



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit Ministry of Health, Nutrition & Indigenous Medicine

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Burns

A burn is an injury to the skin or other organic tissue primarily caused by heat or due to radiation, radioactivity, electricity, friction or contact with chemicals. Thermal (heat) burns occur when some or all of the cells in the skin or other tissues are destroyed by:

- * hot liquids (scalds)
- * hot solids (contact burns), or
- flames (flame burns).

The problem

Burns are a global public health problem, accounting for an estimated 180 000 deaths annually. The majority of these occur in low- and middle-income countries and almost two thirds occur in the WHO African and South-East Asia regions.

In many high-income countries, burn death rates have been decreasing, and the rate of child deaths from burns is currently over 7 times higher in low- and middle-income countries than in high-income countries.

Non-fatal burns are a leading cause of morbidity, including prolonged hospitalization, disfigurement and disability, often with resulting stigma and rejection. Burns are among the leading causes of disability-adjusted life-years (DALYs) lost in low- and middle-income countries. In 2004, nearly 11 million people worldwide were burned severely enough to require medical attention.

Who is at risk?

Gender

Females have slightly higher rates of death from burns compared to males according to the most recent data. This is in contrast to the usual injury pattern, where rates of injury for the various injury mechanisms tend to be higher in males than females. The higher risk for females is associated with open fire cooking, or inherently unsafe cookstoves, which can ignite loose clothing. Open flames used for heating and lighting also pose risks, and self-directed or interpersonal violence are also factors (although understudied).

Age

Along with adult women, children are particularly vulnerable to burns. Burns are the fifth most common cause of non-fatal childhood injuries. While a major risk is improper adult supervision, a considerable number of burn injuries in children result from child maltreatment.

Socioeconomic factors

People living in low- and middle-income countries are at higher risk for burns than people living in high-income countries. Within all countries however, burn risk correlates with socioeconomic status

Other risk factors

There are a number of other risk factors for burns, including:

- occupations that increase exposure to fire;
- poverty, overcrowding and lack of proper safety measures;
- placement of young girls in household roles such as cooking and care of small children;

Contents	Page
1. Leading Article – Burns	1
2. Summary of selected notifiable diseases reported (15th-21st September 2018)	3
3. Surveillance of vaccine preventable diseases & AFP (15 th – 21 st September 2018)	4

- underlying medical conditions, including epilepsy, peripheral neuropathy, and physical and cognitive disabilities;
- alcohol abuse and smoking;
- easy access to chemicals used for assault (such as in acid violence attacks);
- use of kerosene (paraffin) as a fuel source for non-electric domestic appliances;

In which settings do burns occur?

Burns occur mainly in the home and workplace. Children and women are usually burned in domestic kitchens, from upset receptacles containing hot liquids or flames, or from cookstove explosions. Men are most likely to be burned in the workplace due to fire, scalds, chemical and electrical burns.

Prevention

Burns are preventable. Prevention strategies should address the hazards for specific burn injuries, education for vulnerable populations and training of communities in first aid. An effective burn prevention plan should be multisectoral and include broad efforts to:

- improve awareness
- develop and enforce effective policy
- describe burden and identify risk factors
- set research priorities with promotion of promising interventions
- provide burn prevention programmes
- strengthen burn care

In addition, there are a number of specific recommendations for individuals, communities and public health officials to reduce burn risk.

- Enclose fires and limit the height of open flames in domestic environments.
- Promote safer cookstoves and less hazardous fuels, and educate regarding loose clothing.
- Apply safety regulations to housing designs and materials, and encourage home inspections.
- Improve the design of cookstoves, particularly with regard to stability and prevention of access by children.
- Lower the temperature in hot water taps.
- Promote fire safety education and the use of smoke detectors, fire sprinklers, and fire-escape systems in homes.
- Promote the introduction of and compliance with industrial safety regulations, and the use of fire-retardant fabrics for children's sleepwear.

- Avoid smoking in bed and encourage the use of childresistant lighters.
- Promote legislation mandating the production of fire-safe cigarettes.
- Improve treatment of epilepsy, particularly in developing countries.
- Encourage further development of burn-care systems, including the training of health-care providers in the appropriate triage and management of people with burns.

First aid

Basic guidance on first aid for burns is provided below.

What to do

- Stop the burning process by removing clothing and irrigating the burns.
- Extinguish flames by allowing the patient to roll on the ground, or by applying a blanket, or by using water or other fire -extinguishing liquids.
- Use cool running water to reduce the temperature of the burn.
- In chemical burns, remove or dilute the chemical agent by irrigating with large volumes of water. Wrap the patient in a clean cloth or sheet and transport to the nearest appropriate facility for medical care.

What not to do

- Do not start first aid before ensuring your own safety (switch off electrical current, wear gloves for chemicals etc.)
- Do not apply paste, oil, haldi (turmeric) or raw cotton to the burn.
- Do not apply ice because it deepens the injury.
- Avoid prolonged cooling with water because it will lead to hypothermia.
- Do not open blisters until topical antimicrobials can be applied, such as by a health-care provider.
- Do not apply any material directly to the wound as it might become infected. Avoid application of topical medication until the patient has been placed under appropriate medical care.

