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Module 1 explained why seat-belts and child restraints are needed to reduce the fatalities and injuries that are associated with motor vehicle crashes. Before designing and implementing a strong seat-belt and child restraint programme, it is important to assess the situation and needs in the community, region or country where the programme will be implemented. This is often called a “needs assessment.” Many of the steps in this process will also be necessary to monitor the seat-belt programme, once it is in place.

The sections in this module are structured as follows:

2.1 The need to assess the current situation. A situational or needs assessment to determine the extent of the problem is the basis for creating an effective seat-belt and child restraint programme. In addition, needs assessments are essential for galvanizing support and obtaining funding for programmes (and are often required in funding applications).

2.2 How to assess the extent of the problem of non-use of seat-belts and child restraints. This section provides guidance on how to:

- assess the extent of the vehicle occupant injury problem;
- measure seat-belt and child restraint usage;
- determine the reasons for lack of seat-belt and child restraint use.

2.3 How to assess what is already in place. This section describes the questions that need to be asked in order to collect information on what national processes are under way in the country or region with regard to seat-belt and child restraint use. To do this, it is necessary to find out who is responsible for road safety, and consider all those who may have an interest in a seat-belt and child restraint programme. The module gives guidance on how to collect comprehensive information on the institutional and legislative structures that are in place that might have an impact on the programme, and how to find out about any existing or previous seat-belt and child restraint programmes in the project area, in order to learn from these experiences and to identify the potential resources (financial, personnel and institutional) for future programmes.

2.1 The need to assess the current situation

2.1.1 Understanding the current situation through baseline data collection

Those planning a seat-belt or child restraint programme may already have an understanding of some of the information and issues around restraint use in their
country or region, and thus may feel they do not need to conduct a situational or needs assessment. Nonetheless, conducting a well-planned and thorough situational assessment is strongly advised prior to starting any new programme. This does not necessarily imply a prolonged and complicated process, but can mean simply taking the time to search for and compile all the existing relevant information. The most important information to collect is data on current use of seat-belts and child restraints. In addition, although the causal link between restraint use and injury reduction is generally well known, evidence on injury rates for belted and unbelted occupants if available is useful to support the case for legislation on mandatory use. A situational or needs assessment is essential to obtaining initial and continued support and funding for any programme. It will show the gravity of the problem in the specified location and, once the programme is implemented, the initial results can be compared to later evaluations (see Module 5) in order to demonstrate the effectiveness of the programme.

There are three main reasons for assessing the situation before starting a seat-belt and child restraint programme.

- To identify the problem of lack of restraint use and to depict the scale of the problem. Ideally, the information gathered will illustrate injury and fatality rates amongst belted and unbelted people; differences in wearing rates according to age, sex and location; where the greatest need for increasing wearing rates is; the cost of not using seat-belts; and the reasons why vehicle occupants do not use seat-belts. This in turn helps set priorities for action.

- To provide evidence for arguments on why restraint use is essential and why it should be supported. A seat-belt and child restraint programme, in order to be successful, needs the backing of both policy-makers and the public. Accurate data – on factors such as seat-belt and child restraint use and injuries among belted and unbelted occupants in the project area – will help to show what can be gained by implementing a programme, and provide arguments to convince policy-makers and the general public of the need for a comprehensive programme. Module 1 provided background data on the evidence for the effectiveness of restraints in reducing deaths and injuries that can also be used in support of setting up a local programme.

- To provide baseline indicators that can be used for monitoring and evaluating a programme. This may include quantitative information such as seat-belt wearing rates, as well as qualitative information such as public opinion on seat-belt use, or information on compliance with legislation.

These data provide stakeholders with a clear understanding of the current situation in relation to seat-belt and child restraint use, legislation, manufacturing standards and the capacity for change. They also provide useful baseline figures against which the effectiveness of future actions can be evaluated.

Determining the mechanisms currently in place to increase seat-belt and child restraint usage can help stakeholders identify any shortfalls in legislation or
implemented campaigns. For example, it may reveal that no enforcement of existing legislation is undertaken.

### 2.1.2 Quality of the data

Good data are important in assessing the situation. This means data that are appropriate, accurate, complete and reliable. In collecting data, one can also identify problems in the data system itself. For example, in collecting data on seat-belt and child restraint use in a region, it may become clear that the data on seat-belt wearing rates are incomplete. Knowledge of such shortcomings in the data can help set realistic objectives as part of the programme.

 Nonetheless, in many countries where reporting systems are not well established or coordinated, some of the necessary data will not be available. Lack of data should not be used as an excuse for inaction or ignoring a country’s problem of crash injuries. Some country-level data are always available, no matter how rudimentary these may be, and they can be used as a starting point to develop a strategy for increasing seat-belt use.

Methods for collecting data will vary and the data obtained will probably also depend on the source. Hospital data on crashes and injuries incurred, for instance, may be biased because they only take into account cases that are actually brought to the hospital. Similarly, police data on crashes will only record those cases the police investigate. However, either of these two sources is a good starting point.

Data collection should ideally be led by a person who has experience in epidemiology. Module 3 discusses the establishment of a working group to develop a seat-belt and child restraint programme. The public health expert in the working group is probably the most suited person to take charge of this task.

### 2.2 How to assess the extent of the problem of non-use of seat-belts and child restraints

The next two sections guide users on how to gather the information needed for assessing the situation. Collecting such detailed data on some of these issues will be an essential part of any seat-belt use intervention, both as a component of the programme itself and for the purpose of monitoring and evaluation.
2.2.1 Assessing the extent of the vehicle occupant injury problem

This assessment involves examining data on road traffic crashes in order to gauge the extent of the problem with regards to vehicle occupants, and collecting information on injuries among motor vehicle users.

Collecting data on road traffic crashes

Developing appropriate measures to address a road safety problem requires accurate data on the extent of the problem of road traffic crashes, and in particular on motor vehicle crashes and the injuries that result. The data should be used to highlight specific dangers facing motor vehicle occupants, and to emphasize the need for an action programme.

Information will be needed on the incidence, severity and types of crashes. A thorough understanding of the causes of crashes is also important. Information such as locations with an increased risk for motorists, or groups of drivers at increased risk, will be valuable for targeting the programme. For instance, it may turn out that busy urban roads or rural roads are the highest risk areas; young males may be the group found to be at special risk, or people driving as part of their work.

