A nighttime photograph of an industrial facility, likely a refinery or chemical plant. The scene is illuminated by various lights, including bright yellow and green lights from the machinery and structures. A prominent feature is a tall, red and white striped tower on the right side of the frame. The background shows a dark sky with some distant lights, suggesting an urban or industrial area.

Recent amendments in legislations of occupational health in Japan

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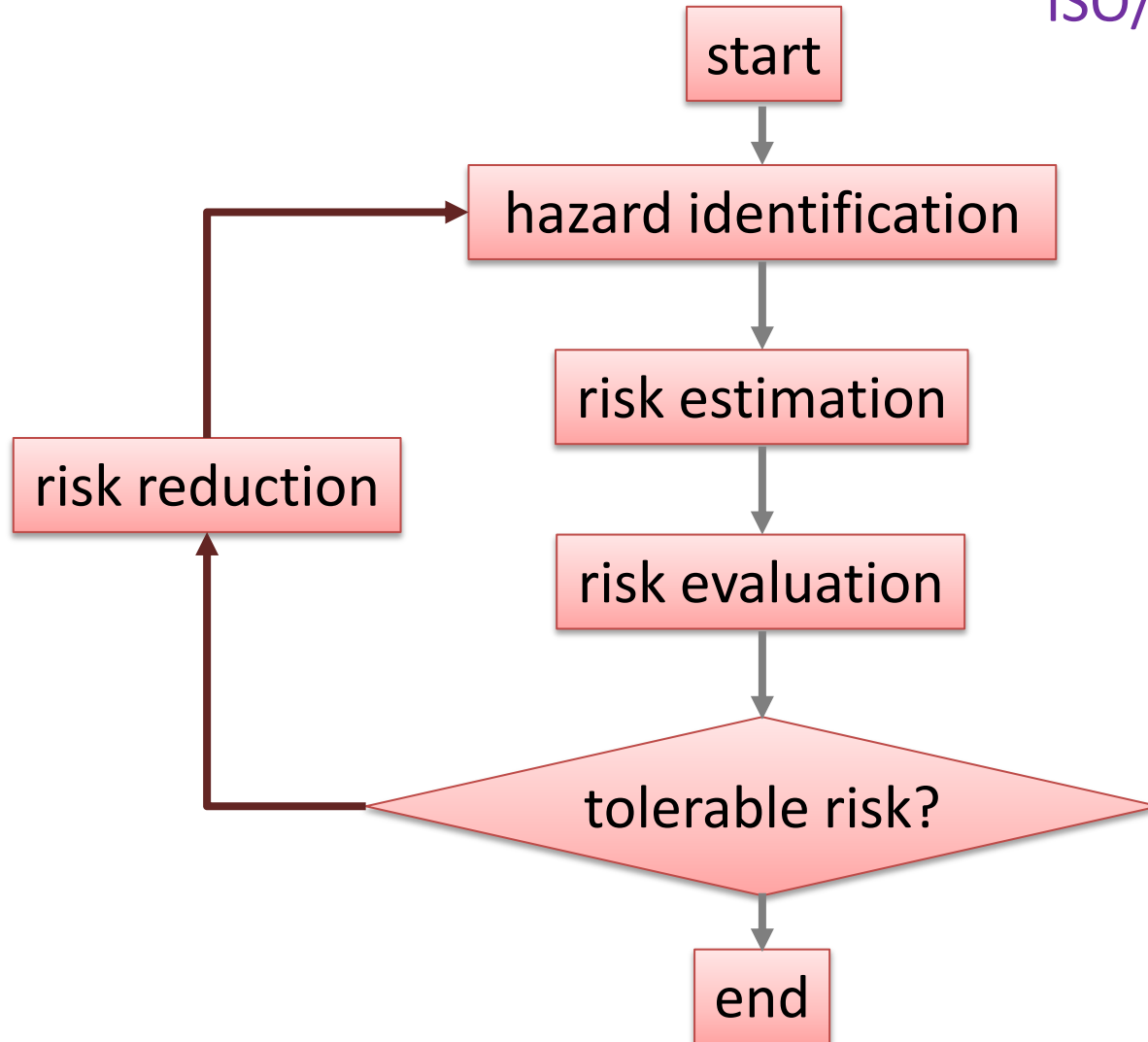
University of Occupational and Environmental Health, Japan

