



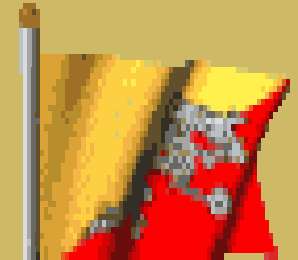
COUNTRY PRESENTATION ON

PILOT INJURY SURVEILLANCE

BHUTAN



Country Background



- Location: Eastern Himalayas
- Borders with China in the North & India in the south east and west.
- Area 45000approx square kilometer
- Population Density 16.36 sq km
- Administratively: 20 districts
- Thimphu: Capital city
- Government
: constitutional democracy(2008)



*Source: 2005 NPHC

Country background cont...

- Population: 672,425
- Male: 333,595(52.5%)
- Female: 301,387(47.5%)

- Rural population: 69.1%
- Urban population: 30.9%

- Literacy rate: (59.5 %)

- Religion: Buddhist: 75.3 %
Hindus : 22.1%
others : 2.6 %

- Agriculture – 79% rural

- Export earning -hydropower generation



HEALTH CARE SYSTEM IN BHUTAN

- 31 hospitals
 - . 1 National referral hospital.
 - . 2 Regional referral hospitals.
- 181 Basic Health Unit.
- 519 Out-reach clinics.
- 187 Doctors.
- 556 Nurses
- 536 Health workers (HA/BHW/PMW).
- 106 Drungtshos /sMenpas
- VHWs (active): 1200.
- PHC coverage over 90%



