment | Improvement of road environment | | Inspection of school route safety |
| Bicycle accidents involving sr. high | Rules and penalties | Traffic laws, crackdowns | | |
| students | Education and awareness | Seminars for malicious offenders | Traffic safety classes | School route safety instruction |
| | | | | |
| Priority challenge 2: Elderly people | Improvement of environment | Improvement of road environment | | Mimamori activities |
| tend to be seriously injured | Rules and penalties | Traffic laws, crackdowns | | |
| in accidents | Education and awareness | Seminar at driver's license renewal | Traffic safety classes | Reminders in the home |
| | | | | |
| Priority challenge 3: | Improvement of environment | Improvement of re | oad environment | Identifying hazard spots |
| There are many accidents at | Rules and penalties | Traffic laws, crackdowns | | |
| intersections | Education and awareness | Seminar at driver's license renewal | Traffic safety classes | Street campaigns |

Example of existing programs 1

Fig. 20

Traffic safety classes using the Scared Straight Approach

· Accident at pedestrian crossing



Accident caused by large truck's inner wheel difference



◆ Accident caused by bicycle



 Accident caused by large truck's blind spot



Scared Straight

⇒ Approach that re-enacts traffic accidents in front of audience to visually show potential dangers

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Example of existing programs 2

Fig. 21

Joint safety inspection of school routes



Safety inspection of school route



Improvement of school route

Police, traffic related organizations, road administrators, and school personnel, etc. check the safety of school routes while students are commuting to and from school, and study possible improvements, etc.

Before measures



After measures



The intersections and sidewalks were colored based on the studies.

Improvement

Priority challenge ①

There are many bicycle accidents involving sr. high students

Direction ①

Increase awareness of traffic safety

Priority target

Senior high school students

Prevention measures (1)

Use Scared Straight approach
Distribute DVD materials, and hold classes

Educational DVD on preventing bicycle accidents was distributed

Fig. 22



Program

- Current situation of traffic accidents
- Examples of bicycle accidents
- Five rules for safely using bicycle

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Traffic Safety Task Force programs Part 1

Improvement

Details

Educational DVD incorporating Scared Straight approach was distributed to 13 senior high schools. The DVD was shown to increase students' awareness of traffic safety.

Results

In June 2017, the Task Force members directly visited 13 schools in the city to distribute the DVD.

The increase in traffic safety awareness after watching the DVD was measured with a survey.

Organizers

Task Force, senior high schools in the city, Police, City

Target

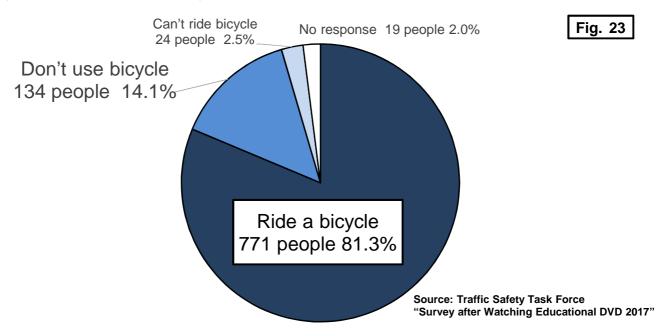
Junior high and senior high school students in Koriyama

Changes since starting SC

The number of senior high school students using bicycle lanes has increased since the DVD was distributed.

Survey Part 1 Use of bicycles for commute to school

Respondent Sr. high school students commuting to school in Koriyama City (7 schools / 948 students)



Approx. 80% (770 people) of the 948 respondents ride a bicycle to school

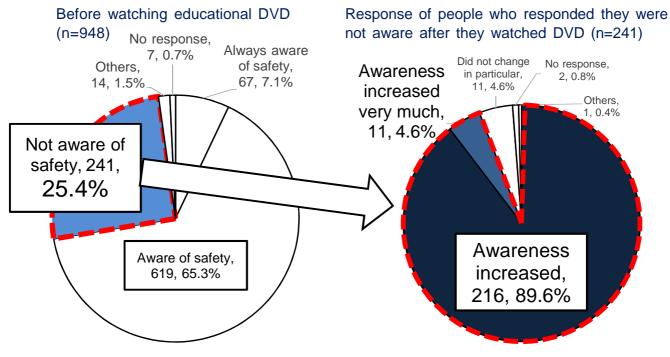
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Traffic Safety Task Force programs Part 1

Survey Part 2 Awareness of traffic safety

Approx. 90% of the students who were unaware of safety responded that their awareness increased after watching the DVD.

