



Facilitating good practices against heat stroke in small-scale workplaces.

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BACKGROUND:

Heat stroke is a serious issue in Japan

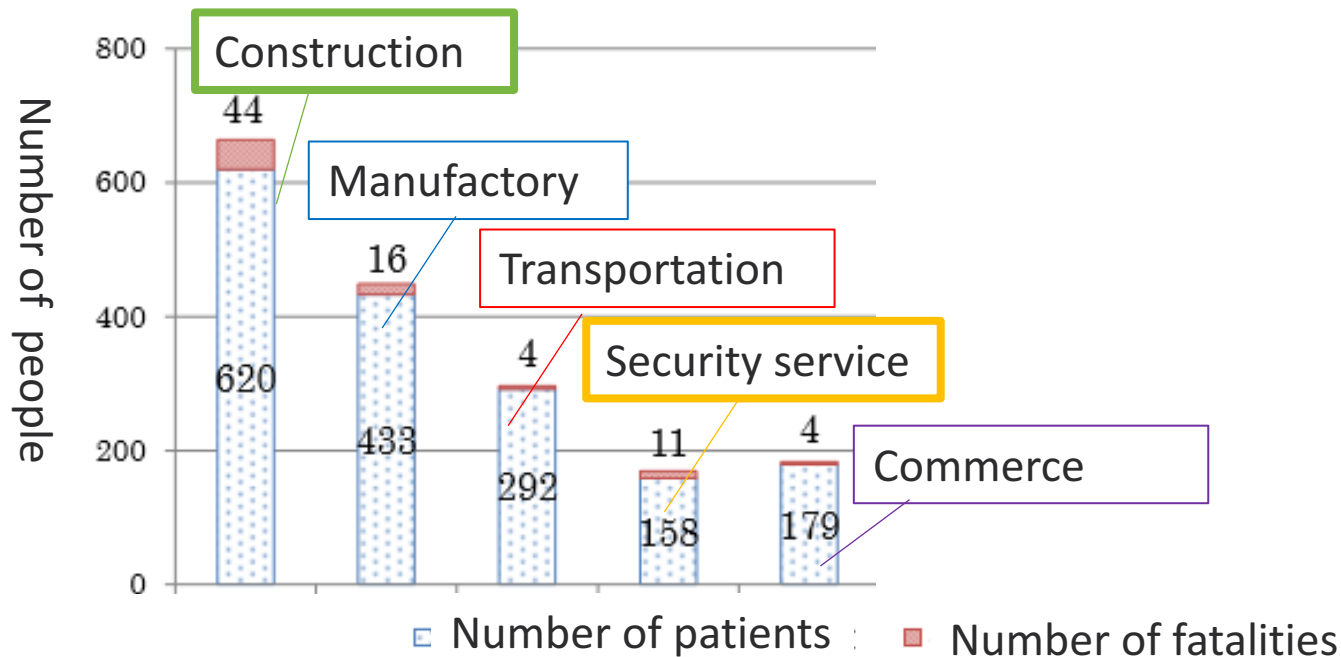
- Due to lack of basic prevention, 20~30 workers died of heat stroke in one year.
- As the working environment differs in these cases, it is necessary to develop flexible case-based approaches in small or medium-sized enterprises.
- From 2013 to 2017, the government developed a special project against heat stroke as the national program.



The 12th Occupational Safety and Health Program

Heat stroke: Reduce the number of casualties due to heat stroke at the workplace by at least 20% in five years.

- The main cause of the heat stroke fatalities was the lack of basic prevention against heat stroke



- Lack of communication from various backgrounds (employment status, ages and countries) was the main cause of heat stroke.

OBJECTIVES

This study classifies the local good practices in preventing heat stroke with a view to extracting:

- the key trends that may help local workplaces implement appropriate improvements.
- common ideas for flexible case-based approaches at local workplaces.
- the role of occupational safety and health staff at these workplaces.

MATERIALS AND METHODS

- From the Reports at the National Industrial Safety and Health Conventions, 100 good practices in heat stroke were extracted.

- These practices were classified into 4 categories ;

1. Machines/devices

2. Workers

3. Work systems

4. Environmental control

- Types of prevention and intervention of OSH staff were considered.