HEALTH CARE SYSTEM

**National Referral
Hospital -1**

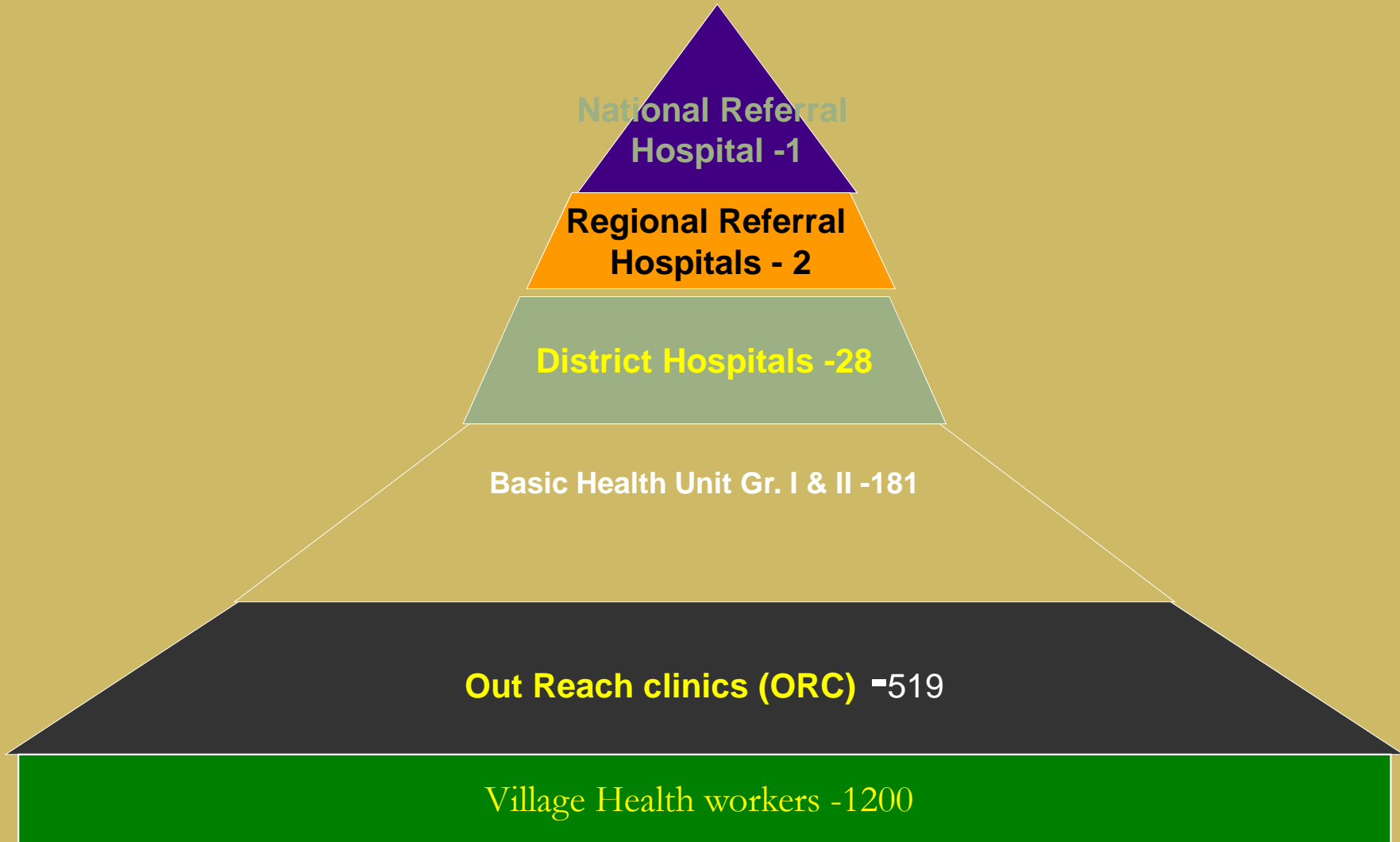
**Regional Referral
Hospitals - 2**

District Hospitals -28

Basic Health Unit Gr. I & II -181

Out Reach clinics (ORC) -519

Village Health workers -1200



5 leading causes of death of all ages (2011 HIMS)

Slno	Disease name	Deaths
1	Alcohol Liver Diseases	138
2	Pneumonia	102
3	Neonatal death	87
4	Other respiratory & nose disease	81
5	Other Cancer	77
6	Other Circulatory Diseases	72
	TOTAL	557

Registered Motor Vehicle

- Vehicles by types;

• Heavy Vehicle	-	7264
• Medium Vehicle	-	1126
• Light Vehicle	-	37538
• Two Wheeler	-	9094
• Power Tiller	-	883
• Tractor	-	250
• Earth Moving Equipments	-	1463
• TOTAL	-	57618

(Road Safety and Transport Authority June, 2011)

List of existing injury data sources/system

- Health information and management system(HIMS)
- Traffic Division, Royal Bhutan Police
- Hospitals
- Department of Public Health - DPR program injury reporting

