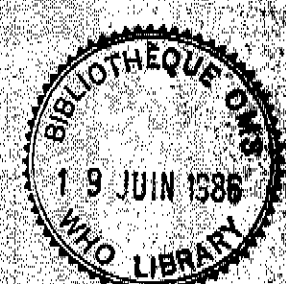


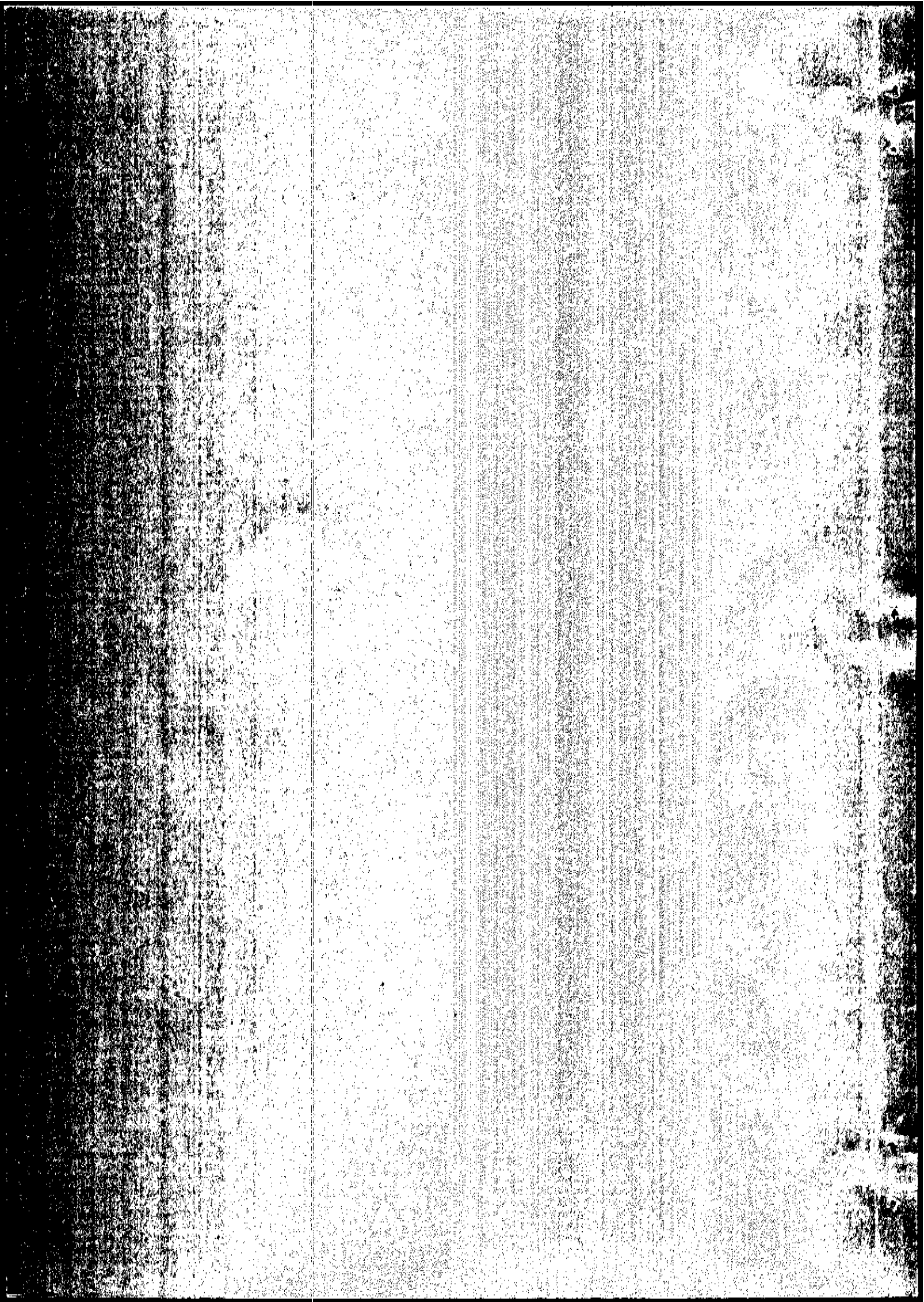
IRP/ADR 24

Prevention and care of motor vehicle injuries in the Caribbean

Bridgetown, Barbados 1986



WORLD HEALTH ORGANIZATION





WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTE
ORGANIZACION MUNDIAL DE LA SALUD

5271

Accidents, Traffic - P & C

JOINT HQ/PAHO WORKSHOP ON THE PREVENTION AND CARE OF MOTOR VEHICLE
INJURIES IN THE CARIBBEAN

Report on a WHO Meeting

Bridgetown, Barbados
12-15 June 1984

IRP/ADR 216-25
ENGLISH ONLY
UNEDITED

1985

Note

The issue of this document does not constitute formal publication. It should not be reviewed, abstracted or quoted without the agreement of the World Health Organization. Authors alone are responsible for views expressed in signed articles.

WORKSHOP ON THE PREVENTION AND CARE OF MOTOR VEHICLE
INJURIES IN THE CARIBBEAN
12-15 JUNE 1984
BRIDGETOWN, BARBADOS

FINAL REPORT

INTRODUCTION:

In accordance with Resolution No. 20 of the 8th Meeting of the Conference of Ministers Responsible for Health in the Caribbean, a Workshop on the Prevention and Care of Motor Vehicle Injuries was held in Bridgetown, Barbados from 12-15 June 1984. The workshop was sponsored by PAHO/WHO and WHO Global Program for Accident Prevention, in collaboration with CARICOM and the Government of Barbados.

The opening ceremony was presided over by Mr. Allison Daniel, Permanent Secretary of the Ministry of Health, Barbados and chaired by Dr. L. Harney, Chief Medical Officer, Ministry of Health, Barbados. Also present were Mrs. Audrey Hinchcliff, Acting Director, CARICOM Health Desk; Mr. David Deane, Chairman Road Safety Committee, Barbados and Dr. Mervin U. Henry, Caribbean Program Coordinator, PAHO/WHO, Barbados. The meeting was formally opened by Mr. Allison Daniel who noted the priority given by the Ministers Responsible for Health in the Caribbean to this matter in their 8th meeting and the continuing support given by the countries to road safety. To illustrate the seriousness of the traffic accident problem, the Permanent Secretary mentioned that over the 5-year period 1977-1981 a total of 181 persons were killed in Barbados as the result of traffic accidents and 5,627 suffered injuries. 40% of those killed were pedestrians and 21% were motorcyclists or passengers on motorcycles. Approximately 1,314 persons attended the emergency department in 1981 as a result of motor vehicle accidents; i.e. an average of 25 persons a week. Statistics for 1982 revealed that the average length of hospitalization of accident victims was 18 days, and the average cost per day per patient was \$145. If the 1982 average cost were applied to the 1981 figure of 5,424 hospital days for traffic accident victims, the estimated direct cost of hospitalization for such victims would be a staggering \$786,480.

Mrs. Audrey Hinchcliffe remembered that as early as the Fifth Caribbean Health Ministers Conference the problem of road traffic accidents was addressed considering the large number of injuries and deaths in the Caribbean community due to the traffic accidents. That interest was present in the Sixth and Seventh Conferences. The Eighth

Meeting of the CMH (1982) resolved: a) to confirm the continued interest of countries in preparing an Action Plan to reduce the impact of traffic accidents; and b) to request the Director of PAHO to submit a progress report to the Ninth Conference of Ministers Responsible for Health scheduled for July 23-28, 1984 in Dominica. Because of this CARICOM asked for realistic, implementable, and cost-effective strategies from this Workshop.

Mr. D. A. Deane informed that the Road Safety Committee has been trying to educate the travelling public on the need to exercise greater care and to practice better safety habits whether as drivers, cyclists or pedestrians and constantly reminding of the dangers of improper road use, the pain and suffering which normally result from accidents, and the economic loss as a result of carelessness and negligence. Mr. Deane mentioned that the production of the Documentary requested from the Government Information Service had finalized and coincidentally, it would be shown on TV that night. He also expressed that the Road Safety Committee had taken a decision to follow up this Documentary with a series of short film strips dealing with various aspects of road safety.

Dr. Henry referred to population increase, urbanization and industrialization as some of the background factors contributing to the increased number of vehicles, traffic accidents and injuries. He also emphasized that the morbidity and mortality of traffic accidents are the highest in young males. Dr. Henry strongly recognized that collective inputs of several other sectors are essential and indispensable if effective community action is to be mobilized to achieve the desired impact. Dr. Henry finally informed that the Workshop Recommendations will be submitted to the Conference of Ministers Responsible for Health in the Caribbean to be held from 23-28 July 1984 in Dominica for review and approval with a focus on early implementation.

Dr. C. Romer, Manager Global Program for Accident Prevention, referred to various WHA Resolutions, the last one in 1976, requesting WHO to cooperate with countries in the formulation of national programs for accident prevention with particular regard to the increasing toll of road trauma on health services especially in the developing world. In many developing countries traffic injury incidence comes higher now than more traditional diseases like tuberculosis. Consequent disabilities can be as important as those resulting from poliomyelitis if not more. In most of the industrialized countries coherent traffic safety policies have curbed the rising trend of road accidents and the commitments of the Caribbean countries participating in this workshop might be seen sound policies and programs. Yet he emphasized that technical cooperation between Caribbean countries was an important goal as there was a need for building local expertise and strategies appropriate of this socioeconomic and cultural setting.

The prepared agenda was reviewed and after some small changes had been made, the Workshop formally commenced its work. Emphasis was placed on the central purpose of the meeting:

1. To identify the nature, extent, and aetiology of traffic accidents in the Caribbean area.
2. To recommend methods for reducing the frequency and the impact of traffic accidents.
3. To develop a Caribbean Plan of Action for the reduction of traffic accidents.

The agenda (attached) included the following topics:

- WHO Global Medium-Term Program on Accident Prevention
- Aetiology of motor vehicle injuries
- Statistical considerations in the measurement of road traffic accidents in developing countries
- The role of alcohol and drugs in traffic accidents
- Medical care for the victims
- Situation in the Caribbean
- Legal aspects of traffic accidents
- Road Safety Program Planning

There was a considerable discussion on the issues raised in plenary sessions and in working groups. The topics of the working groups were: epidemiology; behavioral factors with special regard to alcohol and drugs; technology; and legislation. During the workshop two films from the Insurance Institute for Highway and Safety (USA), and one from the Road Safety Committee (Barbados) were shown.