To collect these data, the following questions need to be asked:

- How many injuries and deaths are there as a result of road traffic crashes in the project region? Note that it is important for the working group to predefine the unit of assessment (see Module 3). For example, this may be the entire country, or it may be a particular province or state, or town or community.
- What is the scale of the problem of crashes involving motor vehicle occupants, in terms of the number of crashes and the number of fatalities, distinguishing between belted and unbelted occupants?
- How does this problem compare, in terms of its scale and the burden on society, with other local public health problems?
- Who are those most likely to be unrestrained in crashes?
- What proportion of vehicles have seat-belts fitted? In the front? In the back?
- What are the wearing rates of seat-belts and child restraints in the front and in the back of vehicles?

The indicators to be used here include:

- injury data showing severity and mortality rates amongst belted and unbelted occupants;
- the age and sex of drivers and passengers involved in crashes;
- wearing rates by sex, age and seating position;
- the distribution of crashes across different road types;
- the age and sex of drivers and passengers involved in these crashes;
- proportion of vehicles by type with fitted seat-belts, distinguishing between front and rear.
Data from surveys and interviews on public attitudes and opinions are useful in determining reasons for non-use in order to develop effective interventions.

**Locating the required information**

Some countries have national data collection systems on road traffic deaths, injuries and disabilities. Traffic police may collect some of this information, but generally such data collection results from collaboration between the police and the transport and health departments. Although traffic crash data systems usually lack detail on the injuries sustained, asking the questions may help to either find where this information is available, or at least show that particular data are lacking. If this is not available, use can be made of other specific data sources, which are listed below.

**Police authorities.** In most jurisdictions investigating crashes is the responsibility of the police. Crash data by severity should be collected in order to provide baseline data for injury rates prior to a seat-belt campaign. Where reporting rates for injury data are suspect, fatality data alone will provide good evidence on the effectiveness of seat-belt campaigns. Police records may also provide information on whether seat-belts were in use in crashes, though these data are not always reliable. Such data will probably also be handled by the country’s traffic safety agency or transportation department, so that information from these bodies should also be considered “official data”.

In practice, full information on these factors is rarely available, as data may not be complete. Issues of underreporting in police records exist even in those countries with a good road safety record.

**Hospital data.** In some countries, the health system is the only comprehensive source of data about road crash injuries. Hospital records are likely to include mainly the most seriously injured casualties, but they are a useful source of information on the distribution of injury types. Since motor vehicle injuries are admitted through the emergency or trauma department it might be efficient to begin the search for data using emergency department records and charts. It is useful to make periodic studies of hospital data, either from a single hospital or a group of hospitals in an area. By extrapolating a sample of data, an order of magnitude estimate can be obtained of the scale of the problem nationally or provincially. These studies should extract information on:

- the type of injury, for instance the body region injured;
- the nature of the motor vehicle crash;
- the types of injuries that most frequently result in death;
- information on those involved in crashes, such as sex, age and occupation.

**Death certificates.** Another source of data is death certificates or coroner reports, although the information and quantity is limited as the numbers will not include non-fatal injuries. Usually, any physician (not just the coroner) can sign a death
certificate, but most jurisdictions keep all death certificates in one government-run location, such as the ministry of health.

**Health clinics.** Some localities do not have trauma centres or hospitals nearby, and rely on local health clinics or primary care treatment facilities to treat injuries and illnesses. These may be suitable sites for collecting basic information on the nature and circumstances of a motor vehicle crash, injuries sustained and seat-belt use.

**Employers.** Often, larger employers collect and retain data on crashes and injuries to their drivers, especially in occupational driving settings. Looking at employer data can give a picture of how risky occupational driving can be, and the benefits (both economic and worker-related) of a mandatory seat-belt use policy for occupational drivers.

**Insurance companies.** Insurers, both health and automobile, may be a convenient source of data. Looking at insurance claims data can yield important insights into costs of care related to motor vehicle crashes, and the benefits of wearing seat-belts to reduce health-care claims.

**In-depth crash injury studies.** Although police and hospital data will provide information on injury trends, detailed comparison of the extent and severity of injury in belted occupants compared with unbelted occupants may only be available from in-depth research. Other sources of data of this kind might be nongovernmental organizations, universities, research organizations and insurance companies.

**Similar or neighbouring countries.** Although no two countries or regions will be identical in the circumstances and conditions with regard to vehicle crashes, where data from a country are lacking, it can be helpful to examine what data are available from similar or neighbouring countries. Such data can be used in support of a seat-belt programme in the country of interest, provided that a clear statement is made that it has been assumed that the two countries are similar with respect to certain factors.
Collecting data on injuries

The protection provided by seat-belts increases with crash severity. The effect is most marked for prevention of fatalities, but also for the most serious injuries. Seat-belts reduce the incidence of ejection from vehicles, and the injuries due to striking the windscreen. The CCIS database shows that 83% of unbelted occupants who died when their cars rolled over had been ejected, compared with 25% of belted occupants (2).

Understanding the effects of a seat-belt programme will include the need to collect data on injury severity and, if available, injury type. The latter will be helpful in providing information on how the range of injuries (by severity) has changed, as well as the number of injuries. However, the high effectiveness of seat-belts means that even in the absence of detailed injury records, overall numbers of casualties can be a reasonable measure of the benefits. A note of caution is necessary where traffic levels are increasing rapidly, as any subsequent increase in crashes may distort the measure of the estimate of the effect of seat-belt wearing.

To collect these data, the following questions need to be asked:

- What proportion of motor vehicle crashes involve fatal injuries? What is the distribution of injury by body region, by injury score or by severity, as defined by the police? Some injury scores used by medical professionals include the Abbreviated Injury Scale (AIS), Maximum Abbreviated Injury Scale (MAIS), Injury Severity Score (ISS) and Probability of Death Score (PODS).
- What are the economic and social impacts of these crashes and injuries on the country’s resources?
- What is the geographical distribution of motor vehicle occupant injuries within the region?
• Are there particular population groups in the region that are at increased risk of injuries resulting from motor vehicle crashes, for instance men, women, young people, ethnic minorities or a particular occupation?
• What other information is collected on those injured as a result of motor vehicle crashes? For example, are those injured generally the drivers or passengers, and do they usually own the vehicle?
• Is there information on seat-belt and child restraint use among motor vehicle crash victims? If available, this will allow a comparison of outcome of crashes involving motorists with and without restraints.

Table 2.1 indicates some of the more commonly used sources of data on injuries, and gives other potential sources of data on injuries.