- A. Occupational safety and health risk assessment
- B. Newly recognized occupational disease caused by chemicals
- C. Mental health care within the framework of occupational health
- D. Health impairment from overwork such as working long hours

A. Occupational safety and health risk assessment

OSH risk assessment

ISO/IEC guide 51



A. Occupational safety and health risk assessment

History of Policy on OSH risk assessment

- 1992 UK; risk assessment in management of health and safety at work regulations
- 1996 EC; guidance of risk assessment at work
- 1999 Japan; Guideline of occupational safety and health management system
- 2001 ILO; Guideline of occupational safety and health management system
- 2001 Japan; Guidelines for the comprehensive safety standards of machinery
- 2005-2009 Japan; development of various industry-specific guidelines on risk assessment
- 2006 Japan; ISH Law Article 28-2

A. Occupational safety and health risk assessment

Law of OSH risk assessment in Japan

ISH Law Article 28-2 (amended in 2006)

The employer shall endeavor to investigate the danger or harm, etc., due to buildings, facilities, raw materials, gases, vapors, dust, etc., and those arising from work actions and other duties, and to take necessary measures prevent dangers or health impairment to workers, in addition to taking the measures provided for by the provisions pursuant to this Act or the orders based on the results of the said investigations.

A. Occupational safety and health risk assessment

Guideline of OSH risk assessment in Japan

Guidelines for risk assessment

timing of implementation: when a structure is installed, relocated, modified or dismantled; when a facility is newly introduced or a change is made to a facility; when a raw material is newly adopted or changed; when a working method or working procedures are newly adopted or changed; when risks perceived in a workplace change or are likely to change

A. Occupational safety and health risk assessment

Guideline of OSH risk assessment in Japan

Guidelines for risk assessment

estimation of risk: to consider the severity and the extent of possibility of the occurrence of injuries, or to consider the toxicity of and the extent of exposure to chemical substances

A. Occupational safety and health risk assessment

Guideline of OSH risk assessment in Japan

Guidelines for risk assessment

reduction of risks: the order of priority

- 1) reduce or eliminate hazards associated with job performance by workers
- 2) engineering measures to prevent or reduce risks; local ventilation systems, etc.
- 3) administrative measures; the preparation of instruction manuals, etc.
- 4) use of personal protective equipment