PARTICIPANTS:

Twenty one delegates from the Bahamas, Barbados, Belize, Grenada, Guyana, Haiti, Jamaica, St. Kitts/Nevis, and Suriname attended the workshop, including epidemiologists, police and transport officials, and administrators. Consultants from the WHO Global Programme for Accident Prevention, and PAHO Regional Programme for Traffic Accident Prevention also attended (a list of participants is attached).

COUNTRY PRESENTATIONS:

The country presentations were essentially based on the responses of an information questionnaire which was prepared by PAHO Regional

Programme for Traffic Accident Prevention and previously submitted to the country participants to be filled out by the appropriate agencies. For practical and methodological reasons, the questionnaire was divided into the following sections:

- A- General information
- B- Human elements
- C- Motor vehicles
- D- Road characteristics
- E- Operations
- F- Traffic accidents
- G- Medical and emergency services
- H- Information systems and road safety programs
- I- Personal views.

The questionnaire responses were mostly received by the workshop organizers at PAHO and tables and graphs were prepared and presented by the consultants during the workshop within a very realistic homogeneity (Annex I). In a similar way, the PAHO legal office submitted to the participants a general picture on the current legislation related to traffic accidents in the Caribbean area to precise the adequacy of that matter to assure effective enforcement of traffic regulations (Annex II).

The workshop participants adopted a standard form for data collection by the police at the scene of the accident. This form was developed from input from the police, health sector and transport representation (Annex III). The participants received a number of traffic accident-related documents (Annex IV).

CONCLUSIONS

o The group recognized that road crashes and their toll of deaths, casualties and disabilities have become a major public health problem in the Caribbean, striking especially young people in the age group 15-25 years becoming a strong contributor to "potential years of life lost".

o It was also noted that action in this area has to be approached by interdisciplinary involvement and using appropriate technology to control the consequences of increasing motorization.

o The participants agreed that the improvement of road safety needs a political commitment at the highest level in order to ensure that protection of the transport system users is not subordinated to economic interests. This commitment should be long term, comprehensive and consistent.

o The group recognized the very strong economic impact of the road accidents including direct cost (damage to vehicles, roads, and property, medical care for the injured, expenditure for administrative services, etc.) and indirect costs (especially those due to the loss of production by the victims). To illustrate the economic impact just in the health sector, the data reveal that in 1982 the average length of hospitalization of accident victims in Barbados was 18 days, and the average cost per day per patient was \$145. Applying those values to the 5,424 hospital days 1981 for traffic accident victims, the estimated direct cost of hospitalization was almost \$ 800,000.

o The group agreed that without adequate collection, analysis and interpretation of accident data it is difficult establish efficient countermeasures, strategies and evaluation system. It was agreed that the police records be utilized as the data starting point.

o The group agreed that alcohol and/or drugs is a significant cause of serious traffic injuries and fatalities, and probably accounts for 40-60% of all fatalities. At the same time, the group recognized the lack of appropriate legislation to facilitate the testing of drivers for alcohol in all the participating countries but Suriname.

o Based on experience in many countries outside the Caribbean, it was recommended the widespread use of seat belts and crash helmets can reduce car occupants deaths and hospital admissions by 50 to 60%.

o The group recognized the need for training courses for law enforcement and health professionals on traffic accidents.

Current legislation was considered in general not adequate to assure effective enforcement of traffic regulations.

RECOMMENDATIONS

Immediate recommendation

o Each country should establish a national road safety committee with executive power and appropriate funding to address the problem of road accidents. This agency should develop and implement policies in the field of transport safety and coordinate the activities in the health and transport sectors and should have linkages with the law enforcement authorities.

Short-Term recommendations

o The group agreed that CAREC be designated the coordinating office for epidemiological, training and research activities of traffic

accidents in the Caribbean. This institution should receive strong support from PAHO and WHO/HQs to accomplish these purposes.

- o A national reporting system should be established:
 - to monitor the overall national accident situation;
 - to monitor changes over time;
 - to provide information to the policymaking sectors; and
 - to evaluate the effectiveness of the countermeasures.

Therefore, the group recommended:

1. To adopt, for statistical purposes, the United Nation's definition of road traffic death, within 30 days of the accident.
 2. To adopt the following "outcome" of accident scale at the scene of the accident for each person:
 - No injury
 - Injury with no treatment
 - Injury treated and discharged
 - Injury admitted to a hospital
 - Death
 3. To adopt an uniform core set of type of vehicles will be utilized, expanded as appropriate for each country's specific needs.
 4. Each country should designate a permanent unit responsible for data on road traffic accidents. Such units should coordinate the information from all sources (police, hospitals, insurance) and be the source of information for all users (police, health, insurance) and be the source of information for all users (police, health, insurance, transport, policymakers).
 5. A uniform form for data collection by the police at the scene of the accident developed from input from the police, health sector and transport representation at the workshop should be adopted by all participating countries after successful pretesting on a sample basis for a specified time period. PAHO/CAREC should coordinate this effort.
- o In relation to alcohol and/or drugs the group recommended:
 1. Clear, comprehensive laws be enacted to make driving under the influence of such substances a punishable offense. A blood alcohol level of .08% has been adopted by many countries in the world to define "impairment" and is recommended for use in the Caribbean.

2. New legislation should specify that blood alcohol tests be performed on all persons in accidents where injury or death has occurred, permitting the analysis of information on alcohol in traffic fatalities.

3. In addition to legislative measures, it is important to raise public awareness and involvement in the drunk driving problem through use of the media and existing community groups.

4. There must be increased certainty, severity and rapidity of punishment of drunk driving. License suspension and revocation seem to be the most effective penalties applied in many countries.

5. There should be appropriate public and professional education and information on the risks of driving under the influence of alcohol and/or medications.

o The fitting and use of lap and shoulder seat belts should be introduced on a mandatory basis as soon as possible and in any case within the next three years. Through PAHO/WHO, material demonstrating the benefits of mandatory seat belt, should be developed and made available to the countries of the Caribbean. This material should include films and video cassetts suitable for use by the media.

o The mandatory use of crash helmets should be introduced in the countries as soon as possible and certainly within the next year. The Bahamas and Suriname have demonstrated that such legislation can be operated effectively even with the rental of motorcycles by tourists. An agreed definition of a crash helmet for the Caribbean should be developed, creating a set of standards for performance suitable for this particular area.

o PAHO/WHO and individual countries in the Caribbean should develop short-term training courses in: traffic medicine, crash investigation, and injury control. To supplement such courses appropriate educational material should be prepared for use in this area. In particular the education of physicians in traffic medicine should be encouraged with the preparation of an appropriate curriculum with emphasis on injury prevention.

o Age limitations for driving certain vehicles should be adopted as follows:

- passenger-carrying vehicles (e.g. large buses) and large, heavy commercial vehicles--minimum licensure age 21, with 3 years of driving experience, and more frequent medical evaluation after age 60.

motorcycles above 250cc - minimum licensure age 21

o It is necessary to promote the development of emergency medical care national systems to assure the care, transport and treatment of the injured persons in accordance with the resolutions adopted by the PAHO Seminar on Emergency Medical Services, Washington, September 1983.

o Limiting of the number of more dangerous vehicles on the road should be encouraged through fiscal and taxation measures. In particular motorcycles of 250 cc and more should be actively discouraged by discriminatory taxation and such measures could also be applied to high performance cars which it was recognized are unsuitable for many of the roads in the countries of the Caribbean area.

Long-term Recommendations

o Information on vehicle design defects should be circulated among Caribbean and other countries notably the United States. Such defects often only appear after experience with very large numbers of cars in circulation, and therefore liaison on recalls of vehicles in the US and elsewhere needs to be established, possibly through PAHO and national road safety committees.

o The periodic inspection of vehicles for maintenance defects covering types, brakes, steering, and lighting in particular should be encouraged on an annual basis and also through spot checks. In some countries of the Caribbean a legal procedure should be introduced enabling defective vehicles to be removed from the roads.

o Thought should be given to the use of speed governors on buses and other public service vehicles, and the fitting of under-run guards on trucks should be introduced.

o A uniform specification for the main safety-related features of new vehicles is required. Standards be adopted from the industrialized countries should be applied to laminated windscreens, steering wheels, head restraints, seat belts, and anti-burst door locks as soon as possible.

o The mandatory use of headlights by motorcycles at all times of the day should be soon introduced.

o The need for more active identification of roadside hazards was noted. Better identification of blackspots is required and to this end closer liaison between police and transport authorities is needed.

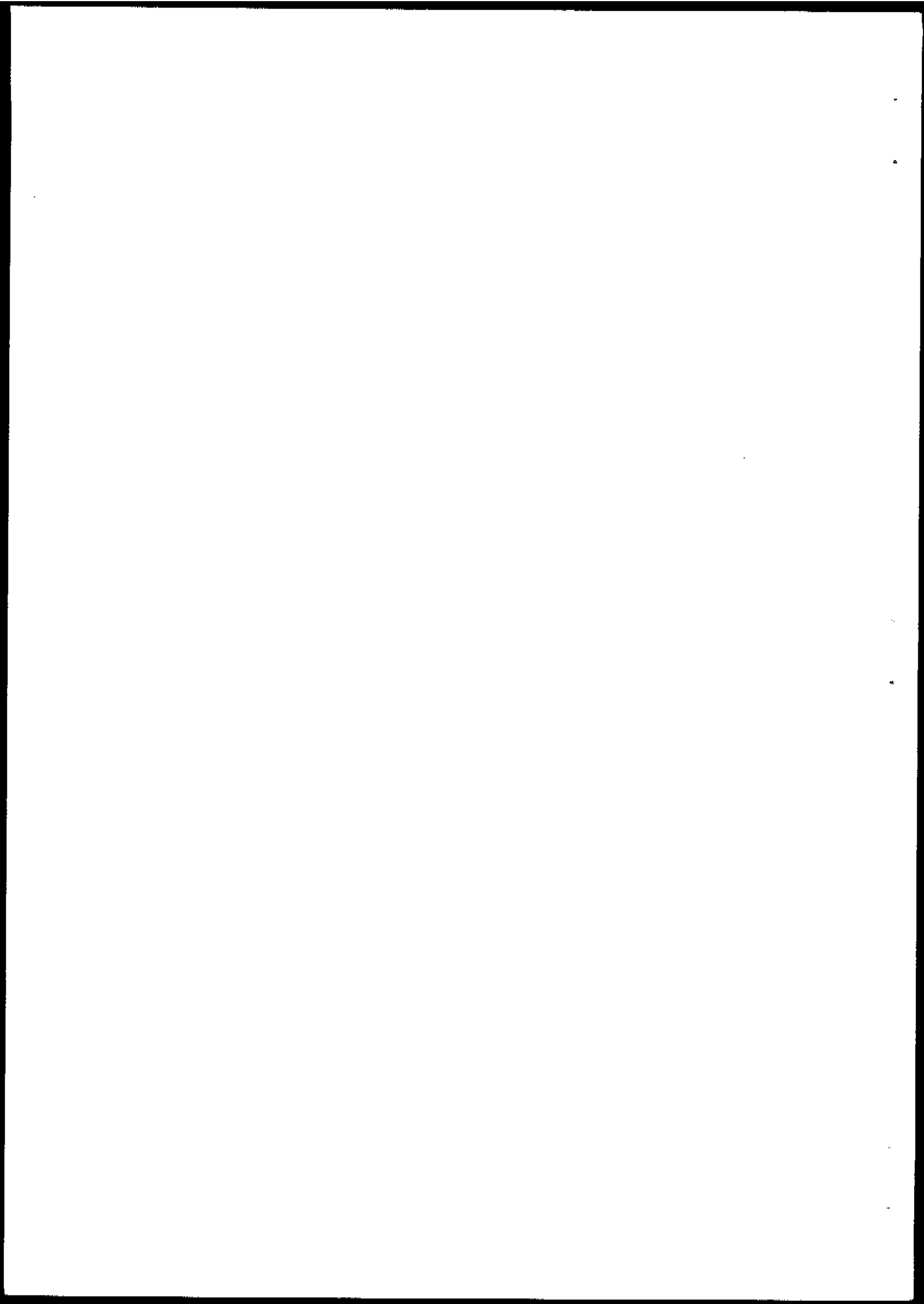
o In-person renewals for driver's licenses should be established at 5-year intervals including vision screening by the licensing agency as well as completion of a brief self-reporting form on the presence or absence of medical conditions that have proven to be an undue safety risk (e.g. grandmal seizure disorders).