<table>
<thead>
<tr>
<th>Possible sources of data on injuries, according to severity of injury</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No injury</strong></td>
</tr>
<tr>
<td>Household (community) surveys</td>
</tr>
<tr>
<td>Health clinic records</td>
</tr>
<tr>
<td>Family doctors’ records</td>
</tr>
<tr>
<td>Emergency room records</td>
</tr>
<tr>
<td>Ward admission records</td>
</tr>
<tr>
<td>Intensive care unit admission records</td>
</tr>
<tr>
<td>Death certificates</td>
</tr>
</tbody>
</table>

**Other potential sources of data on fatal and severe injuries are:**
For fatal injuries:
• autopsy/pathology reports
• police reports.
For severe non-fatal injuries:
• hospital inpatient records
• trauma registries
• ambulance or emergency medical technician records.

**Additional sources of data on specific types of injury are:**
For motor vehicle injuries:
• automobile insurance company records
• police traffic accident reports
• department of transport reports.
For occupational injuries:
• workplace records
• labour inspector or national safety records
• national insurance schemes/workers’ compensation bureau
• rehabilitation centres.

Source: This information is extracted from the *Injury surveillance guidelines* (3).
2.2.2 What are the seat-belt and child restraint wearing rates in the area being considered?

An accurate assessment of the current situation with regard to seat-belt fitment (the number of vehicles fitted with seat-belts for all seating positions) and overall seat-belt and child restraint use will provide any country or state with a number of baseline figures that future programmes will aim to improve. Therefore, all subsequent assessments become indicators of success. In relation to a programme designed to increase seat-belt usage, it is vitally important to determine current wearing rates and to examine existing mechanisms in place that promote the use of the safety device.

Assessing the proportion of motor vehicle users wearing seat-belts will be an important factor to consider in arguing for a seat-belt programme. This means asking the following questions:

- What is the proportion of seat-belt use among vehicle occupants nationally (or in the project area)? This rate (percentage of belted occupants by seating position) should also be used as a baseline indicator against which to evaluate the programme’s effectiveness.
- What types of people are not wearing seat-belts? Can a breakdown be arrived at in terms of age, sex, whether the person is a driver or passenger and purpose of the journey?
- What is the cost of the non-use of seat-belts, in terms of injuries sustained by motor vehicle users involved in crashes?

Where will these data come from?

Data on seat-belt use may be available from the following sources:

- police records
- records of national or local health authorities
- national transportation agency records
- research studies and surveys.
Road traffic injuries are a major public health problem in Malaysia. They constitute the second leading cause of burden of mortality. Vehicle occupants constituted about 18% of road fatalities in 2003. Legislation for seat-belt use in the front seats was introduced in 1978. The usage of seat-belts in both front and rear seats was studied using similar methodology in the same urban and rural districts in 1995 and 2006.

Factors affecting seat-belt use included age, sex, ethnic group and location of road. There was an increase in the usage of seat-belts as age increased up to the age of 69 and a slight decline after the age of 70 among the front seat occupants. There was a low use of seat-belts among adolescents, with only 50% of adolescent drivers and 76.5% of adolescent passengers in the front seat using seat-belts compared with the overall rates of 84% (rural) and 87% (urban). A higher percentage of female drivers (91%) wore seat-belts than male drivers (82%). If the driver was belted, there was a higher probability that the front seat passenger was belted. Usage of child restraints was minimal, and rear seat-belt wearing was also very low, 10% on urban roads and 3% on rural roads.

Over the 10-year period seat-belt use has shown a slight increase on urban roads, and a larger increase, from a lower rate, on rural roads, so that the urban/rural difference has narrowed. Though the law was introduced nearly 30 years ago, it needs to be enforced. Usage of child restraints should be promoted. A significant number of deaths and unnecessary disability can be prevented through the improvement of seat-belt use \( (4,5) \).

**CASE STUDY: Seat-belt use in Malaysia**

Observational surveys of seat-belt use

If accurate current information on the extent of seat-belt wearing is lacking it will be necessary to carry out observational surveys. These may be concentrated in particular regions or at particular locations. Since an increase in the usage of seat-belts will be a key objective of any campaign, it will be important to establish a reliable regime for measuring and monitoring seat-belt use on a regular basis. This does not have to be a nationwide survey, but it should ideally cover a range of road types and locations.

Sites should be selected such that all road types are represented so that as far as possible correlation may be made between urban and rural roads, motorways and unclassified roads, built-up areas and non-built-up areas, and so on. Sites should be assessed for the ease with which they allow the survey staff to observe and record the use of seat-belts and child restraints by vehicle occupants. For example, sites where traffic lights are installed allow survey staff time to view vehicle occupants clearly. This helps to ensure that results can be generalized to represent different vehicles and different journeys. This need to observe the car occupants is a limiting factor in carrying out surveys on high-speed roads such as motorways.

The sites selected for observation can depend to some extent on the survey staff. Compromises can be made on the data being nationally representative to ensure quality of data over quantity of data. Therefore, it is better to accept surveys conducted in one or two smaller locations where the researcher can rely on quality of data than try to blanket large parts of the country or state and receive inaccurate data.
from unreliable survey staff. To ensure consistency in data, researchers should try to use the same sites for every subsequent observation. The case studies below from Ghana and the United Kingdom give examples of procedures that have been used.

**CASE STUDY: Assessment of seat-belt wearing rates, Ghana**

The first national study on seat-belt compliance in Ghana took place in 2006 as part of the Drive to Live Programme. Seat-belt usage was measured in a series of observations undertaken in the country’s regions with the highest crash rates. The study (sample size 12,000) also recorded motorcycle helmet usage, mobile phone usage and spectacle wearing. The data were collected prior to a road safety campaign that encouraged seat-belt wearing and switching off phones while driving. A set of “after” campaign data will be collected, which will also be used to inform a national seat-belt campaign.

Observations were made at the point of sale for fuel (fuel stations). The surveys were conducted between 07:00 and 09:00, and between 16:00 and 18:00, corresponding to the peak periods for retail sales, and included collection of both weekday and weekend data.

Survey supervisors were chosen from subcontractors regularly used by a company specializing in surveys. The supervisors trained regional enumerators to conduct the surveys at the fuel stations. Two enumerators were assigned to each fuel station (with the exception of two sites where four were used) to record the following information:

- seat-belt usage (driver and passenger)
- usage by five vehicle classes
- motorcycle helmet usage
- use of mobile phone while driving
- spectacle wearing.