Fig. 24



Source: Traffic Safety Task Force "Survey after Watching Educational DVD 2017"

New

Fig. 25

Priority challenges (1)(2)(3)

There are many bicycle accidents involving sr. high students Accidents involving elderly people easily become serious There are many accidents at intersections

Direction ①

Improvement of traffic safety awareness

Priority target

Citizens, especially sr. high students and elderly people

Prevention measures 2

Preparation and distribution of traffic accident hotspot intersection map



Prepared materials

- · Pamphlets
- Posters
- · Leaflets

FY2016 Edition Safe Community Pamphlet

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Traffic Safety Task Force programs Part 2



Details

Intersections with a high rate of accidents in the city were marked on a map, and prepared as the city's first Traffic Accident Hotspot Intersection Map. This map was distributed with the cooperation of many organizations and groups.

Results

Promotional goods

- Pamphlet and leaflet (FY2016)
 - Prepared in February 2017, and distributed to students at 61 elementary schools and 28 junior high schools. These were distributed to a total of 9,390 people at Safe Community explanation meetings and events, etc.
- Poster (FY2017)

Prepared in October 2017. We plan to distribute 1,000 copies to industrial parks, etc. to inform people commuting from outside town.

Organizers

Task Forces (Traffic Safety, Child, Elderly), traffic safety teaching specialists, Association of Mothers for Traffic Safety, Traffic Safety Association, Police, etc.

Target

3rd year junior high students, senior high students, elderly people

Traffic Safety Task Force programs Part 3 Improvement

Priority challenge 2

Accidents involving elderly people easily become serious

Direction ①

Increase awareness of traffic safety

Target

Elderly people

Prevention measures 3

Expansion of traffic safety classes



Details

- Traffic safety classes where participants can have fun while learning are held
- Elderly people will be urged to sense changes in physical abilities that come with aging.

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Traffic Safety Task Force programs Part 3

Improvement

Details

The scale of traffic safety classes will be increased, in cooperation with senior learning programs. Skits will be added to traffic safety classes to make it fun to learn about safety.

Results

- June 2017 Safety seminar held at senior learning seminar (about 40 participants)
- July 2017 Asakano Gakuen University (about 50 participants)

Organizers

City, Asakano Gakuen University, senior clubs, traffic education teaching specialists, Police, Traffic Safety Associations, Association of Mothers for Traffic Safety

Target

Elderly people

Changes since starting SC

We recognized that although accidents involving elderly people tend to be serious, there are few traffic safety classes for elderly people. These classes were held as part of the program.



Priority challenge 2

Accidents involving elderly people easily become serious

Direction (1)

Increase awareness of traffic safety

Target

Elderly people

Prevention measures 4

Promotion of voluntary return of driver's license by the elderly



Provided information

- Overview of policy for voluntary return of driver's license
- Dementia symptoms while driving check sheet
- Comparison of automobile maintenance costs and price of using taxis

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Traffic Safety Task Force programs Part 4



Details

A leaflet giving an overview of the City's policy for voluntary return of driver's license, a check sheet of dementia symptoms while driving, and a comparison of automobile maintenance costs and price of using taxis was prepared and distributed.

Results

Leaflet

Prepared in September 2017. Distributed to approx. 800 students of "Asakano Gakuen University" in October 2017.

* We plan to distribute this to elderly people in all districts via welfare officers who look after physically challenged people and the elderly who are living alone.

Organizers

Task Forces (Traffic Safety, Elderly), Asakano Gakuen University Student Council, etc.

Target

Elderly people

Traffic Safety Task Force programs Part 4 Results:



Elderly people who voluntarily returned their driver's licenses [as of August 31, 2017] 92 people

Of which, people who received bus/taxi tickets. [as of August 31, 2017] 73 people

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 licenses will feel safer.
- Opportunities for elderly people to think about the voluntary return policy will increase.