o Physicians should be educated to assess driver impairment and to appropriately advise patients, particularly on the influence of medications on driving skills.

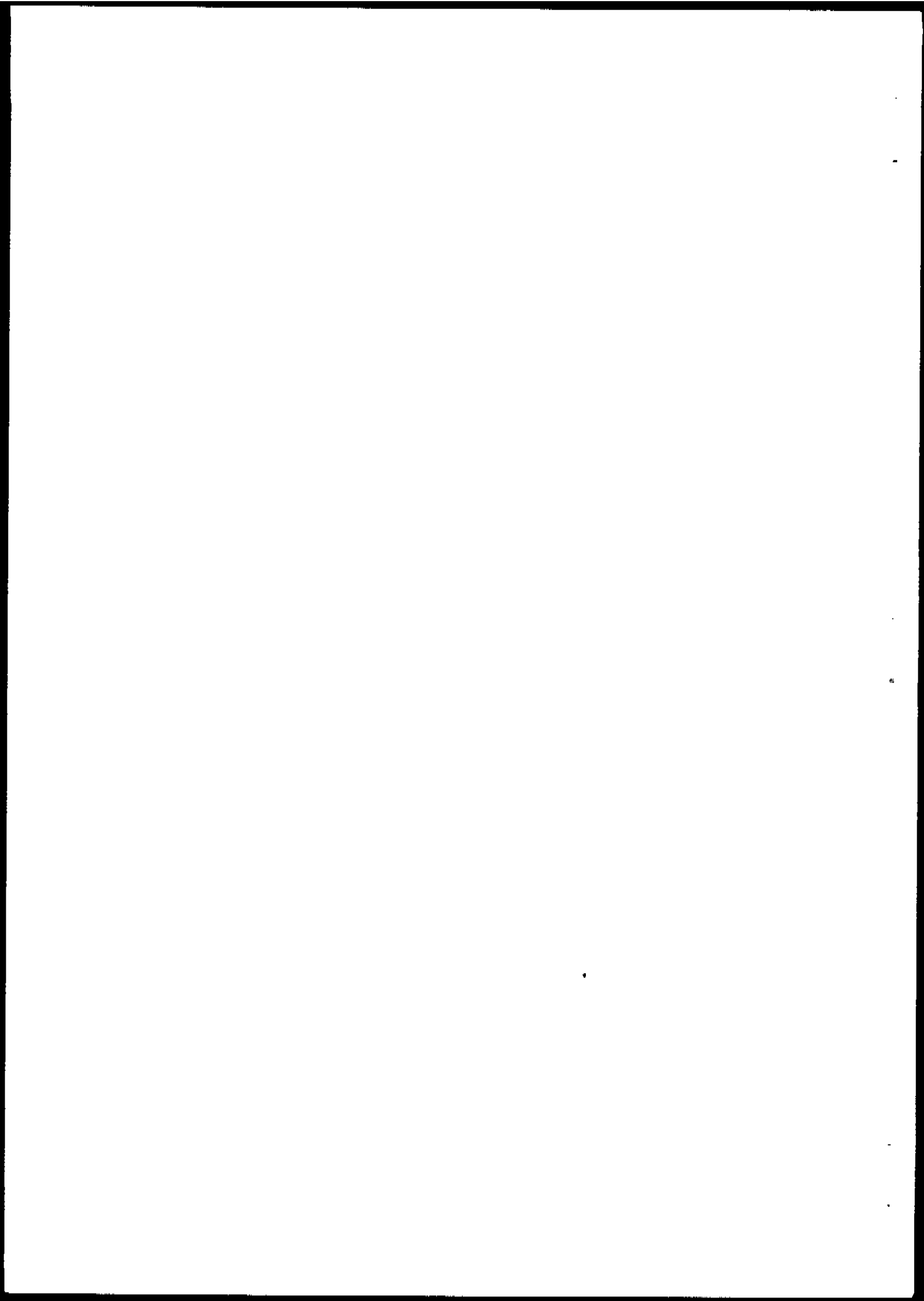
o Consideration should be given to establishing medical advisory committees to licensing agencies to assist in developing medical guidelines for driving.

o Demerit points systems in licensing have been shown to be effective in a number of countries. These experiences should be shared with a view toward regional adoption.

o Legislation should be reviewed to assure effective enforcement of traffic regulations, particularly requiring possession at all times of a driver's license, and vehicle registration, so as dangerous alterations to motor vehicles. Attention should be given especially to swift adjudication of traffic violators.



ANNEXES



Annex I

RECENT TRAFFIC ACCIDENT STATISTICS FROM SELECTED COUNTRIES OF THE CARIBBEAN
(COUNTRIES ORDERED ACCORDING TO THEIR DEGREE OF MOTORIZATION)

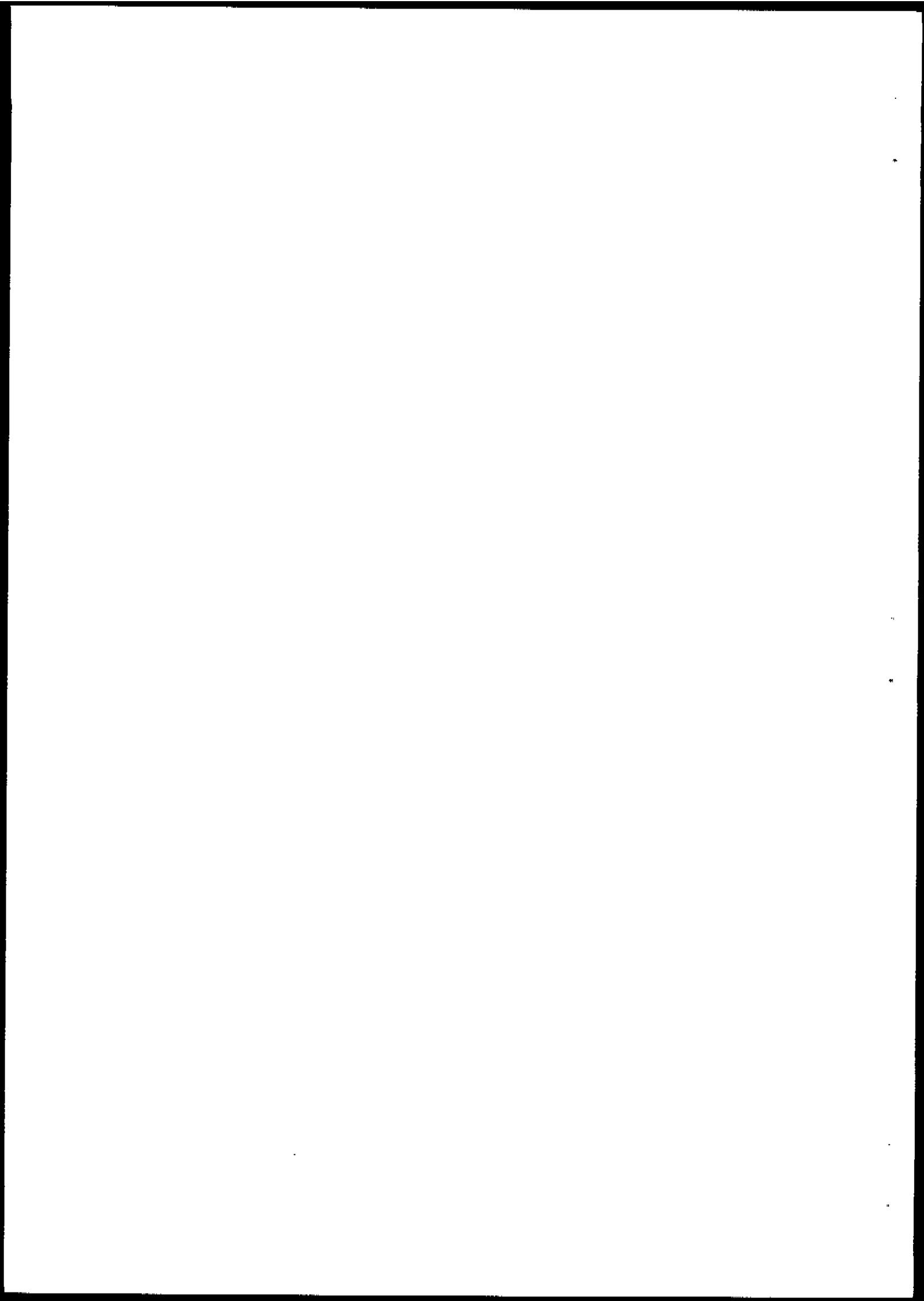
Population	Number of Licensed Drivers	Number of Registered Motor Vehicles	Total Number of Accidents	Road Network Kms of Paved/Unpaved	Number of Deaths	Number of Injuries	MotORIZATION Index	Deaths Per 10,000 Vehicles	Deaths Per 100,000 Inhabitants
British Virgin Islands	--	4,500 (83)	297 (83)	--	2 (83)	79 (83)	2.7	4.4	166.7*
Bahamas	46,886 (82)	63,050 (82)	3,279 (83)	--	31 (83)	891 (83)	3.3	4.9	14.8
Suriname	87,472 (83)	71,860 (82)	4,443 (83)	2200/6500	71 (83)	370 (83)	5.0	9.9	19.7
Barbados	49,670 (81)	44,170 (83)	3,913 (83)	--	34 (83)	934 (83)	5.7	7.7	13.6
St. Kitts-Nevis	5,400 (83)	5,139 (83)	482 (83)	86/100	4 (83)	160 (83)	8.4	7.8	92.4*
Guyana	47,298 (83)	71,008 (83)	>2,493 (83)	861/5336	183 (83)	2,870 (83)	9.9	25.8	26.1
Jamaica	286,032 (83)	156,145 (83)	6,426 (83)	2594/-	373 (83)	2,738 (83)	13.8	20.7	15.0
Grenada	10,105 (79)	7,741 (83)	597 (80)	609/375	6 (80)	197 (80)	13.9	7.8	5.6
Dominica	--	5,000 (83)	500 [†] (83)	--	10 [†] (83)	--	16.4	20.0	12.2
Haiti	30,899 (83)	53,000 (83)	5,973 (83)	4800/2000	1600 [†] (80)	--	95.4	301.9	31.7