These observations indicated about 40% compliance overall with seat-belt usage laws, with the highest rates amongst car drivers (up to 50%) and the lowest rates amongst truck drivers (less than 20%) (6).
Module 2: How to assess the situation in a particular country

In the United Kingdom, surveys of seat-belt use have been carried out every year since October 1988 in April and October, when journeys are less likely to be affected by summer holidays and adverse weather. Initially only two areas, Crowthorne and Nottingham, were surveyed, but in 1998 the coverage was extended and by 2002 further summer surveys in 10 additional areas were carried out. Teams of three observers are used and observations are made between 08:30 and 17:30 in eight half-hour sessions. All observations are made in daylight to ensure visibility of seat-belt use.

Two team members observe the occupants of passing vehicles, including their age, sex and seat-belt use. Their observations are recorded using a hand-held computer, with one electronic form being completed for each car that is surveyed. The third team member counts the number of vehicles passing during each session.

In order to be able to look into cars to record the seat-belt use of rear seat passengers, only stationary cars are observed, so survey sites are located wherever possible at junctions with automatic traffic signals. When the traffic stops at the approach to the junction, the pair of observers proceeds along the queue of vehicles, observing the occupants of each stationary vehicle in turn. When the queue starts to move, they return to the junction and wait for the traffic to stop once more before restarting the process.

A clear sampling strategy is required. For example, at a traffic signal location:

1. When the signal turns red, observe the first car that stops.
2. As time permits, observe in strict order any stationary vehicles queuing behind the first.
3. When the lights change, suspend observation until the next red period.

The survey sites are chosen so as to be representative of all types of road and traffic. However, the need to observe stationary vehicles means that it is impossible to make observations on motorways, and there are few suitable sites on rural roads (7).

**CASE STUDY: Seat-belt wearing survey procedures, United Kingdom**

Box 2.1 describes how to set up an observational study. A sample seat-belt wearing observation form is given in Appendix 2.
Even if detailed and comprehensive data are lacking, it should be possible to conduct a simple observational study to obtain a good estimate of seat-belt use. Simple counts of drivers and passengers using seat-belts, at particular locations and at different times of the day, will provide a rough estimate of how many motorists are using seat-belts and will later be of use in developing actions to be taken.

Because of cost, this type of study is often done on a small scale. If it is already known that a high proportion of crashes and injuries occur on particular roads or in particular areas, it is recommended that the study be carried out in those high-risk locations.

This observation method for calculating seat-belt wearing rates in a population could be used for data collection in situational assessment, as well as in an experimental or quasi-experimental evaluation design (see Module 5).

### Planning period

Before conducting an observational survey, the target population should be clearly defined in terms of who they are, where they live and over what period of time data will be collected. Detailed road maps and data on traffic volume and estimated population prevalence of seat-belt use from other sources should be collected for the area of interest.

### Develop a data collection protocol

This is a detailed written document describing the approach that will be used to collect data. It includes what will be done, how it will be done, who will do it and when it will be done.

### Develop data collection instruments

These include a form or set of forms used to collect information (e.g. questionnaires, interview schedules). Training material should also be developed for staff carrying out roadside observations.

### Sampling

The observed population should be representative of the population of interest in the target area. This means that a random sample of the population should be observed. Although non-random samples may be more feasible in certain situations, for example observations made at fuel stations or outside schools, consideration should be given to how generalizable or representative the results from such selective samples would be.

If the aim of the study is to document seat-belt wearing in a particular geographical area, then all road types should be included in the design of the study. Seat-belt wearing may differ across different road types; for example, drivers may be more likely to wear seat-belts on highways than on local roads. The sampling frame should therefore be designed such that it ensures adequate counts to enable an estimate of seat-belt use across different road types, and also ensures a mix of roadway types, volumes and locations (urban, suburban and rural).

All possible roadway segments should theoretically be eligible for sampling. Depending on the size of the target area, the sampling frame may be divided into two or three stages. For example, to measure helmet use in a province, three stages may be employed:

- **Random selection of primary sampling units (e.g. the district or equivalent).** The number of selected primary sampling units should be calculated in proportion to the estimated vehicle kilometres travelled (VKT) for each sampling unit. For example, if the VKT is low in one district, then proportionally fewer sampling units would be selected from that district than for one with higher VKT. If VKT is not available by district, the primary sampling units may be selected using district population.

- **Random selection of roads** within each primary sampling unit, ensuring all road types are represented.

- **Random selection of observational sites** on the selected roads.

### Number of sites

The actual number of observational sites will depend largely on funding and other logistical issues. If funding is limited it may be more practical to make a greater number of observations from a smaller number of sites. However, consulting a statistician to help determine the appropriate number of sites to give a statistically precise estimate is recommended.

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**BOX 2.1: Measuring seat-belt wearing rates: an observational study**

Continues...
Site selection

Ensure that observational sites are selected randomly from all available sites. This may be done by creating a numbered grid, overlaying it on a map and randomly selecting sites from the grid. Exact observation sites should be determined according to the planned protocol before conducting the observations.

Whenever possible, the observation sites should be near intersections where cars slow down, preferably in the absence of a police officer. For example, sites may be selected at signalized intersections where vehicles are stationary and observations of seat-belt wearing are easier to conduct.

Narrow roads are better for observing passing traffic; on wider roads, observations may be taken on one side of the road only, for traffic passing in one direction.

Predetermined protocol

The predetermined protocol should allow for variations in methods for observations or site selection. If traffic volume is too heavy at a particular site to accurately record information, the protocol may state that one observer should observe occupants in the front seats only, while the other observes rear seat passengers. Along with direct observations recorded by observers, a video camera may be used to record traffic flow at sites with heavy flows and where traffic travels at high speeds.

Each site that does not satisfy the selection criteria should have another alternative site on the same road, for example if the original site or time selected is unsuitable due to inclement weather (e.g. heavy rain), if police are in attendance at a particular site or if observations may not be made safely at a site (e.g. due to roadworks).

Seat-belt observations

Project leaders should take safety into account when planning observational work and seek to minimize any likely measurement error.

Observers should be trained beforehand to remove any possible bias. Consider where training takes place, how it is conducted, and who delivers it. Produce a written guideline for observers and others involved in the evaluation and ensure that protocols are adhered to.

Observations may be made by two or more trained observers. Observations may then be later compared to assess level of agreement between observers.

Identify a safe, convenient location from which to make observations. For safety and security reasons, observers should work in pairs and they should wear reflective vests.

Observations should be made for a predetermined period of time. Time periods should be the same at each site to be able to make comparisons between sites.

Observations of seat-belt use may include such categories as age, sex, seating position and seat-belt present but not worn. Clearly, depending on the volume and speed of traffic at observation sites, it may not be practical to observe and record more information than whether a seat-belt is worn or not worn (e.g. estimation of age of car occupants may be too difficult unless this information is gathered through reviewing video footage).