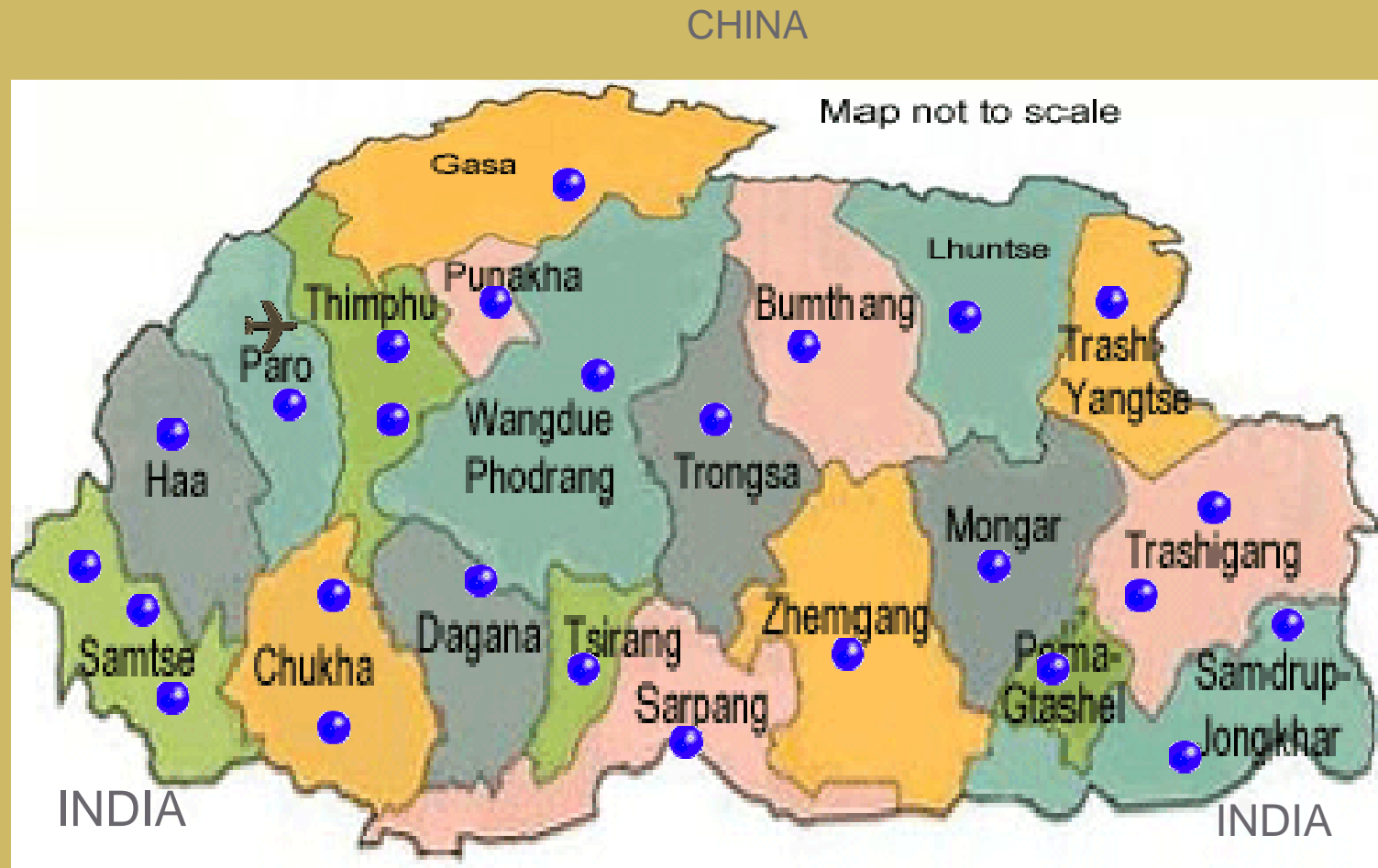
Introduction

- Financial & technical support from WHO
- Injury reporting - 29 hospitals & selected BHU I
- External cause of injury Chapter IX – XX ICD- 10
- 19 external causes of injury – 0-11mths; 1-4yrs; 5-14yrs; 15-49yrs; 50+yrs
- Injury report –monthly reporting
- District to central program

Objectives of Injury Reporting

- Orient with ICD 10 – Chapter 19 -20.
- Information system on injury report maintained in respective district hospital;
- To provide data on injuries to facilitate resource allocation decisions for stakeholders at various levels
- To integrate the Injury Surveillance System into the existing BHMIS