Source: Information from each country as obtained from the questionnaires completed for the Workshop on the Prevention and Care of Motor Vehicle Injuries in the Caribbean, Barbados, June 1984.

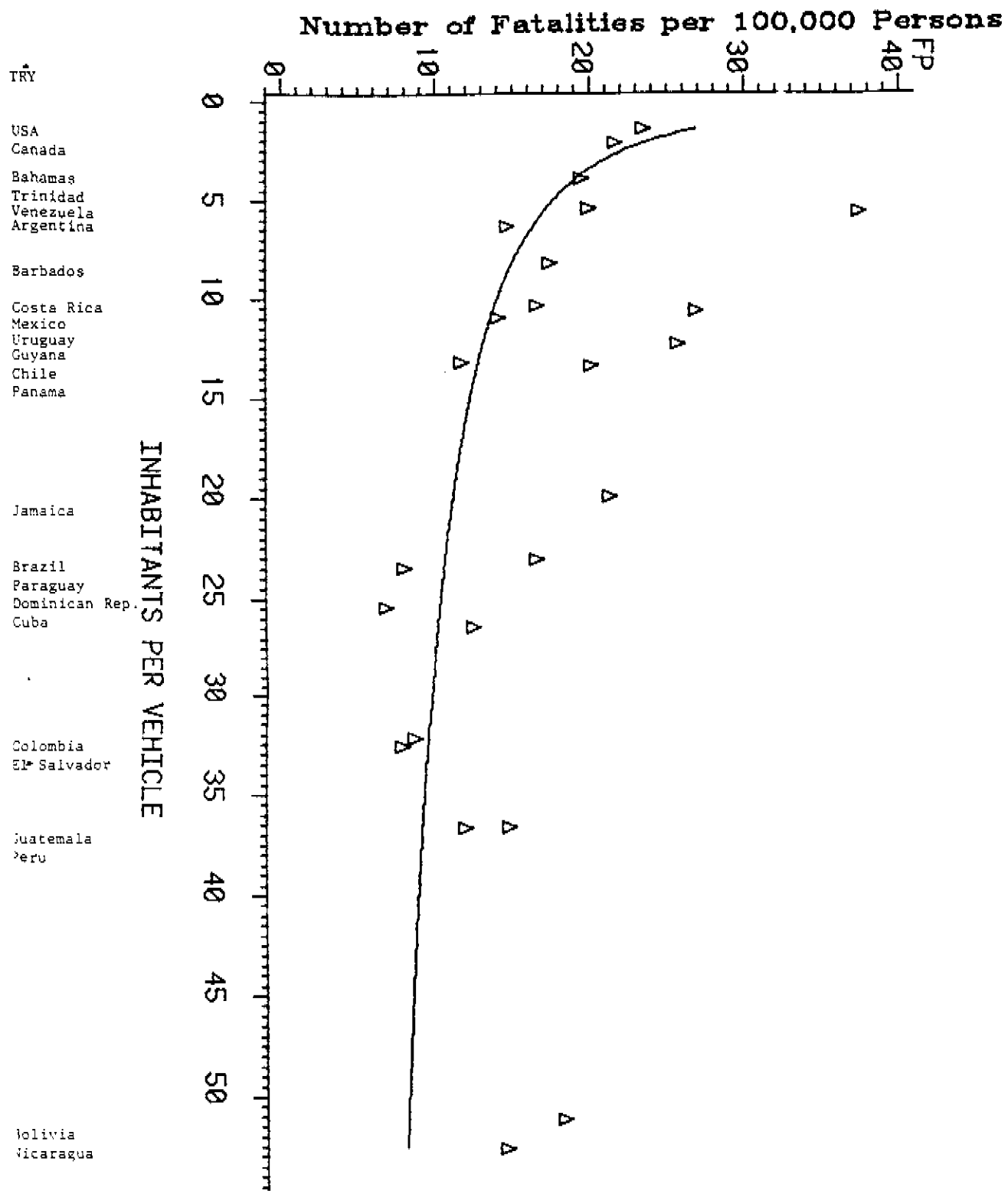
*"Meaningless" given the very small population size.

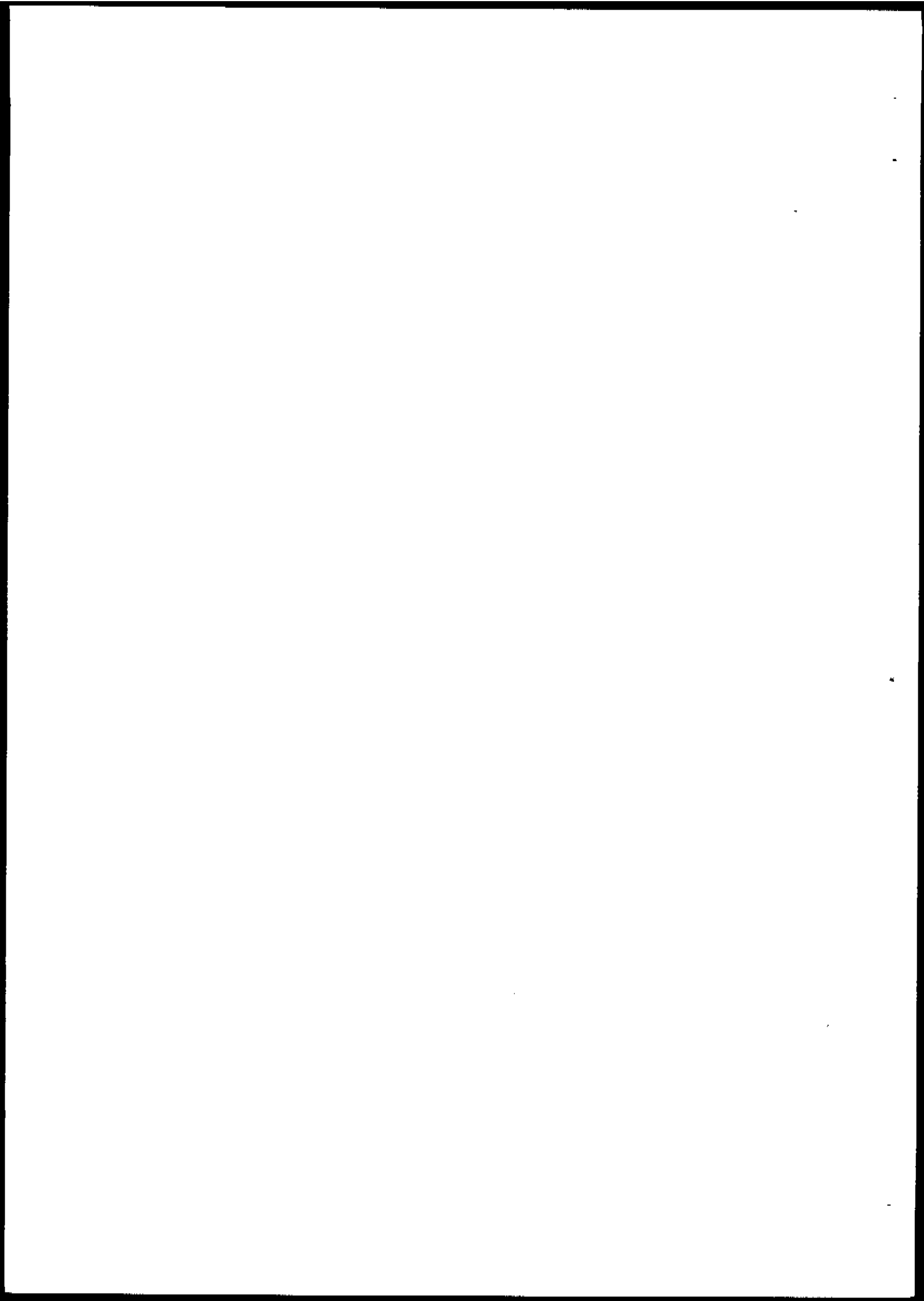
**Last two digits of the year.

[†] Approximate figure.