Traffic Safety Task Force programs Part 5

Improvement

Priority challenge 3 There are many accidents at intersections

Direction 2 Main

Maintenance of road environment

Target

Around intersections

Prevention measures 5

Measure to prevent accidents at traffic accident hotspots



Details

 Request installation of caution signs at traffic accident hotspots, etc. 32

Improvement

Details

Request installation of caution signs and banners alerting of traffic accidents, based on Traffic Accident Hotspot Intersection Map.

Results

September 2017 Koriyama District Traffic Safety Association was asked to install caution signs.

* Installation of signs will be studied in the future.

Organizers

Traffic Safety Task Force, Koriyama District Traffic Safety Association

Target

Intersections

Traffic Safety Task Force programs Part 6

Improvement

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Priority challenges 123

There are many bicycle accidents involving sr. high students Accidents involving elderly people easily become serious There are many accidents at intersections

Direction 2

Maintenance of road environment

Target

Around intersections

Prevention measures 6

Onsite investigation of intersections

Fig. 28



(Example of measures) Colored intersection



Details

- Safety measures at community roads using traffic big data
- Colored intersections and road markings

Traffic Safety Task Force programs Part 6 Improvement

Details

Traffic safety measures at community roads

Results

FY2015 "Shinmei and Momomidai Districts" registered as countermeasure areas Analysis of traffic big data, onsite investigation, review of countermeasures FY2016 FY2017 Implementation of measures (scheduled)

Organizers

National government, Prefecture, City, Police, each school in district, community residents, etc.

Target

Intersections (community roads in residential areas)



Onsite investigation of hazardous spots

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Activity indicators and performance indicators [Fig. 29]

| Priority challenges | Program | Activity indicator | Short-/mid-term | Long-term | |
|---------------------|--|--|--|------------------|--|
| 1 | Preparation, distribution, and promotion of Traffic Accident Hotspot Intersection Map | No. of maps distributedNo. of places map is distributed | Changes in safety awareness (Survey) | | |
| | Traffic safety classes using Scared Straight teaching methods | No. of educational DVDs distributedNo. of sessions held | Changes in participants' awareness of traffic safety | | |
| 2 | Traffic safety classes | No. of sessions held | Changes in participants' | No. of accidents | |
| | Promotion of voluntary return of driver's license | No. of sessions held | awareness of traffic safety | | |
| 3 | Accident prevention measures at traffic accident hotspots (improvement of signs, banners, guide signs, etc.) | No. of signs, etc. installedNo. of improved guide signs | No. of traffic accident hotspots with improved environment | | |
| | Onsite investigation of intersections | No. of investigations | Proposals made to road administrators | | |

Results of activities to date

Fig. 30

| Priority challenge | Implemented measure | No. of results |
|--|---|--|
| Challenge 1 There are many bicycle accidents involving sr. high students | Use of educational DVD incorporating Scared Straight approach (for jr. high and sr. high students) | Distributed to 13 sr. high schools and 28 jr. high school in FY2017 Safety classes held at 7 sr. high schools Effect measured with survey (7 schools, 948 people) |
| Challenge 2 Accidents involving elderly people easily become serious | Promotional leaflet distributed Self-awareness of driving capabilities promoted Elderly people given chance to talk about traffic safety | Safety seminar (FY2017) Seminar for elderly people: 40 people Asakano Gakuen University: 50 people |
| Challenge 3 There are many accidents at intersections | Preparation and distribution of Traffic Accident Hotspot Intersection Map Preparation of poster-sized Traffic Accident Hotspot Intersection Maps | 15,000 Traffic Accident Hotspot Intersection Maps prepared (FY2017) Distributed at events and meetings, etc. Poster-sized Maps 1,000 copies prepared (FY2017) |

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Problem points at this point

How to promote Traffic Safety Task Force programs

Promote with leaflets distributed at community halls and "Asakano Gakuen University", a school for elderly people, etc.

- Participants at community hall lectures
- Students at Asakano Gakuen University, etc.



Environment for learning information

Problem points

Adults and elderly people who tend to be isolated at home



Environment where information is hard to reach

How can we widely promote the programs?



Thank you for your attention.