Injury Reporting Places



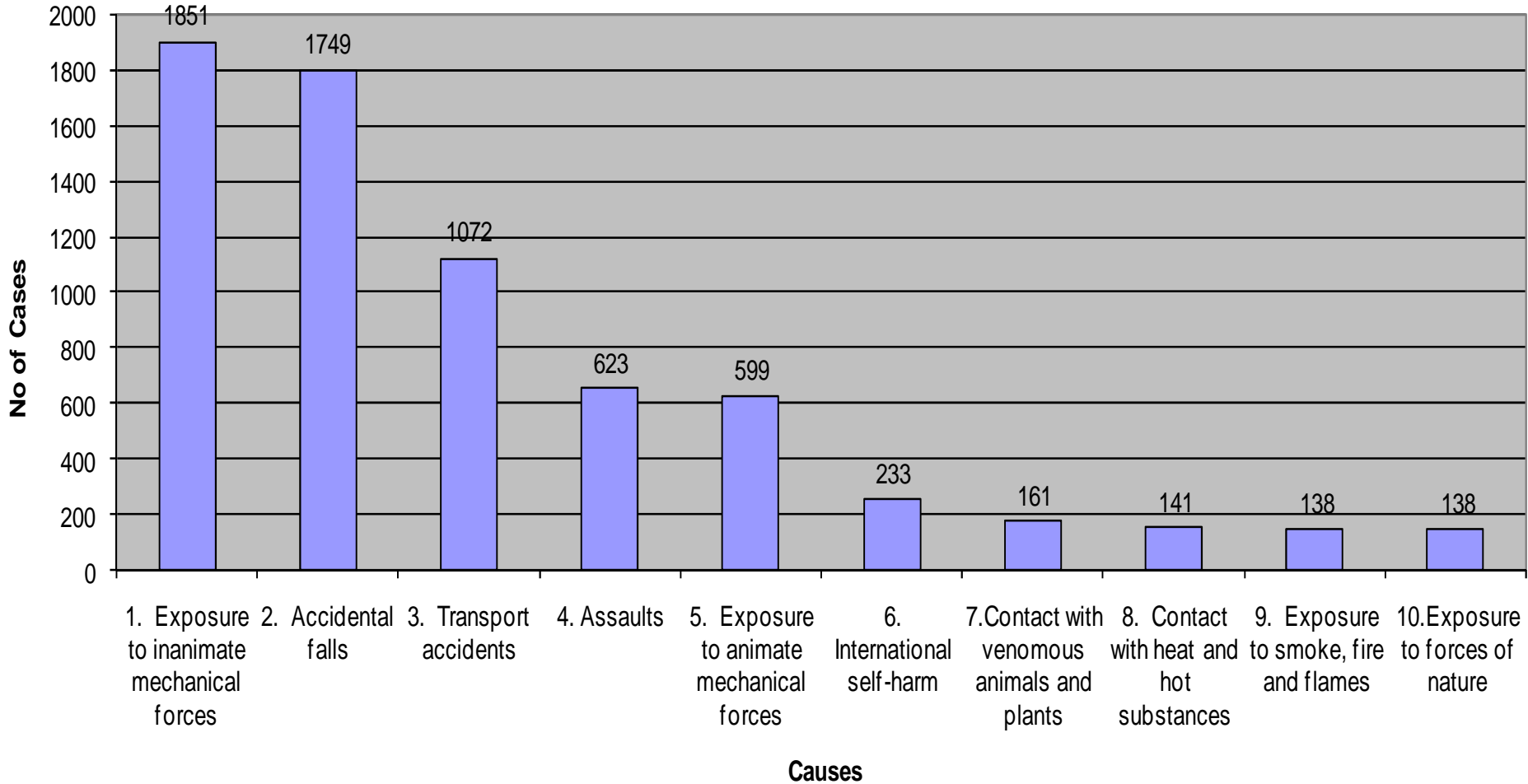
Injury Reporting -2008

External Causes of injury	Age/ ICD 10 Code group	Total of all age group						Total
		Injured			dead			
Unintentional injury		M	F	T	M	F	T	
1. Transport accidents	V01-99	805	267	1072	30	6	36	1108
2. Accidental falls	W01-19	1207	542	1749	10	2	12	1761
3. Exposure to inanimate mechanical forces	W20-49	1401	450	1851	1	0	1	1852
4. Exposure to animate mechanical forces	W50-64	374	225	599	1	0	1	600
5. Accidental drowning and submersion	W65-74	11	6	17	1	0	1	18
6. Other accidental threats to breathing	W75-84	4	1	5	0	1	1	6
7. Exposure to electric current, radiation and extreme ambient air temperature and pressure and extreme	W85-99	20	3	23	1	0	1	24
8. Exposure to smoke, fire and flames	X00-09	92	46	138	2	1	3	141
9. Contact with heat and hot substances	X10-19	83	58	141	0	1	1	142
10.Contact with venomous animals and plants	X20-29	98	63	161	1	1	2	163
11.Exposure to forces of nature	X30-39	103	35	138	1	0	1	139
12.Accidental poisoning by and exposure to noxious substances	X40-49	48	26	74	0	0	0	74
13.Overexertion, travel and privation	X50-57	5	0	5	0	0	0	5
14. Accidental exposure to other and unspecified factors	X58-59	86	21	107	0	1	1	108
Intentional injury								
15. International self-harm	X60-84	139	94	233	6	3	9	242
16. Assaults	X85-Y09	322	301	623	2	2	4	627
Undetermined intent and other								
17. Event of undetermined intent	Y10-33	9	11	20	0	1	1	21
18. Legal intervention and operations of war	Y35-36	0	1	1	0	0	0	1
19. Unspecified event and undetermined intent	Y34	3	2	5	2	1	3	8
Total	V01-Y36	4810	2152	6962	58	20	78	7040