- The selection of approaches was supervised by and discussed with five researchers and practitioners of occupational safety and health.



USE 2017

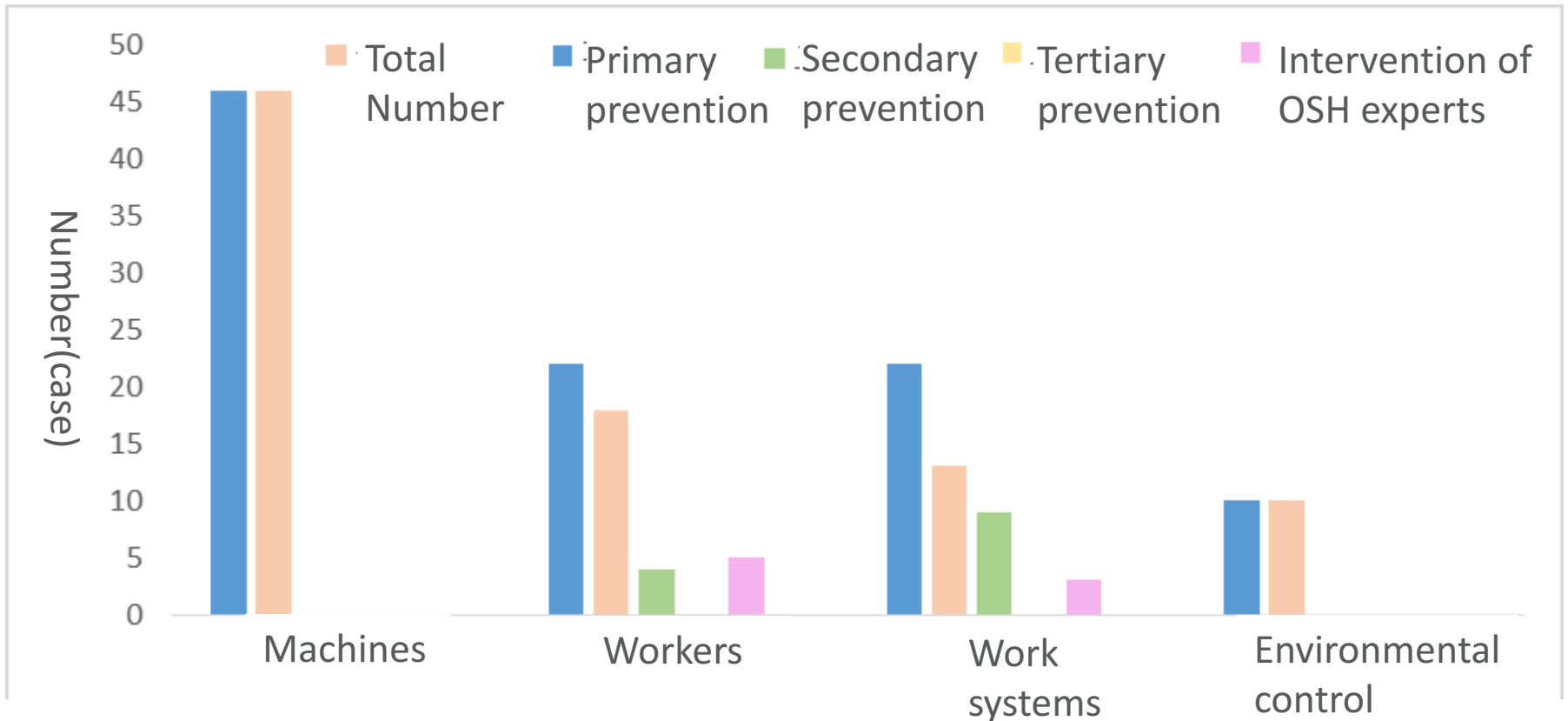
understanding small enterprises

Toru Yoshikawa, et al. "Development of a Mental Health Action Checklist for Improving Workplace Environment

as means of Job Stress Prevention." Sangyo Eiseigaku Zasshi 49.4 (2007): 127-142.

www.useconference.com

RESULTS AND DISCUSSIONS



- 100 Good practices from 16 workplaces
- Primary prevention; 87, Secondary prevention; 13, Tertiary prevention; 0.
- Intervention of OSH experts; 8

Examples of good practices

Categories	Good practices	Types of prevention
Machines (46)	▪ <u>Prevention kits against heat stroke (21)</u>	Primary
	▪ Facilities for cooling (13)	Primary
	▪ Thermometers and hygrometers at work areas (6)	Primary
Workers (22)	▪ Trainings for heat stroke; First aid and prevention (7)	Primary
	▪ <u>Manuals for prevention heat stroke (5)</u>	Primary
	▪ <u>Daily information for heat stroke (4)</u>	Primary

Low cost and easy- to- apply improvements are mainly implemented.