A. Occupational safety and health risk assessment

future agenda of policy on OSH risk assessment

guidelines for safety issues are preceded ahead of those for occupational health

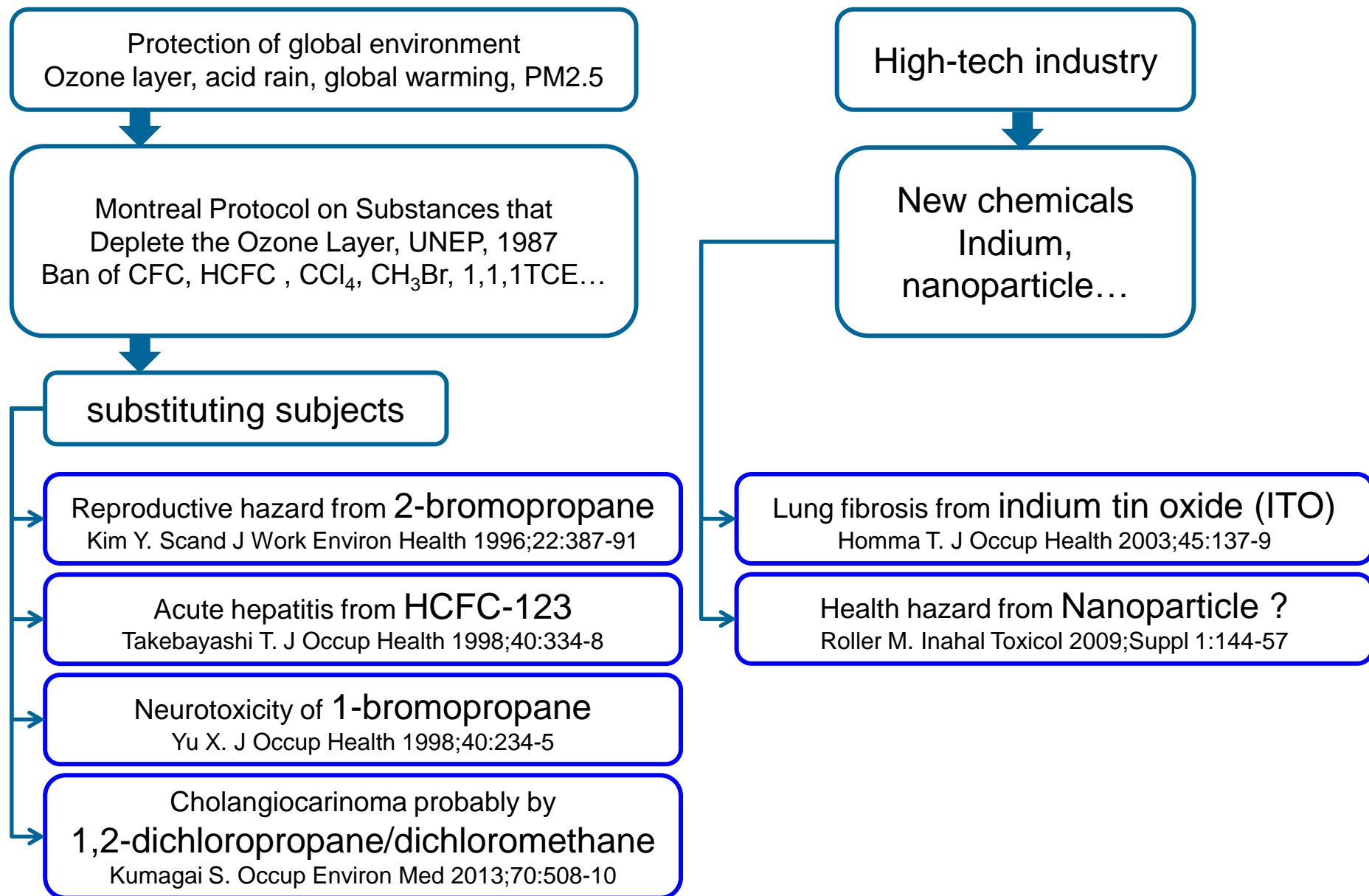
technical difficulty of risk evaluation comparing different agents

English terminology is an obstacle for promotion

non-binding guidelines are less prioritized and depended on voluntary actions from employers

preparatory movements for ISO 45000

B. Newly recognized occupational d. caused by chemicals



B. Newly recognized occupational d. caused by chemicals

Indium (In)

1) Announcement of Guidelines, 2010

Amendment of Cabinet Order on ISH Law, 2012

Amendment of Ordinance on specified chemical substances, 2012

adding indium compounds in the list of specified chemical substances, group 2

health exam with checking serum In concentration and serum KL-6 level, etc.