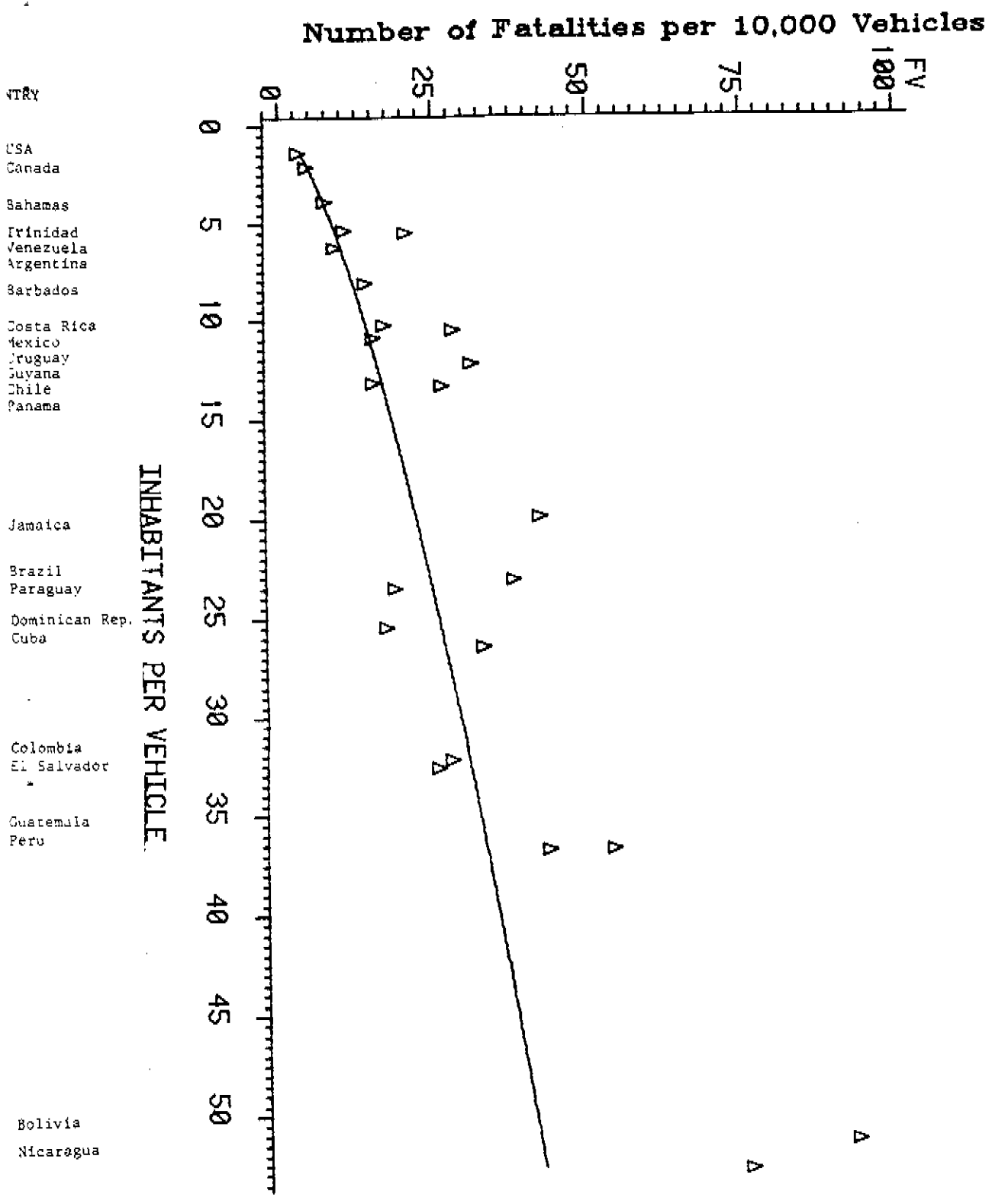


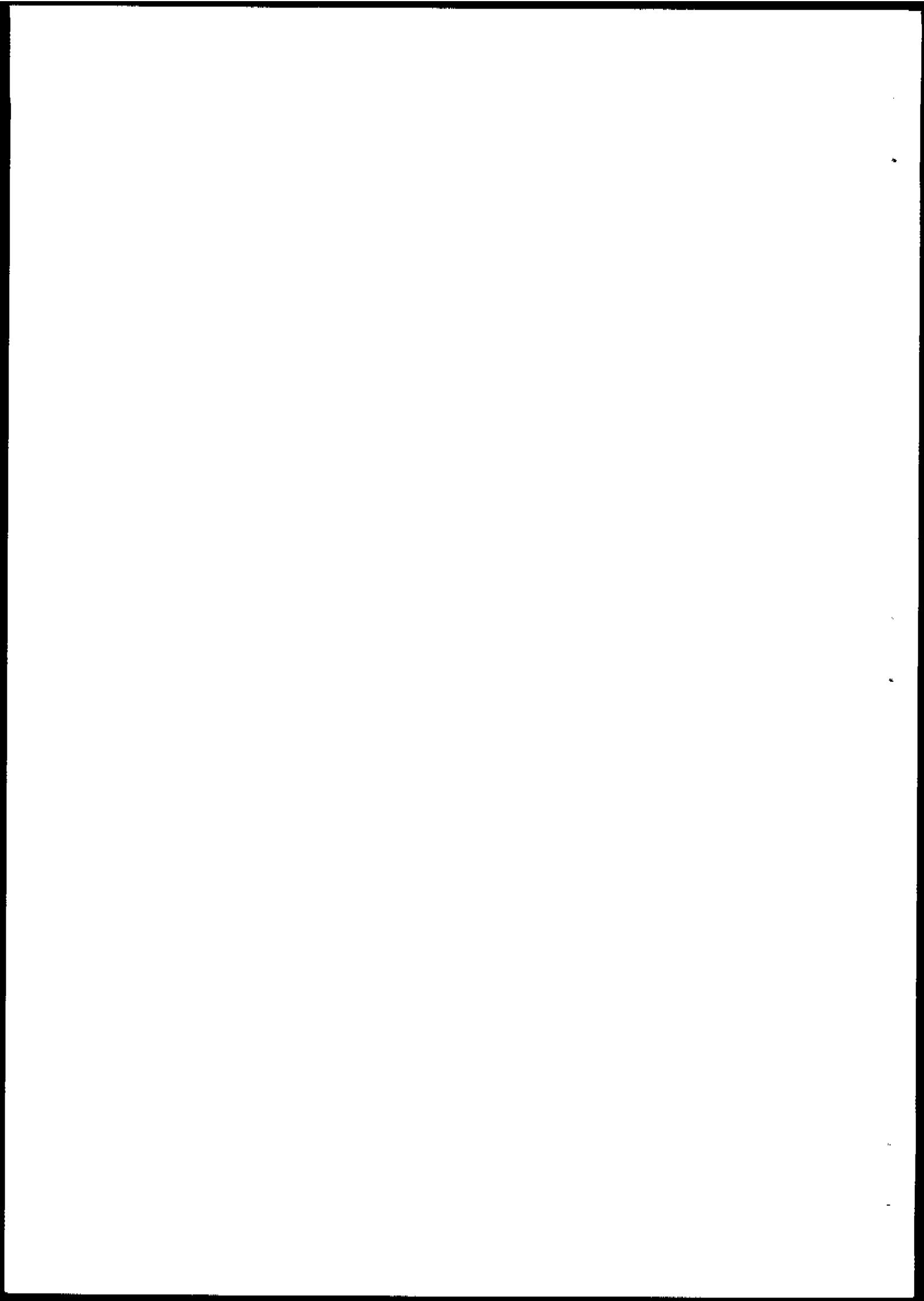
Relationship between the Population Fatality Proportion and the Degree of Motorization for Selected Countries in the Americas, 1980





Relationship between the Vehicle Fatality Ratio and the Degree of Motorization for Selected Countries in the Americas, 1980





ANNEX II

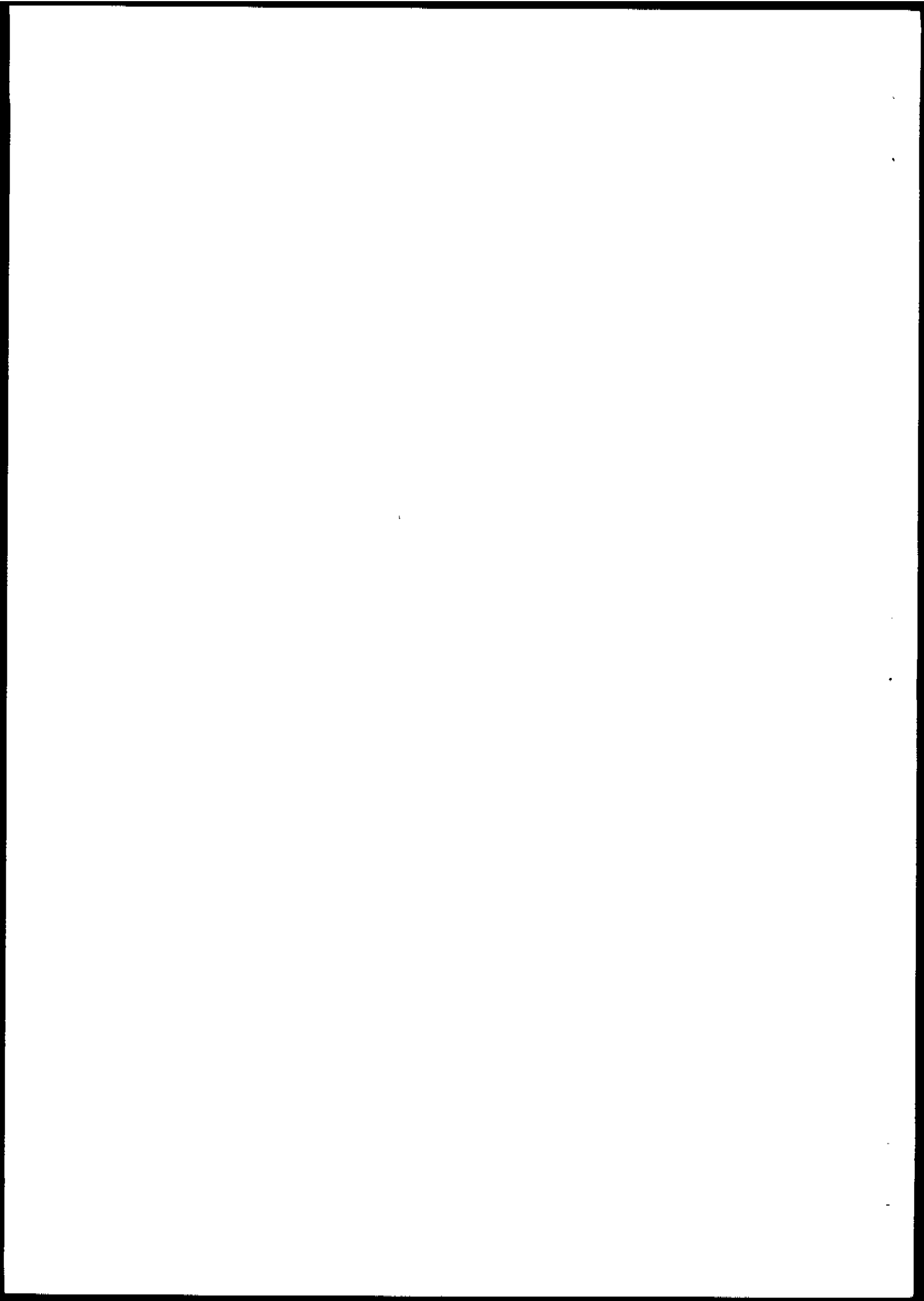
CURRENT LEGISLATION RELATED TO TRAFFIC ACCIDENTS IN THE CARIBBEAN

ISSUE	BARBADOS	B.H.I.	DOMINICA	GRENADA	GUYANA	HAITI	JAMAICA	ST. LUCIA/NEVIS	SURINAME
Requirements of obtaining driver's licence Minimum Age - Private Car - Omnibus - Taxis - Motorcycles - Trucks - Medical Exam - Theory Exam - Practical Exam Other Requirements	16 18 ? 15 18 No Yes Yes		17 19 19 17 19		17 18 21 16 18 No Yes Yes Police Driving School 4 hrs. 3 days	17 20 ? 15 20 Yes Ten Yes Authority of parents Driving Schools	15 21 ? 17 21 Private: No Trucks, Buses Yes Yes Yes Knowledge of mechanics to drive (written)	14 21 16 16 14 No Yes Yes N.A.	18 16 18 20 18 Yes Yes Yes Private Driving School
Renewal requirements	70+ years Medical certificate		Annual fee	Annual fee	Annual fee	Previous license	Payment of fee	Application	Medical exam
Motor Vehicle Recorders Obligation Responsible	Licensing Authority		Police	Police	District/National No. info.	National	Parish level	Police Traffic Dept.	Attorney General Police
Duration of licence	2 year		1 year	1 year	1 year	1 year	?		1 year