Repeating measurements after the intervention

Repeat observations should be made by the original observers using the same protocol on the same days and times and at the same sites as measurements made before the programme.

2.2.3 Why do people not wear seat-belts and use child restraints?

A seat-belt and child restraint law is unlikely to be successful if people do not obey it, or understand the reason for it, or are unaware of it. Similarly, if vehicles are not widely fitted with seat-belts, or child restraints are difficult or expensive to obtain, use rates are likely to remain low. Once seat-belts are available it is important to assess attitudes to seat-belt wearing in order to provide targeted information to support
legislation and campaigns. Child restraints, because they are an additional cost, may require campaigns that provide them free, on rental, or at low cost.

**Public attitudes to seat-belt use**

It is useful to know how people regard road safety generally, and their attitudes to seat-belt wearing in particular. This information can help shape a seat-belt use programme and help decide how much should be invested in raising public awareness about the benefits of seat-belts. The goals of a programme will determine which groups should be surveyed and the questions to be asked. They may include asking the following questions:

- What are people’s attitudes to road safety generally?
- Do people understand the benefits of wearing a seat-belt? Public attitudes on seat-belt use and seat-belt laws can therefore also serve as a baseline indicator.
- What is the level of public awareness of the benefits of seat-belts?
- Why don’t people wear seat-belts? For example, if it is found that motorists have a negative attitude towards wearing a seat-belt, or if they are unaware of the laws or of the effectiveness of seat-belts against injury, then the programme needs to address these issues.
- Who are those most resistant to using seat-belts? Apart from gauging the public’s knowledge and attitudes, this type of information can also help identify which groups are most resistant to using seat-belts, so that the programme can target them to change their attitudes and behaviour. Information on variables such as age, sex, occupation and ethnicity would therefore need to be collected.

For child restraint programmes, similar questions should be asked of parents and caregivers about their attitudes towards child restraints with the added component of cost as a barrier.

**Where will these data come from?**

Data of this type may have been collected as part of a previous seat-belt programme (see section 2.3.5). There may also be studies conducted:

- by market research firms;
- by universities, nongovernmental organizations or other agencies working in road safety.

If such data are not available, it might be useful to conduct a public opinion survey to collect this information. If the programme is still being developed, there are likely to be time and budget constraints. Therefore, only a preliminary survey is suggested at this stage, and a more detailed one can be undertaken later. In a preliminary survey, it is most useful to focus just on the geographical area and population group estimated to have the highest risk.
Some studies have found that there is a lack of awareness of the risk to passengers in rear seats in cars that contributes to lower seat-belt wearing rates. For example, a telephone survey of 1148 Israeli adults found that there was a higher perceived need to wear seat-belts in the front than in the rear, and wearing rates in the rear were 35% higher among respondents who believed that they were necessary (8).

A survey of parents with children aged under 11 years in the United Kingdom was carried out to assess parents’ knowledge and use of child restraints. Only 62% said that their child always or usually travelled in a child restraint. The use of restraints was highest for children aged 0–3 years, and lowest for those aged 10–11 years. Nearly half the sample thought that it was safe to start using an adult seat-belt between the ages of 7 and 9 years, showing ignorance of the legal requirement and of the reasons for using a child restraint (9).

**CASE STUDY: Survey of rear seat-belt use, Oman**

In Oman wearing a seat-belt is compulsory in the front seats but not in the rear. The use of seat-belts in 1066 cars entering a university and hospital campus in Oman was observed to determine the degree of seat-belt wearing in the rear. A seat-belt complying with local traffic regulations was being worn by 90% of drivers and 81% of front seat passengers. However, only 1.4% of back seat passengers wore a seat-belt. Only 4% of children under the age of 5 years were strapped in a child restraint and only 17% of children aged 5–12 years were strapped in. A third (34.6%) of children under 5 years of age were sitting in the front seat. In cars with child occupants, 40% of the time parents wore seat-belts but the children did not. Occupants conformed to the law but behaviour indicated a lack of awareness of the dangers of not wearing seat-belts, especially in the case of children (10).
Some reasons given for not wearing seat-belts or using child restraints

The following examples of reasons given for not wearing seat-belts or using child restraints have been collected from studies in different countries:

- Seat-belts are uncomfortable or inconvenient.
- Motorists worry that a seat-belt might trap them in a burning car or under water following a crash.
- Drivers think that they can avoid crashes because they are highly skilled.
- Passengers who put their seat-belts on are seen by drivers as criticizing their driving.
- Motorists think that it is better to be thrown clear after a collision.
- Pregnant women don’t have to wear seat-belts.
- It is not necessary to wear seat-belts for short trips around town at low speeds.
- Sitting in the rear of a car is safe without a seat-belt or child restraint.
- Children don’t like being strapped in.
- It is safe to hold a child on the passenger’s lap.
- Child restraints are too expensive.
Module 2: How to assess the situation in a particular country

**BOX 2.3: Some common myths about seat-belts**

- **Myth: Seat-belts are uncomfortable or inconvenient.**
  - **Fact:** People quickly become used to wearing seat-belts and once wearing becomes a habit there is no discomfort or inconvenience. The imaginary discomfort or inconvenience of wearing a belt the first few times in no way compares to the serious discomfort and inconvenience of motor vehicle crash injury. Newer seat-belts are made so that comfortable movement is possible but they will still lock up in sudden stops or crashes.

- **Myth: Drivers in airbag-equipped vehicles don’t need to wear seat-belts.**
  - **Fact:** Airbags provide supplemental protection in frontal crashes by protecting the head and chest from hitting the steering wheel or dashboard, but airbags will not help in a side or rear impact or roll-over crash. An airbag by itself reduces the risk of dying by only 12%, whereas a seat-belt reduces fatality risk by 45–60% (11). Motorists should wear a seat-belt for protection in all types of crashes.

- **Myth: Wearing a seat-belt might lead to getting trapped in a burning car or caught in one under water.**
  - **Fact:** Less than 1 out of 200 traffic-related incidents involve fire or water submersion. The greatest danger is with the impact that precedes the fire or submersion in water. If a car occupant is not using a seat-belt, it is very likely that they will be knocked unconscious or severely injured. Chances of escape are 3 to 5 times better while wearing a seat-belt (12).