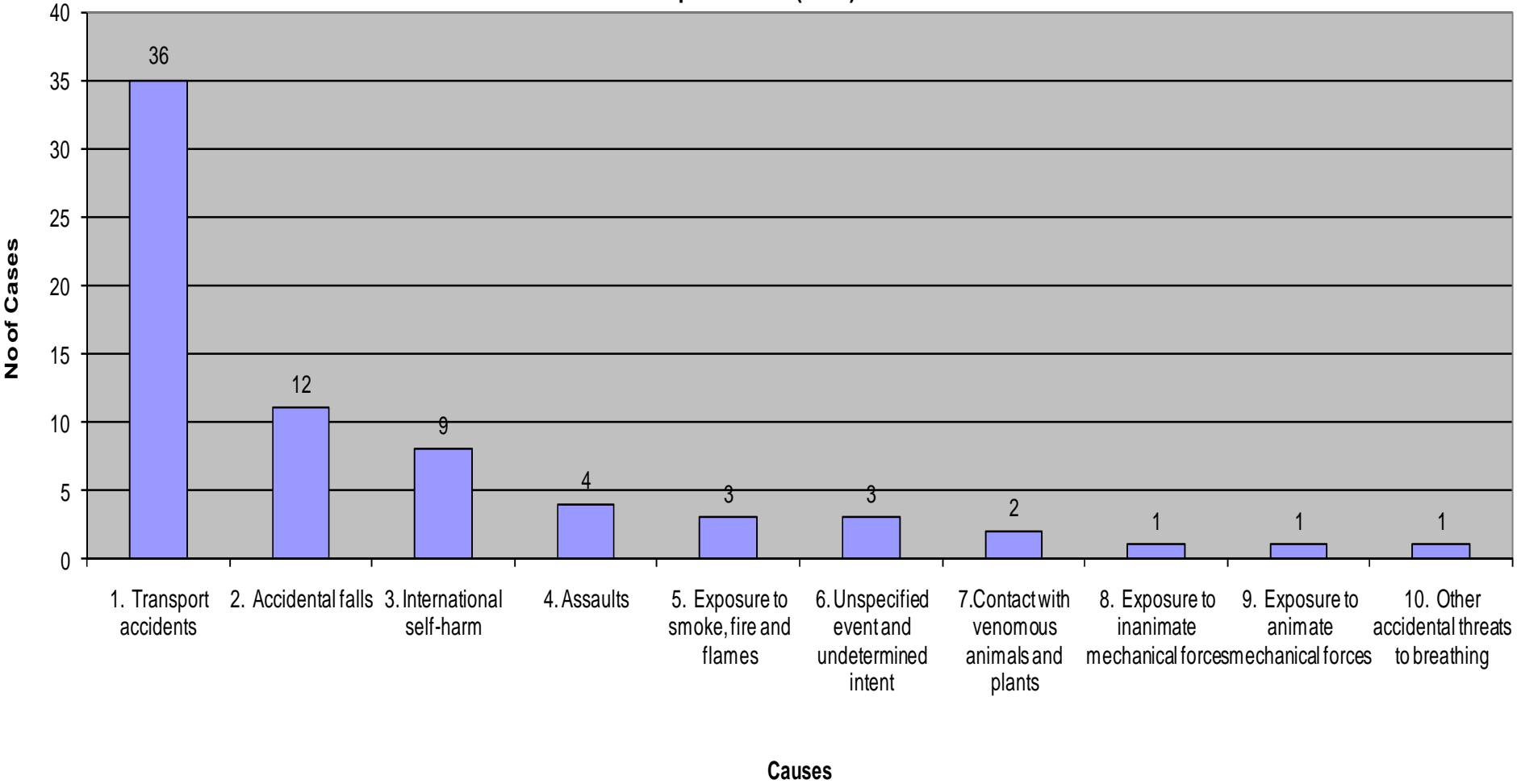
Injury Reported (2008)

- Total cases reported 2008 - 7040
- Total injury cases – 6962
- Total death cases – 78(M-58/F-20)

Top 10 Injury (2008)