TRAFFIC ACCIDENT-RELATED CURRENT LEGISLATION IN SELECTED CARIBBEAN COUNTRIES

ISSUE	BARBADOS	3 4 J	DOMINICA	GUAYANA	JAMAICA	ST. KITTS/ NEVIS	SURINAME
Motor vehicle inspection Organization responsible	License Authority Public 1/yr Private: 1/yr Public: 2/yr			Traffic Police Private: 1/yr Public: 2/yr	Traffic Police 1/yr Spot checks	Police Traffic Dept. Private: 1/yr Public: 2/yr	Traffic Police 1 year
Frequency							
Seat Belts installed	No		No	No	No	No	No
Organization responsible for road works	Ministry of Works/ Transport & Works		Ministry of Construction	Ministry of Works and Transport	Public Works Dept. Ministry of Construction	Public Works Dept.	Ministry of Public Works (primarily)
Organization responsible for traffic accidents and functions	Road traffic Authority/ Department		Royal Grenada Police Force Traffic Dept.	Vehicles Service	Police	Police	Traffic Police (incl. Traffic Info. Unit)
Organization responsible for traffic control/enforcement	Royal Bahamas Police Force Traffic Division	Royal Barbados Police Force	Royal Grenada Police Force Patrol Unit	Lawrence Force Traffic Dept.	Police Traffic Dept.	Lawless driving Inebriated driving Exceeding speed limit Lighting offences Policing offences	N.A.
Most frequent traffic citations	Driving without licence Speeding Inadequate Brakes	Restricted Parking Exceeding speed limit Driving without licence and attention failure to comply with road signs/ signals Inefficient brakes	Speeding Risk of care at road junction Failing to signal Failing to keep on side	Overloaded vehicles Failing to conform to traffic signs Obstruction of unlighted unicycle road	Medical to prevent permit alteration Exceeding speed limit Disobey traffic lights Careless driving, dangerous driving	Caravan driving Inebriated driving Inebriated vehicles Lighting offences Policing offences	
Alcohol Use/enforcement	No limits Medical testing	No limits None	No limits Foot patrol		152 mg of %SA new Medical exam can be retained	No limits Spot checks	0.5% Blood test if voluntary

ISSUE	BALDWIN	BALDWIN	I.P.I.	DORSET	GREYHOUND	CUTBACK	BELT	JAMAICA	ST. KITTS/NEVIS	ST. LUCIA
Speed Limits	Enforced by Radar				Motor Cycle Patrol	Enforced by Radar	No Radar No Speed Limits OUT OF CITIES	Radar	Police	N.A.
Licensing	Yes (since 1959)	Yes (since 1952)			Yes	Yes (since 1933)	Yes (since 1964)	Yes (since 1939)	Yes (since 1960)	Yes (since 1982)
Seat belts use	No	No			No	No	No	No	No	No
Motor Cyclic Helmets Use	Yes	No			No	Yes (since 1975)	Yes (since 1964)	No	No	Yes (since 1982)
Child Restraint Use	No	No			No	No	No	No	No	No
Organization Collecting Hospitality Information	N.A.	Police Min. of Health Insurance Ministry of Transport and Works			Police Hospital Insurance No systemization	Police Department Weekly	Service Circum- (Use Vehicle)	Police Department J.I.S.	N.A.	Traffic Police Government Health Organization Including Police (Information)
Organization for Road Safety Planning	Police Health Radio Jamaica Ministry of Transport	Police General Insurance Asso- ciation Ministry of Transport and Works			No	Road Traffic Accident Committee, Nat. Road Safety Council General Road Safety Association Ministry of Transport and Works	Road Traffic Accident Committee, Nat. Road Safety Council General Road Safety Office Ministry of Transport and Works	Police Department Ministry of Transport and Works	Police Department Ministry of Transport and Works	Police Department Ministry of Transport and Works
Intersectoral Co-ordinator	No	No			No	Ministry of Transport and Works	Ministry of Transport and Works	No	No	No



ANNEX III

TRAFFIC ACCIDENT REPORT

Station: _____
 Branch: _____
 Officer: _____

1. Card Type
 2. Report Date
 3. Report Time
 (24 hr. clock)

1
 2-7
 day mth yr
 8-11

Particulars of Accident

4. Accident ID no. 12-16
5. No. of Vehicles Involved 17
6. Date of Accident 18-23
7. Estimated Time of Occurrence
 (24 hour clock) 24-27
8. Light Conditions
- 1. Dawn
 - 2. Day 28
 - 3. Dusk
 - 4. Night
9. Weather Conditions
- 1. Clear
 - 2. Overcast 29
 - 3. Light Rain
 - 4. Heavy Rain and Wind
10. Accident Type
- 1. Vehicle/Pedestrian
 - 2. Vehicle/Vehicle 30
 - 3. Vehicle/Animal
 - 4. Vehicle/Stationary Object
 - 5. Loss of control/Skidding
 - 6. Other, specify _____
11. Road Surface
- 1. Tarred
 - 2. Gravel 31
 - 3. Dirt
 - 4. Other, specify _____
12. Road Conditions
- 1. Dry
 - 2. Wet 32
 - 3. Muddy
 - 4. Oily
 - 5. Other, specify _____

13. Road Defects

- | | | | |
|----------------|--------|-------|-----------------------------|
| Potholes | 1. yes | 2. no | <input type="checkbox"/> 33 |
| Broken Edges | 1. yes | 2. no | <input type="checkbox"/> 34 |
| Under Repair | 1. yes | 2. no | <input type="checkbox"/> 35 |
| Other, specify | 1. yes | 2. no | <input type="checkbox"/> 36 |
-

14. Environment

- | | | | |
|----------------------|------------|-----------|-----------------------------|
| sidewalk | 1. present | 2. absent | <input type="checkbox"/> 37 |
| traffic light | 1. present | 2. absent | <input type="checkbox"/> 38 |
| barriers | 1. present | 2. absent | <input type="checkbox"/> 39 |
| bridges | 1. present | 2. absent | <input type="checkbox"/> 40 |
| Pedestrian Crossings | 1. present | 2. absent | <input type="checkbox"/> 41 |
| Road Signs | 1. present | 2. absent | <input type="checkbox"/> 42 |
| Bends/Curves | 1. present | 2. absent | <input type="checkbox"/> 43 |
| Other, specify | 1. present | 2. absent | <input type="checkbox"/> 44 |
-

15. Artificial Road Lighting

- | | | | |
|------------|--|--|-----------------------------|
| 1. None | | | |
| 2. Partial | | | <input type="checkbox"/> 45 |
| 3. Full | | | |
| 4. N/A | | | |

Location _____

Drawing of Locality:

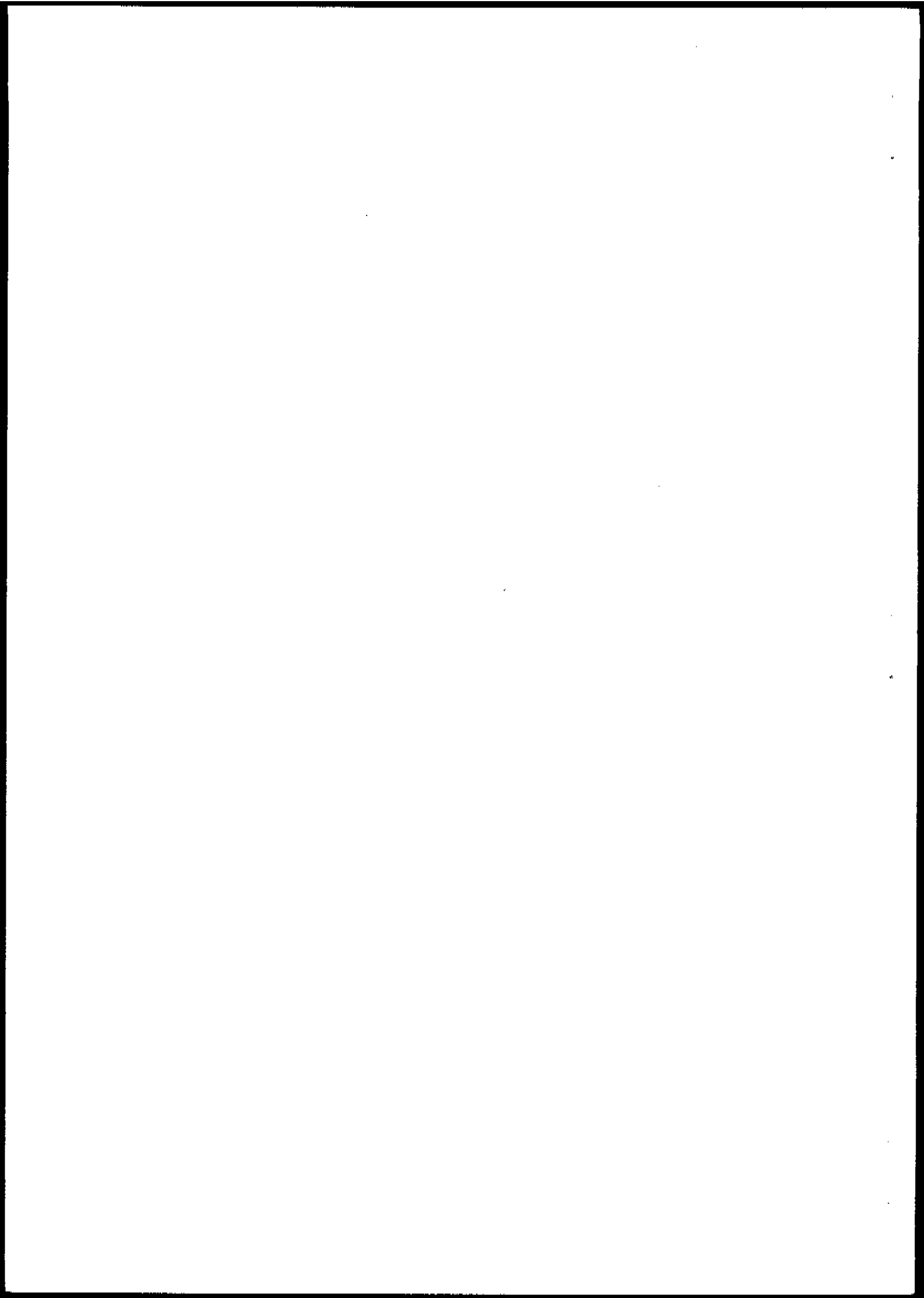
Statement: _____

17. Current Defects
- | | | | |
|--------------------|---------------------------|--------------------------------|-----------------------------|
| Defective Tires | 1.absent | 2.present | <input type="checkbox"/> 62 |
| | 1.contributed to accident | 2. no contribution to accident | <input type="checkbox"/> 63 |
| Defective Brakes | 1.absent | 2.present | <input type="checkbox"/> 64 |
| | 1.contributed to accident | 2. no contribution to accident | <input type="checkbox"/> 65 |
| Defective Lights | 1.absent | 2.present | <input type="checkbox"/> 66 |
| | 1.contributed to accident | 2. no contribution to accident | <input type="checkbox"/> 67 |
| Defective Steering | 1.absent | 2.present | <input type="checkbox"/> 68 |
| | 1.contributed to accident | 2. no contribution to accident | <input type="checkbox"/> 69 |

18. No. of Occupants 70-71

19. Safety Devices Available
- | | | | | |
|-------------------------------|-------|------|-------|-----------------------------|
| Seat Belt for driver | 1.yes | 2.no | 3.n/a | <input type="checkbox"/> 72 |
| Seat Belt for front passenger | 1.yes | 2.no | 3.n/a | <input type="checkbox"/> 73 |
| Seat Belts in back seat | 1.yes | 2.no | 3.n/a | <input type="checkbox"/> 74 |
| Child seats | 1.yes | 2.no | 3.n/a | <input type="checkbox"/> 75 |
| Helmets | 1.yes | 2.no | 3.n/a | <input type="checkbox"/> 76 |

20. Damage done to vehicle _____



ANNEX IV

DOCUMENTS DISTRIBUTED AT THE TRAFFIC WORKSHOP
BARBADOS, 12-15 JULY 1984

-National Road Accident: Control Programme Development. Report on a WHO meeting, Dhaka, Bangladesh, 27-30 November 1983.

Seat Belts and Other Devices to Reduce Injuries from Traffic Accidents. Report on a WHO Technical Group Meknes 26-28 June 1979

Road Traffic Accident Statistics. Report on a WHO Ad Hoc Technical Group. Prague, 26-28 Sept. 1978

Symposium on Accident Prevention in Childhood Traffic Accidents. Report on a WHO/ICC/IPA Meeting, Manila 14-15 November

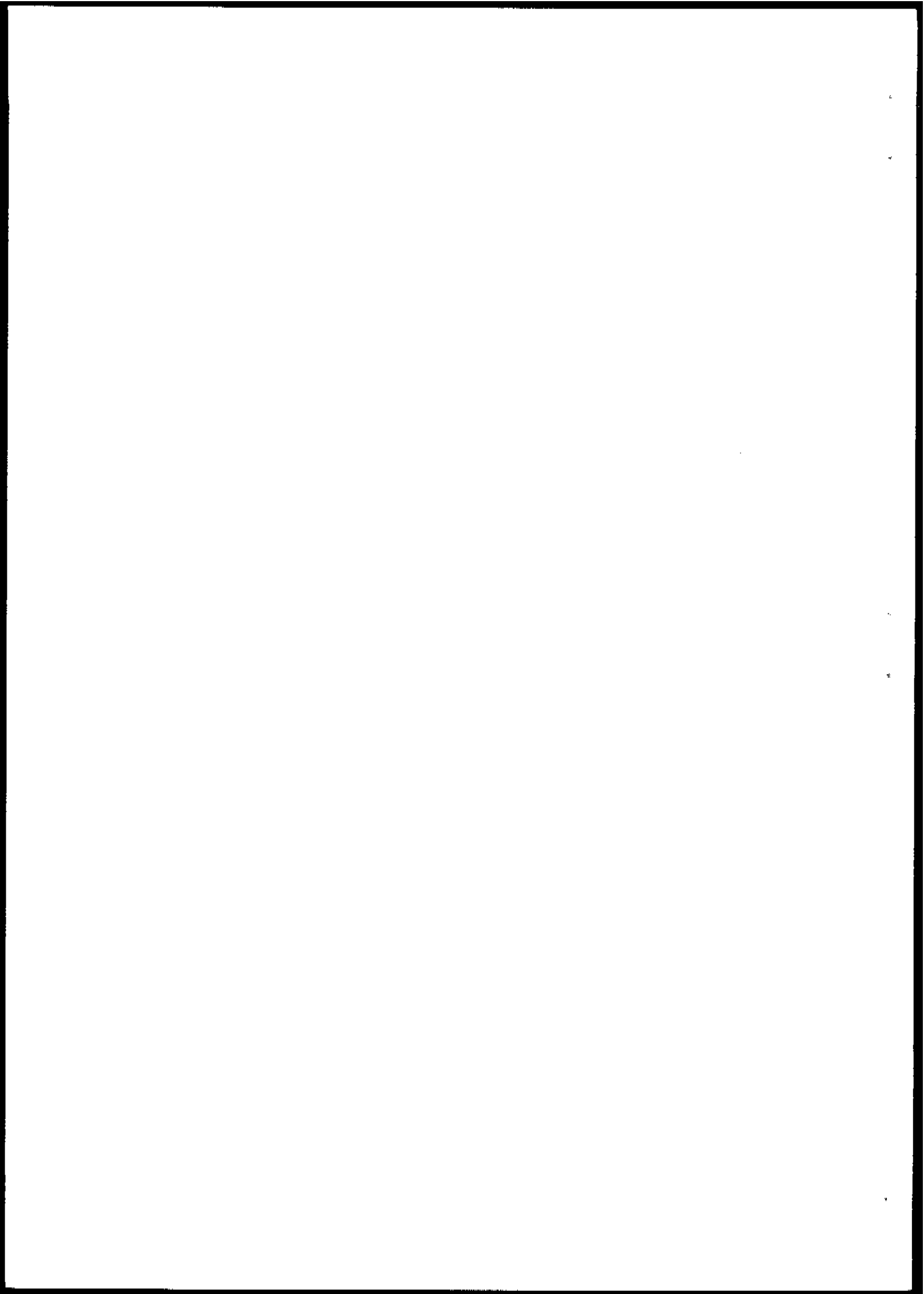
Restraint Systems. Their use and effectiveness. G.M. Mackay, Accident Research Unit, University of Birmingham, United Kingdom

Road Traffic Accidents in Developing Countries. Report of a WHO meeting. Mexico City, 9-13 November 1981

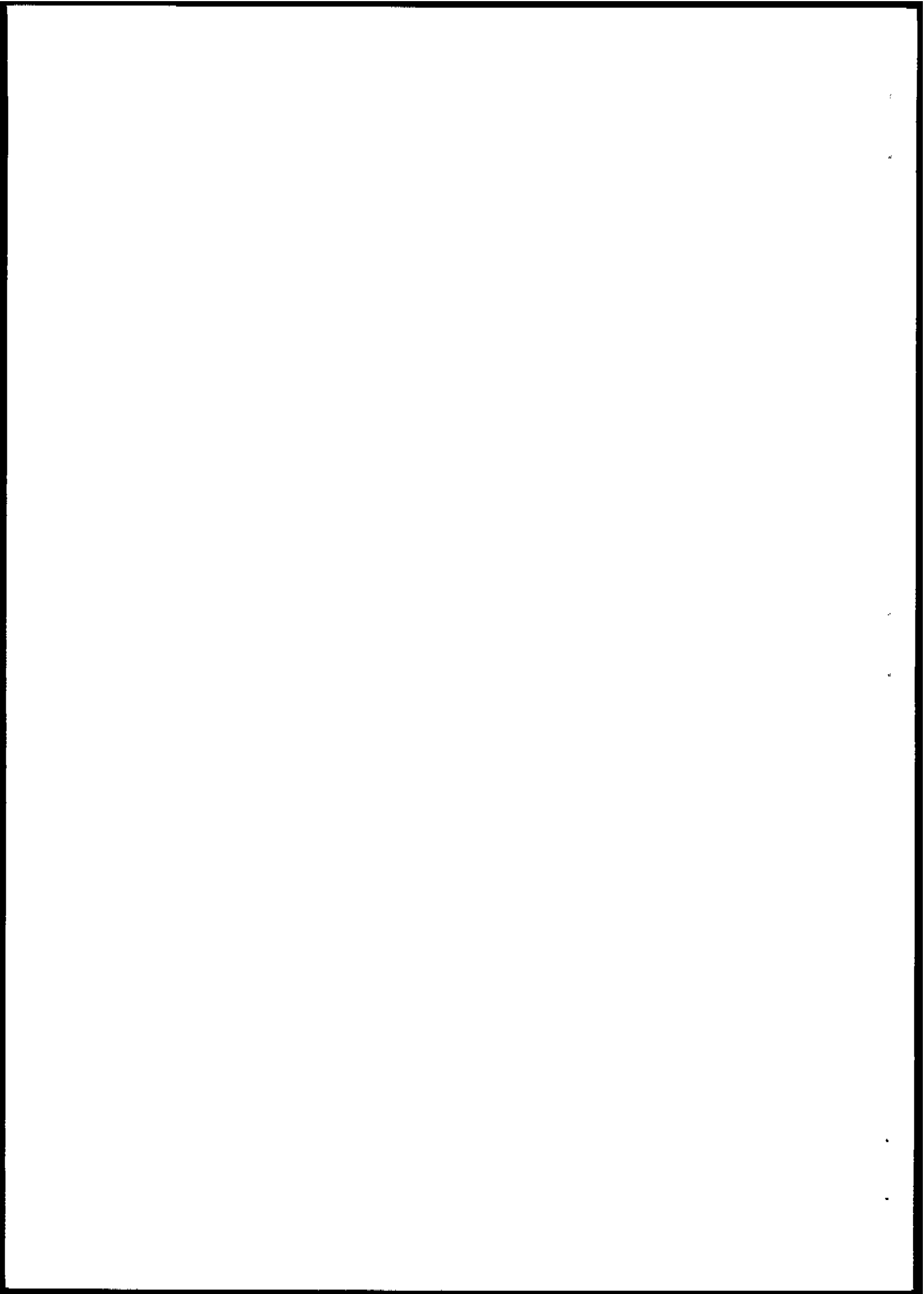
Traffic Accidents in the Americas. Current Situation and Perspectives. PAHO, 1984

Prevention of Traffic Accidents in Childhood. Report on a WHO Study in collaboration with the International Children's Centre and the University of Uppsala, 1981

The Role of Alcohol and Drugs in Traffic Safety in the Americas PAHO, 1984.