- **Myth: It is better to be thrown clear of a car in a collision.**
  - **Fact:** Being thrown from a vehicle is four times more likely to lead to fatal injury in a crash, and three quarters of people who are thrown from the car are killed. The force of an impact can throw someone nearly 50 metres, or 15 car lengths. Seat-belts also prevent a car occupant’s head from smashing into the windshield, which could cause spinal damage. The best bet in a crash is to stay inside the vehicle, securely held by the seat-belt (12).

- **Myth: Seat-belts can hurt you in a crash.**
  - **Fact:** Properly worn seat-belts seldom cause injuries. If they do, the injuries are usually surface bruises and are generally less severe than would have been the case without any belt. Studies have consistently shown that injuries in most serious crashes would have been much more severe had seat-belts not been worn.

- **Myth: Seat-belts are unnecessary at low speeds and on short trips.**
  - **Fact:** Of road crash casualties who were not restrained, 70% were travelling at less than 50 km/h. A collision at 50 km/h has the same effect as falling from the fourth floor of a building. Two thirds of crashes happen less than 15 km away from home (13).

- **Myth: Wearing a seat-belt in the back is not necessary.**
  - **Fact:** When a crash happens an unrestrained passenger in the back seat will be propelled against the front seat with a force of several tonnes, crushing the front seat occupant (13).

**Data on availability and cost**

The extent of fitment of seat-belts in the vehicle fleet needs to be assessed in order to establish their availability. It will be important to establish the proportion of vehicles in which seat-belts are fitted, showing front and rear seats separately.

Data on seat-belt fitment may be available from:

- government data on vehicle registrations by date of vehicle registration
- vehicle manufacturers, retailers or importers
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- vehicle inspection reports
- retailers and fitters of seat-belts for retrospective fitment.

Older vehicles are less likely to have seat-belts fitted as standard, but newer vehicles are more likely to have seat-belts. If legislation making fitment compulsory has been introduced it will be possible to establish the proportion of the vehicle fleet that has been registered since the legislation was enacted. This is particularly important in countries in which the fleet contains a significant proportion of vehicles that pre-date any introduction of regulations concerning compulsory seat-belt fitment. In this case, it will also be important to assess the availability and cost of retrofitted seat-belts.

Typical indicators on seat-belt fitment are:
- car registrations by date, in particular the proportion registered after any law on compulsory fitment was enacted;
- the proportion of vehicles with front seat-belts;
- the proportion of vehicles with rear seat-belts.

These data will come from vehicle manufacturers, importers and distributors, and from government statistics on vehicle registrations. If suitable data are not available from these sources it may be necessary to contract a market research firm to collect the data if the budget allows. Whereas seat-belts are generally factory fitted to vehicles, rather than being purchased separately, child restraints are usually purchased by parents and are not part of the car's original equipment. The cost and availability of suitable child restraints that are designed for children and infants of different sizes will affect their use. The following questions can be used to gather information on child restraints:
- How many child restraints by type are made and sold in the region over a specific time period?
- Who sells child restraints, and where are these distributors located?
- Is supply sufficient to meet demand, and is there a sufficient range of restraints for all age groups and sizes of children?
- What is the average cost of the different types of restraints?
- Are there any loan schemes available?

Data will come from retailers and manufacturers; road safety and other organizations involved in child safety; local government and voluntary organizations that operate loan schemes; and surveys of parents.

The data collected on all aspects of seat-belt wearing will be used for baseline indicators, against which the effectiveness of the programme can be monitored, or for designing and targeting programmes to increase wearing rates. The availability of seat-belts will be a factor in deciding how quickly to phase in enforcement of seat-belt use laws, if this is one of the objectives of the programme (see Module 3).
2.3 How to assess what is already in place

It is important to assess what laws and regulations on seat-belt use exist in the project area, how they are implemented and whether or not they are enforced. For example, if despite a law mandating seat-belt use among car users and a defined national seat-belt standard the seat-belt wearing rate is low and many vehicles do not have seat-belts that conform to regulations, it would be a fair indication that the laws and regulations are not working, or that the enforcement of these laws and standards is inadequate.

Assessing what is in place in a country with regard to existing or previous seat-belt programmes will help to identify the key organizations or people – within government, in the private sector and in civil society – that should be involved in a seat-belt or child restraint programme. They will also point to the main sources of potential political and financial support. As mentioned, this assessment can be conducted at different geographical levels (e.g. country, province or state, town or community) and this should be agreed upon before starting.

The areas described in the following sections need to be examined.

2.3.1 Who is in charge of road safety, and what funds are there for it?

Describing the general situation in the country is a first step to assessing the situation and whether there is a place for a seat-belt programme. How such a programme is then implemented will depend on the country’s political system. It is also important to consider whether existing laws encourage seat-belt use, and whether there are funds set aside for road safety programmes that could include seat-belt use initiatives. The following further list of questions will help formulate an overall picture of the situation.

- Is there a centralized, regional or federal system of government? Is there provision in the constitution or in national laws for decentralization? If so, to what extent do local authorities engage in decision-making and making funds available?
- Which are the main government departments – such as those of transport, health, justice and the police – involved in road safety decision-making and what role does each department play?
- What is the current budget for road safety in the country? Are there priorities in the budget for future improvements in the field of road safety? Are there funds that might be accessed for a seat-belt programme?
Nongovernmental and private organizations that could contribute to a seat-belt programme include:

- international organizations and funding agencies, such as WHO, the World Bank, the Global Road Safety Partnership, the FIA Foundation, and other bodies with road safety expertise, as well as those with funding capabilities;
- private consulting firms;
- domestic nongovernmental organizations, including road safety groups and motoring clubs;
- manufacturers and distributors of motor cars;
- major employers, particularly where staff use cars in their work, and on journeys to and from home.

Many countries have a national road safety policy or plan providing a strategic output on delivering better road safety. There are also many local-area projects with specific aims and objectives. In order for seat-belt programmes to have the greatest effect, a coordinated approach should be taken. Therefore, local-area initiatives should be encouraged to complement the programme established and delivered at a national level.

The importance of linking seat-belt and child restraint programmes to national policies and action plans cannot be overstated. This confirms commitment to the programme and aids its implementation. It will also identify clear targets for success and provide the direction required to achieve the aims and objectives of a programme.

National campaign organizers should aim to facilitate coordination by providing local campaign organizers with adequate warning of initiatives, possibly through a published calendar, in order to intensify the effect of the road safety message. National launches of campaigns can also help to bring about a realization that there is a coordinated drive to increase seat-belt use.