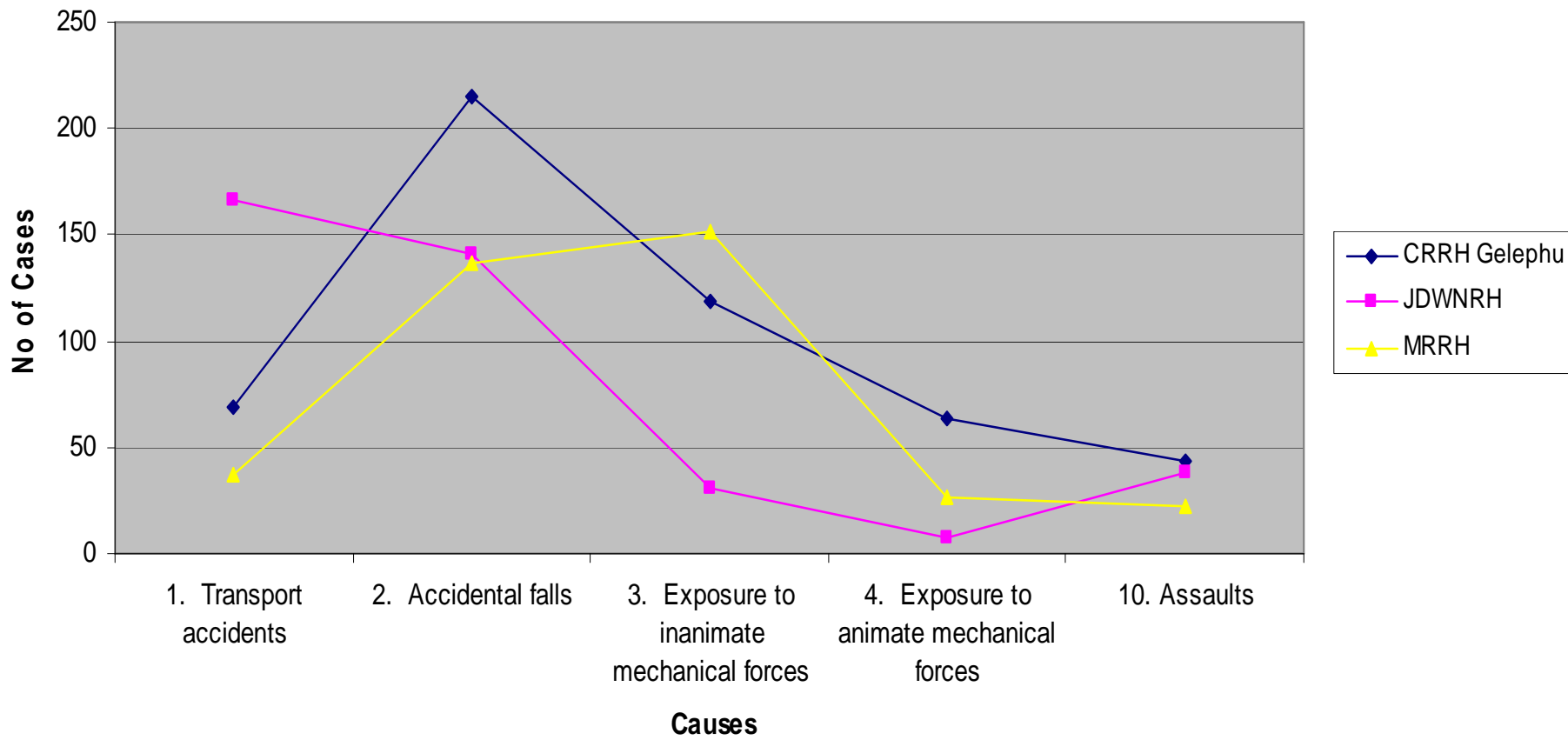


Top 10 Deaths(2008)