AGENDA AND LIST OF PARTICIPANTS



WORKSHOP ON THE PREVENTION AND CARE OF MOTOR

VEHICLE INJURIES IN THE CARIBBEAN

12-15 JUNE, 1984, BARBADOS

AGENDA

TUESDAY 12 JUNE 1984

9.00 - 10.00 a.m.	PLENARY SESSION	OPENING CEREMONY
10.00 - 10.30	"	COFFEE BREAK
10.30 - 10.45	"	WHO GLOBAL PROGRAM ON TRAFFIC ACCIDENTS - Dr. Claude Romer
10.45 - 11.15	"	INTRODUCTORY REMARKS ON EXTENT OF VEHICLE INJURIES - Dr. Murray Mackay
11.15 - 11.45	"	AETIOLOGY OF MOTOR VEHICLE INJURIES - Dr. Isaac Glizer
11.45 - 12.00	"	ROLE OF ALCOHOL AND DRUGS IN TRAFFIC ACCIDENTS - Dr. Marilyn Katatsky
12.00 - 12.15	"	DISCUSSION
12.15 - 2.00 p.m.		LUNCH
2.00 - 2.45	"	STATISTICAL ASSESSMENT OF PROBLEM - Dr. Enrique Bergamini
2.45 - 3.30	"	MEDICAL CARE FOR THE VICTIMS - Dr. Arvid Berglund
3.30 - 4.00		COFFEE BREAK
4.00 - 4.30	"	DISCUSSION
4.30 - 5.00	"	SUMMARY AND GENERAL REFLECTIVES - By The Steering Committee

WEDNESDAY 13 JUNE 1984

9.00 - 9.20 a.m.	PLENARY SESSION	OVERVIEW OF PROGRAM IN THE CARIBBEAN - Dr. Peter Diggory and Ms. Yvette Holder
9.20 - 9.30	"	LEGAL ASPECTS OF TRAFFIC ACCIDENTS - Ms. Susan Connor
9.30 - 10.00	"	COUNTRY PRESENTATIONS (10 mins each)
10.00 - 10.30		COFFEE BREAK
10.30 - 11.30	"	COUNTRY PRESENTATIONS (cont'd)
11.30 - 12.00	"	DISCUSSION
12.00 - 2.00 p.m.		LUNCH
2.00 - 2.30	"	ROAD SAFETY PROGRAM PLANNING Dr. Isaac Glizer
2.30 - 3.30	WORKING GROUP SESSION	GROUPS I AND II
3.30 - 4.00		COFFEE
4.00 - 5.00	"	GROUPS I AND II (cont'd)

THURSDAY 14 JUNE 1984

9.00 - 10.00 a.m.	WORKING GROUP SESSION	GROUPS III AND IV
10.00 - 10.30		COFFEE BREAK
10.30 - 12.00	"	GROUPS III AND IV (cont'd)
12.00 - 2.00 p.m.		LUNCH
2.00 - 3.30	PLENARY SESSION	PRESENTATION BY EACH WORKING GROUP'S RAPPOREUR
3.30 - 4.00		COFFEE
4.00 - 5.00	"	DISCUSSION FOR PREPARATION OF CARIBBEAN ACTION PLAN

FRIDAY 15 JUNE 1984

9.00 - 10.00 a.m.	PLENARY SESSION	CONTINUATION OF DISCUSSION AND PREPARATION OF CARIBBEAN ACTION PLAN
10.00 - 10.30		COFFEE BREAK
10.30 - 12.00	"	DISCUSSION AND APPROVAL OF THE RECOMMENDATIONS
12.00 - 12.30 p.m.		CLOSURE

WORKSHOP ON THE PREVENTION AND CARE OF MOTOR VEHICLE
INJURIES IN THE CARIBBEAN
BRIDGETOWN, BARBADOS 12-15 JUNE, 1984

LIST OF PARTICIPANTS

PARTICIPANT COUNTRIES:

BAHAMAS

Mr. Charles Clarke
Superintendent
Road Traffic Department
Ministry of Transport
P.O. Box N.1615
Nassau

Mr. Erol Farquharson
Deputy Superintendent
Police Department
C/o Police Headquarters
P.O. Box N.458
Nassau

BARBADOS

Mr. Neville Millington
Assistant Hospital Director
Queen Elizabeth Hospital
Martindales Road
St. Michael

Sargeant Luther Moore
Research and Planning
Central Police Station
Royal Barbados Police Force
Bridgetown

Superintendent Pedro Parris
Assistant Superintendent of Police
Central Police Force
Royal Barbados Police Force
Bridgetown

Dr. Beverly Miller
Senior Medical Officer of Health (Epidemiologist)
Ministry of Health
Old National Insurance Building
Jennetts Lane
St. Michael

BARBADOS CONT'D

Miss Cheryl-Ann Bennett
Civil Engineer
Ministry of Transport and Works
Pine
St. Michael

Mr. David Callender
Technical Officer
Ministry of Transport and Works
Pine
St. Michael

BRITISH VIRGIN ISLANDS

Mr. Laurence Walters
Licensing Officer
Government British Virgin Islands
P.O. Box 64
Road Town
Tortola

DOMINICA

Mr. Eugene Proctor
Police Inspector
Police Headquarters Roseau Dominica
Post Office Roseau
DOMINICA

GRENADA

Ms. Shirley Mathlin
Administrative Officer
Ministry of Health
St. George's

Mr. James Stroude
Inspector of Police
Traffic and Transport Department
St. George's

GUYANA

Dr. Edgar London
Principal Medical Officer
Ministry of Health
101A Laluni St., Queenstown

Mr. Patrick Gaskin
Senior Superintendent of Police
Guyana Police Force
107 Parade Street, Kingston
Georgetown

HAITI

Yves Renaud Guirand
Doctor and Monitor at Haitian Red Cross
Ministry of Health and Population
Haitian Red Cross
Port-au-Prince

Lieutenant Jacques D. Pierre
Vehicles Service (Military Service)
Port-au-Prince

JAMAICA

Mr. Ramsford Roach
Deputy Superintendent Police
Jamaica Constabulary Force
Traffic Department
83 Hanover St.
Kingston

SURINAME

Dr. Willem Bakker
Designated Epidemiologist
Bureau of Public Health
Rode Kruislaan No.22
Paramaribo

Mr. Hermanus Kloof
Inspector of Police
Police Department
Constan Vredenstraat No. 88
Paramaribo

ST. KITTS/NEVIS

Dr. Franklin Lloyd
Chief Medical Officer
Ministry of Health
Basseterre

Mr. William Walwyn
Superintendent of Police
Police Department
Basseterre

AGENCIES

Dr. Elias Anzola Perez
Regional Adviser in Prevention of Accidents
Pan American Health Organization
Washington D.C. U.S.A., 20037

Dr. Peter Diggory
Director Caribbean Epidemiology Center
P.O. Box 164
Port-of-Spain
Trinidad

Dr. Mervyn U. Henry
Caribbean Program Coordinator
PAHO/WHO
P.O. Box 508
Bridgetown
Barbados

Ms Yvette Holder
Statistician
Caribbean Epidemiology Center
P.O. Box 164
Port-of-Spain
Trinidad

Dr. Marilyn Katatsky
Regional Adviser in Alcohol and Drug Abuse
Pan American Health Organization
Washington D.C. U.S.A. 20037

Dr. Claude J. Romer
Manager, Global Programme for
Accident Prevention
World Health Organization
Regional Office for Europe
8 Scherfigsvej
Copenhagen, Denmark

Mrs. Susan Connor
Legal Office
Pan American Health Organization
Washington D.C. U.S.A. 20037

AGENCIES CONT'D

Dr. Beleke Zeleke
Country Representative
Pan American Health Organization
P.O. Box 10969
Georgetown
Guyana

Mrs. Audrey Hinchcliffe
Health Development/Officer-in-charge
CARICOM Health Section
Bank of Guyana Building
Georgetown
GUYANA S.A.

Eng. Ronald Williams
Area Adviser
Pan American Health Organization
Dayrells Road
P.O. Box 508
Christ Church, Barbados

Mr. Seymour Barnes
Health Education Adviser
Pan American Health Organization
Dayrells Road
P.O. Box 508
Christ Church, Barbados

TEMPORARY ADVISORS:

Dr. Irvine Brancker
PAHO Consultant on Emergency
Medical Attention to the Victims
Queen Elizabeth Hospital
Martindales Road
St. Michael, Barbados

Shrikant I. Bangdiwala, Ph.D.
Research Assistant Professor
Department of Biostatistics
University of North Carolina
Chapel Hill, North Carolina 27514

Dr. Isaac Miguel Glizer
Avenida Andres Bello
Residencias Robin, Apto. 31
Caracas, Venezuela

TEMPORARY ADVISORS CONT'D

Dr. Murray Mackay
Director, Crash Injury Research Fund
Accident Research Unit
University of Birmingham
P.O. Box 363
Birmingham B12 2TT
United Kingdom

Doris Storms, MMPH, Sc. D.
Associate
Department of International Health
The Johns Hopkins University
School of Hygiene and Public Health
Baltimore, Maryland 21205

OBSERVER

Ms. Elaine Petrucelli
Executive Director
American Association for Automotive
Medicine (AAAM)
40 2nd Avenue
Arlington Heights, Ill. 60005

SECRETARIAT

Miss Annie Guiksen
Assistant
WHO, 8 Schekfigsvej
Copenhagen, Denmark

Miss Heather Griffith
Secretary
Pan American Health Organization
Dayrells Road
P.O. Box 508
Christ Church, Barbados

Miss Kim Foster
Stenographer
Pan American Health Organization
Dayrells Road
P.O. Box 508
Christ Church, Barbados