Significant results cannot be achieved simply by initiating a national campaign. It requires the assistance of local practitioners in delivering and reinforcing the message. Government agencies are more likely to have the funds to produce resources and expensive national advertising. Local-level practitioners are in a better position to distribute resources to the target audience at ground level to reinforce the national message. Local initiatives may also be guided by targets established at a national level. These are more likely to be aimed at reducing road death and injury in general; however, the plan or strategy should define how these casualty savings should be made. This may include increasing seat-belt wearing rates.
2.3.2 Who are the stakeholders?

A stakeholder analysis sheds light on the social environment in which the policy will be developed and implemented. Its primary function is to identify all possible partners who might have an interest in addressing seat-belt and child restraint use, including those who might initially oppose efforts to increase seat-belt use or to mandate seat-belt wearing in the region. Potential stakeholders include government departments, nongovernmental organizations and institutions that will be affected (positively or negatively) by the new law or standards, local communities, formal or informal groups, as well as individuals (e.g. representatives of workforces, victims of crashes). Stakeholders might also include vehicle manufacturers who might be affected by a new law, regulators, industry bodies and associations, importers and exporters.

The second important function of the analysis is to examine the remit of all of the stakeholders, and to understand the relationships between them. A careful analysis should be made of the influence, importance and interests of all major stakeholders, as this will facilitate the design of appropriate approaches for involving them. It is especially important to identify supporters and opponents and, moreover, to appreciate the reasons for their respective positions so as to be able to develop a marketable package that satisfies all parties concerned.

With these comments in mind, the key objectives of a stakeholder analysis are thus:

- to identify key stakeholders, define their characteristics and examine how they will be affected by the policy (e.g. their specific interests, likely expectations in terms of benefits, changes and adverse outcomes);
- to assess their potential influence on the development, approval and implementation of a seat-belt programme;
- to understand the relationship between stakeholders and possible conflicts of interest that may arise;
- to assess the capacity of different stakeholders to participate in developing a seat-belt programme and the likelihood of their contributing to the process;
- to decide how they should be involved in the process to ensure the best possible quality and viability of the programme, in particular:
  - the nature of their participation (e.g. as advisers or consultants, or as collaborating partners);
  - the form of their participation (e.g. as a member of the working group, or as an advisor, or sponsor);
  - the mode of their participation (e.g. as an individual participant or as a representative of a group).

A more in-depth discussion on conducting a stakeholder analysis can be found in Developing policies to prevent injuries and violence: guidelines for policy-makers and planners (II).
2.3.3 Is there a seat-belt use law in place?

As already stated in this section, it is important to know what road safety laws exist and whether they are adequately enforced. Experience has shown that road safety legislation without proper enforcement is unlikely to have the desired effect. In part, this is because road users do not always recognize the risks involved and the benefits to them of the protective measures contained in the legislation. For this reason, they do not always support laws designed to improve their own safety on the roads.

A seat-belt programme may require the creation of a new law or the modification of an existing one. On the other hand, the existing law may be satisfactory, but may not be properly enforced. Most countries today have some type of law on seat-belt use. It is therefore useful to begin by reviewing the current state of the laws, as shown in the following checklist:

- What current laws relate to road safety generally?
- Is there a specific law on seat-belt use? If so, does it apply nationally or locally? Is it up to date?
- To whom does the law apply – for example, to all drivers and passengers, and all age groups? Are there specified exemptions?
- Does the law apply to all types of road?
- Does the law specify the type or standard of seat-belt or child restraint that should be worn?
- What are the penalties for not complying with the law?
- Is the law enforced? Is it enforced everywhere, and among all motor vehicle users?
- How is a new law officially adopted by the government? What are the mechanisms of endorsement?
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The United Nations Economic Commission for Europe (UNECE) Working Party on Road Safety (WP1) carried out a survey on seat-belt use and legislation for all its member countries and for a number of African countries in 2005. The survey covered both adult seat-belts and child restraints, and it collected information on the following topics:

- collection of information on seat-belt use
- legislation on the equipment of vehicles with seat-belts
- legislation on seat-belt use
- exemptions from mandatory use
- enforcement of seat-belt legislation
- education and campaigns
- evaluation and research on seat-belt wearing
- types of child restraints and legal requirements for their use.

The questionnaire used in the survey is in Appendix 1 and the results can be found on the UNECE website (14).

BOX 2.4: The UNECE survey of seat-belt use and legislation

The United Nations Economic Commission for Europe (UNECE) Working Party on Road Safety (WP1) carried out a survey on seat-belt use and legislation for all its member countries and for a number of African countries in 2005. The survey covered both adult seat-belts and child restraints, and it collected information on the following topics:

- collection of information on seat-belt use
- legislation on the equipment of vehicles with seat-belts
- legislation on seat-belt use
- exemptions from mandatory use
- enforcement of seat-belt legislation
- education and campaigns
- evaluation and research on seat-belt wearing
- types of child restraints and legal requirements for their use.

The questionnaire used in the survey is in Appendix 1 and the results can be found on the UNECE website (14).

BOX 2.5: Seat-belt and child restraint wearing legislation in Latin American countries

The Organización Panamericana de la Salud or OPS (Pan American Health Association or PAHO) has published a review of safety legislation in Latin American countries that summarizes the legislation on seat-belt wearing.

Car occupants

- Compulsory seat-belt wearing for driver and front seat passengers: Argentina, Chile, Colombia, Cuba, Dominican Republic, El Salvador, Mexico, Panama and Uruguay.
- Compulsory seat-belt wearing for all car occupants: Brazil, Costa Rica, Ecuador, Peru and Venezuela.

Children

(a) Seating position

It is compulsory for children to travel in the rear seats of cars at the following ages:
- 12 or younger: Argentina, Brazil, El Salvador and Uruguay
- 10 or younger: Colombia and Venezuela
- 8 or younger: Dominican Republic
- 5 or younger: Mexico

(b) Rules for child restraints

- Costa Rica: Child restraints are compulsory for children that are 4 years of age or younger.
- El Salvador: Child restraints are compulsory for children that are 2 years of age or younger with a weight not exceeding 15 kg.
- Brazil: Children that are 12 years of age or younger and less than 1.5 metres (m) tall are to be restrained into a system according to their weight. If no child restraint is available in the car, children younger than 3 years of age should be restrained by a seat-belt. Children younger than 3 years of age must travel in a child restraint according to their weight and height.
- Colombia: Children that are 2 years of age or younger are to travel always in the back in a child restraint system that can be fixed to the car seat.

In some cases the regulations are not national but regional, as in the case of Uruguay, or they apply to certain types of vehicles, such as public transport buses in Paraguay (15).
2.3.4 Is there a seat-belt and child restraint standard in place?