Source:

WHO. Burns Fact Sheet. https://www.who.int/news-room/fact-sheets/detail/burns

Compiled by:

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Table 1: Selected notifiable diseases reported by Medical Officers of Health 15th-21st Sept 2018(38th Week)

	*.	100	100	100	100	100	100	100	100	100	93	100	100	100	100	100	100	100	100	100	95	88	100	100	100	100	100	66
WRCD		62	. 69	54	09	61	27	24	71	22	37	20	37	29	25	. 69	. 65	78	62	62	44	28	47	. 29	47	. 65	20	23
Leishmania- M sis	<u>*</u>	m	40	6	24	102	0	2	629	354	т	1	m	6	7	0	7	18	299	7	355	191	7	36	173	13	П	2281
eishm iis	A	0	c	0	0	11	0	0	35	13	0	0	0	-	0	0	0	0	21	0	23	က	0	7		0	0	11 2
		25	38	81	53	13	30	48	10	12	6	7	4	2	П	17	22	6	78	89	34	17	94	112	86	45	11	936
Meningitis	ω	2	0	1	0	0	н	7	0	0	0	0	0	0	0	0	0	0	2	m	2	0	2	2	2	0	0	31 6
	⋖	546	292	493	566	36	184	268	500	228	235	31	27	39	6	143	245	167	422	119	334	208	379	148	236	298	161	2998
Chickenpox	B	6	8	8	m	cc	0	12	н	2	13	0	0	П	н	12	12	-	13	8	6	4	8	9	4	4	2	50 5
ວົ	⋖	0	0	0	0	0	0		П	0	7	н	0	П	П	m	н	0	7	0	7	H	0	0	7	0	0	18 15
Human Rabies	<u>B</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	⋖	2	12	12	18	7	23	m	m	13	П	0	0	0	0	7	7	7	20	7	11	4	33	31	21	13	П	244
Viral Hepatitis	B	0	0	0	0	0	0	0	П		0	0	0	0	0	0		0	7	0		0	H	7	0	1	0	10
	⋖	11	4	9	84	7	113	46	64	41	255	16	1	7	9		0	22	21	11	17	0	72	116	24	63	1	1004
Typhus Fever	a	0	0	0	н	0	0	7	m	7	7	0	н	0	н	0	0	0	0	0	0	0	4	П	7	П	0	20 1
	⋖	162	180	450	65	74	37	308	29	190	10	4	1	31	8	39	34	48	114	37	109	93	132	234	547	219	7	3192
Leptospirosis	ω	8	1	13	m	0	П	4	7	4	0	0	0	0	0	0	1	1	2	7	2	0	7	2	11	8	П	71 3
	∢	53	59	24	19	32	47	12	2	22	213	7	7	12	11	56	6	13	С	10	39	18	13	7	2	80	31	738 7
Food Poisoning	В	0	12	0	1		0	е	0	0	0	0	0	0	0	0	4	0	0	0	т	2	0	0	0	0	0	24
	∢	36	19	11	m	4	12	2	m	9	37	16	m	38	10	72	7	4	13	4	m	0	∞	Н	21	9	7	272
Encephaliti Enteric Fever s	ω	0	0	0	0	0	0	1	П	0	0	0	0	П	0	1	0	0	0	0	0	0	0	0	0	0	0	4
iii iii	∢	6	œ	4	Ŋ	1	m	10	4	9	2	П	0	4	0	2	m	7	13	9	7	2	8	7	36	8	m	155
ncepha	B	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	∢	29	28	29	93	16	48	45	14	32	122	25	17	15	7	135	23	36	105	35	46	31	86	63	145	49	36	1455
Dysentery	В	7	0	0	1	0	0	1	1	0	4	0	0	0	1		0	0			0	0	0	m	4	1	1	22 14
	⋖	7485	4215	2453	2889	9//	165	982	713	864	2378	267	190	479	93	4262	200	927	1959	1420	729	255	439	727	1825	1154	1541	39191
Dengue Fever	В	./	80 4	22 2	53 2	9	e	6	9	13	35 2.	7	2	9	4	15 4	7	4	20 1	19 1	4	-	9	9	24 1	9 1	7 1	
Deng	∢	6	80	2	Ŋ					1	m					1			2	1					2			455
RDHS Division		Colombo	paha	Kalutara	Kandy	Matale	NuwaraEliya	Galle	Hambantota	Matara	Jaffna	Kilinochchi	Mannar	Vavuniya	Mullaitivu	Batticaloa	Ampara	Trincomalee	Kurunegala	Puttalam	Anuradhapura	Polonnaruwa	Badulla	Monaragala	Ratnapura	Kegalle	Kalmune	SRILANKA

•T=Timeliness refers to returns received on or before 21st September , 2018 Total number of reporting units 353 Number of reporting units data provided for the current week: 351 C**-Completeness A = Cases reported during the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

15th-21st Sept 2018(38th Week)

Disease	No. of	Cases b	y Province	Э					Number of cases during current	Number of cases during same	Total number of cases to	Total num- ber of cases to date in	Difference between the number of cases to date in		
	W	С	S	N	Е	NW	NC	U	Sab	week in 2018	week in 2017	date in 2018	2017	2018 & 2017	
AFP*	00	01	00	00	00	00	00	00	01	02	02	45	50	- 14 %	
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%	
Mumps	01	02	01	01	03	00	00	00	00	08	05	259	237	9.2 %	
Measles	01	00	00	00	00	00	05	00	00	06	01	97	172	- 43.6 %	
Rubella	00	00	00	00	00	00	00	00	00	00	03	04	09	- 55.5 %	
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	01	0%	
Tetanus	00	01	00	00	00	00	00	00	00	01	02	17	16	6.2 %	
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
Japanese Encephalitis	00	00	00	00	00	00	01	00	00	01	00	25	21	19.0 %	
Whooping Cough	00	00	00	00	00	00	00	00	00	00	03	37	17	117.6 %	
Tuberculosis	53	32	07	08	14	07	01	11	04	138	116	6228	6120	1.7 %	

Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.

RDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna,

KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam,

AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS** =Congenital Rubella Syndrome

NA = Not Available

Number of Malaria Cases Up to End of September 2018,

10

All are Imported!!!

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication

ON STATE SERVICE

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