Examples of good practices

Categories	Good practices	Types of prevention
Work systems (22)	▪ <u>Daily health check before work (6)</u>	Secondary
	▪ Appropriate working time and breaks (6)	Primary
	▪ <u>Workplace patrol (2)</u>	Secondary
	▪ <u>Inclusion of associated companies in systems (2)</u>	Primary
Environmental control (22)	▪ Local measurements about the risk of heart stroke (5)	Primary
	▪ Detection the high-risk places (4)	Primary

Providing chances of communication with supervisors and workers from associated companies are implemented by many workplaces.

Examples of good practices

- Construction
- 45 workers



Daily health check by supervisors



Free water, salts and ice near the work area



“Six cups of drinks = 1.8l” project



Examples of good practices

- Construction
- 26 workers and workers from a cooperating company

Daily talk by the head manager about heat stroke



Training for prevention



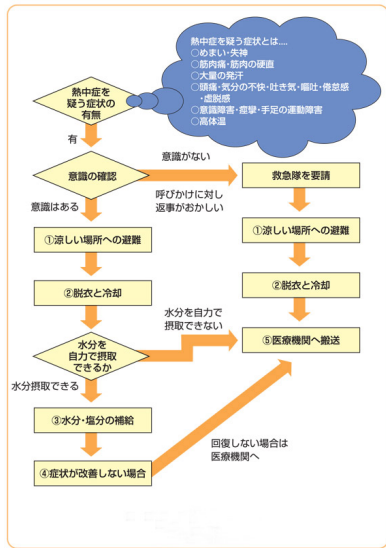
Information board for heat stroke near the work area



Goods for prevention against heat stroke

Examples of good practices

- Security services
- 200 workers



Health check at daily meetings

区分	No.	チェック項目	✓	✓	✓	✓	✓	✓
新札幌サニックス 機待室・生活習慣		以下の人は熱中症にかかりやすい人です。						
	1	高齢者(65歳以上の人)である。						
	2	心臓病、狭心症などにかかったことがある。						
	3	これまで熱中症になったことがある。						
	4	高血圧である。						
	5	ふとっている。						
	6	風邪を引いて熱がある。						
	7	下痢をしている。						
	8	二日酔いである。						
	9	朝食を食べなかった。						
10	睡眠不足である。							
新札幌サニックス 機待室		以下の人は熱中症にかかっている人です。						
	11	めまい、立ちくらみがする。						
	12	汗が流れてもふいても出てくる。						
	13	手足や体の一部がつる。						
	14	顔がズキンズキンと痛い。						
	15	吐き気がする。						
	16	体がだるい。						
	17	判断力・集中力が低下する。						
	18	意識が薄い。						
19	体がぐにゃぐにゃする。							

Flexible shifts based on daily health check sheet

Manual for prevention against heat stroke



Permission for using towels to clients

Important findings

- Many workplaces implemented low-cost and multiple improvements by the initiative of local workers.
- Practices for improving communication seemed to be a key trend at many workplaces.
- Each workplace developed flexible case-based approaches adjusted to the local situation.

Hints for occupational health staff

Occupational health staff members are expected to;

- facilitate workplace improvements with the self help of workers and employers.
- provide specialized knowledge and advice on good practices from the comprehensive view.
- find early signs of heat stroke and provide support for developing a systematic approach.

SUMMARY OF THE STUDY

Good practices against heat stroke are generally aimed at primary prevention addressing the four categories.

1. Machines/Devices

2. Workers

3. Work systems

4. Environmental control

- It is useful to promote locally adapted measures learning from these good practices in various industries.