It is also very important to know whether the seat-belts and child restraints that are available meet approved standards. Such standards might be set by a national body or an international one (see Module 4). Cars should be sold with evidence that seat-belts are fitted that meet such standards and there should be an active process of checking seat-belts for compliance with set standards. There should be a system for ensuring that the child restraints available for purchase meet specified standards. The following questions need to be asked:

- Is there a national or international standard specified that seat-belts and child restraints should meet?
- Do currently available seat-belts and child restraints meet the standard?
- Do vehicle manufacturers abide by this standard?
- Do motor vehicle users wear seat-belts that meet such a standard?
- Are these seat-belts suitable for local conditions of heat and humidity?
- What is the cost of child restraints that meet recommended standards?

2.3.5 Have any seat-belt and child restraint programmes been attempted so far?

In most places where motor vehicle use is high or increasing, some measures have already been taken to increase the level of seat-belt use among motor vehicle users. Many countries have mandatory seat-belt laws and public awareness campaigns that promote seat-belt use. Before launching a new programme it is important to be aware of these programmes, laws and campaigns and examine whether they have been effective and whether they could be improved. Such a review can reduce costs and can suggest better ways to carry out future interventions.

The following checklist may be useful in finding out about what has already been implemented:

- Are there any other seat-belt or child restraint programmes currently in place in the country, or a neighbouring country?
- Who are the stakeholders of these programmes?
- Are there seat-belt use or child restraint programmes that have been conducted in the recent past?
- What were the outcomes of these programmes? Are the results available?
- What were the obstacles or constraints to these programmes? What lessons can be learnt?

Table 2.2 summarizes the actions that may be taken to assess the current situation concerning seat-belt and child restraint usage.
### Table 2.2 Summary of actions for assessing the current situation concerning seat-belt and child restraint usage

<table>
<thead>
<tr>
<th>Monitoring measures</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analysis of casualty data</strong></td>
<td>Identification of the real problem facing the country. Determine seat-belt and child restraint usage rates of road casualties. Calculate the savings (humanitarian and economic) that can be made from increased use.</td>
</tr>
<tr>
<td><strong>Assess existing manufacturing standards and legislation</strong></td>
<td>Determine the adequacy of any existing standards and legislation designed to control the fitting and maintenance of seat-belts and child restraints in vehicles. Identify any gaps in standards or legislation.</td>
</tr>
<tr>
<td><strong>Assess existing wearing legislation</strong></td>
<td>Determine the adequacy of existing legislation designed to enforce the use of seat-belts and child restraints. Identify any gaps in legislation.</td>
</tr>
<tr>
<td><strong>Capacity to regularly test and monitor the condition of seat-belts</strong></td>
<td>Assess the capacity to undertake annual statutory vehicle tests that include checks on the condition of seat-belts.</td>
</tr>
<tr>
<td><strong>Observed wearing rates</strong></td>
<td>A visual assessment of wearing rates, representing all types of road. Conducted at regular intervals – recommended every 6 months.</td>
</tr>
<tr>
<td>To highlight the percentage of vehicle occupants wearing seat-belts and child restraints at a national or state level</td>
<td>Using the same sites in selected areas of the country/state for each assessment. Weekend and weekday assessments. Observers need to indicate sex, seating position, approximate age, type of vehicle, if child restraints and seat-belts are installed, and if they are being worn.</td>
</tr>
<tr>
<td>A sample survey form can be found in Appendix 2</td>
<td></td>
</tr>
<tr>
<td><strong>Stakeholder analysis/market research</strong></td>
<td>Surveys indicating road vehicle occupants’ level of awareness and knowledge of seat-belts and child restraints and their benefits. Assessment of casualty statistics. Determine reasons for non-use.</td>
</tr>
<tr>
<td><strong>Child restraint sales</strong></td>
<td>Number of child restraints sold by type.</td>
</tr>
<tr>
<td>To indicate any increase in the purchase of child restraints</td>
<td></td>
</tr>
<tr>
<td><strong>Vehicles sales</strong></td>
<td>Number of vehicles imported with or without seat-belts installed.</td>
</tr>
<tr>
<td>To establish the percentage of vehicles in use that have seat-belts installed</td>
<td>Sales of new vehicles with seat-belts installed – may be affected by legislation.</td>
</tr>
<tr>
<td><strong>Convictions</strong></td>
<td>Analysis of criminal statistics relating to vehicle occupants in court for non-compliance with seat-belt legislation.</td>
</tr>
<tr>
<td>To be used post-legislation, to indicate levels of effective enforcement</td>
<td></td>
</tr>
</tbody>
</table>
2.3.6 Using the situational assessment to prioritize actions

Once the situation has been assessed, the process of prioritizing actions can begin. In many countries, injury prevention and road safety are not recognized as major health and development issues that require political backing. As a result, in these places, a network of key groups with a common interest in road safety needs to be created in order to develop programmes to increase the use of seat-belts and child restraints. Research has shown that when many groups are involved in improving road safety, and successfully share the responsibilities, the effects are much greater (16, 17). What actions to take will depend on where the country is in relation to restraint awareness, campaigns and legislation. Once this has been determined using the information obtained, as explained in this module, and using the summary of actions in Table 2.2, stakeholders will be in a position to identify what is required.

A big factor in prioritizing these actions will be the funds and resources available to deliver and support the actions undertaken. For example, in some countries national television and radio is owned by the government and therefore advertising can be inexpensive. However, in countries where television and radio is not government owned, advertising can be a significant drain on the resources available.

However, educating the public is imperative at the outset of any new promotion, service or product, and seat-belts and child restraints are no exception. Vehicle occupants need informing and then re-educating to generate acceptance of the benefits of wearing a seat-belt. Continuous education is also necessary for future generations.

Summary

Before designing and implementing a seat-belt or child restraint use programme, a situational assessment must be conducted. Asking a number of the questions listed in this module can help identify the particular problems around seat-belt use in the country, make a strong argument in support of the programme and provide indicators that can later be used to judge a programme’s success. The extent of the problem of non-use of restraints needs to be assessed. This involves collecting data on road crashes and injuries, as well as on restraint wearing rates and reasons for non-use. This information can be used as baseline information and to identify the main needs of the programme. Some of this information may also be used in an evaluation of the project.

An analysis of what is already in place with regard to seat-belt and child restraint use needs to be conducted. This involves examining who is in charge of road safety in the country or area, the financial resources available for seat-belt use programmes, the legal instruments already in place, whether a seat-belt standard is specified and what other programmes are in place already or have been conducted in the region or country.
References