Comparison of Injuries in 3 Referral Hospitals

Top 5 injuries in 3 Referral Hospitals

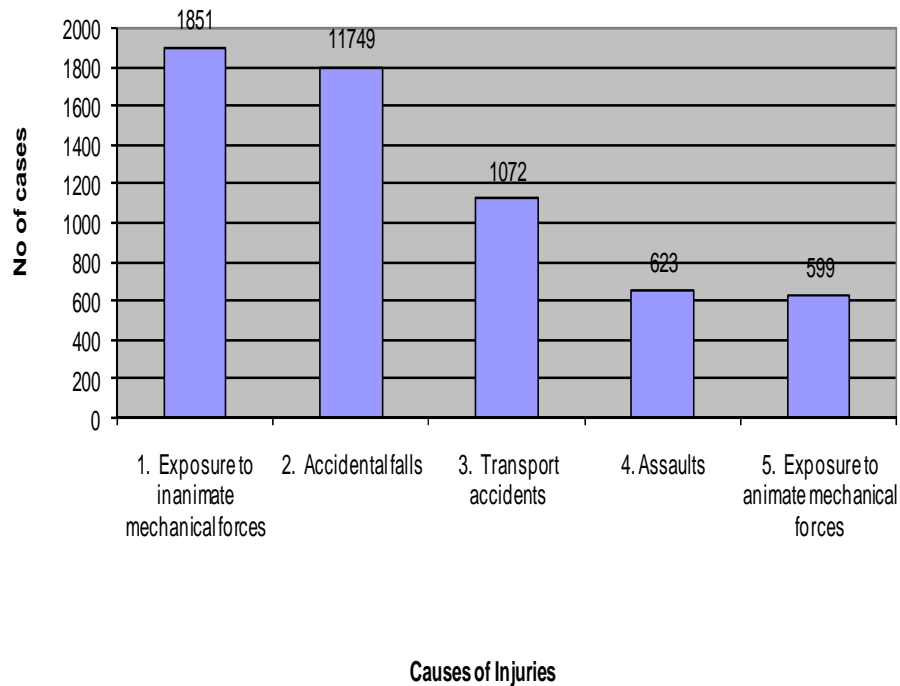


Distribution of Injuries District wise

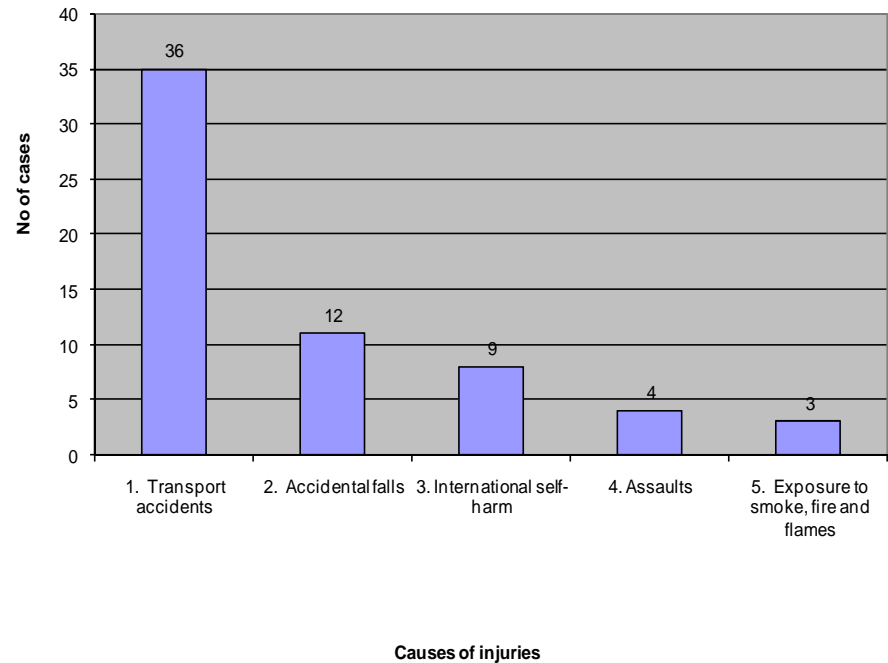
SI No.	Districts	Injured			Dead			Grand	Total
		Male	Female	Total	Male	Female	Total	n	%
1.	Bumthang	159	49	208	0	1	1	209	2.9
2.	Chukha	414	144	558	14	4	18	576	8.2
3.	Dagana	151	49	200	0	0	0	200	2.8
4.	Gasa	77	16	93	0	0	0	93	1.3
5.	Haa	76	23	99	3	2	5	104	1.5
6.	Lhunsi	46	19	65	3	0	3	68	1.0
7.	Mongar	272	122	394	6	0	6	400	5.6
8.	Paro	191	67	258	1	0	1	259	3.7
9.	Pemagatshel	219	100	319	0	0	0	319	4.5
10.	Punakha	584	383	967	0	1	1	968	13.8
11.	Samdrupjongkhar	130	48	178	0	2	2	180	2.6
12.	Samtsi	307	132	439	6	0	6	445	6.3
13.	Sarpang	513	187	700	7	4	11	711	10.1
14.	Thimphu	594	221	815	3	3	6	821	11.7
15.	Trashigang	248	84	332	2	0	2	334	4.7
16.	Trashiyangtshi	108	78	186	2	0	2	188	2.7
17.	Trongsa	325	251	576	0	0	0	576	8.2
18.	Tsirang	297	132	429	0	0	0	429	6.1
19.	Wangdiphodrang	99	47	146	11	3	14	160	2.3
Total		4810	2152	6962	58	20	78	7040	100.0

Injury Vs Death cases

Top 5 causes of Injuries



Top 5 Deaths due to Injuries



THANK YOU