B. Newly recognized occupational d. caused by chemicals

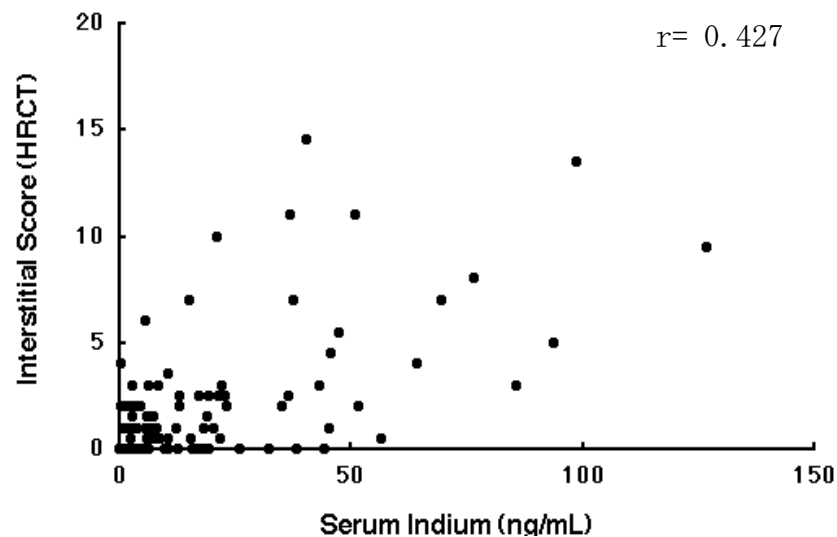
- 2001 1st death case
- 2003 1st case report
- 2010 Governmental notice
- 2012 Ordinance modification

Health exam
every 6 months
work history
subjective symptoms
serum In concentration
serum KL-6 concentration

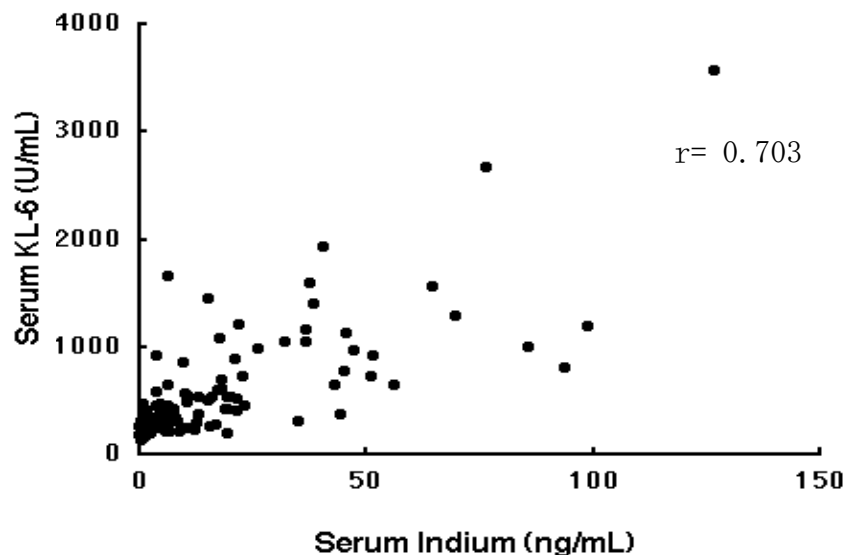
Close exam
when needed by doctors
HRCT
serum SP-D
lung function tests

Indium (In)

serum In と Interstitial Score (HRCT)



serum In and KL-6



B. Newly recognized occupational d. caused by chemicals

bromopropanes

2) Announcement of Guidelines for preventing chemical intoxication, 2013

peripheral neuropathy by 1-bromopropane

3) Amendment of Ordinance for Enforcement of the Labor Standards Act, Article 35, 2013

reproductive dysfunction by 2-bromopropane

peripheral neuropathy by 1-bromopropane

pulmonary dysfunction by indium tin oxide

B. Newly recognized occupational d. caused by chemicals

dichloropropane, dichloromethane

4) Amendment of Ordinance for Enforcement of the Labor Standards Act, Article 35, 2013

No.7-11: cholangiocarcinoma by 1,2-dichloropropane

No.7-12: cholangiocarcinoma by dichloromethane

5) Amendment of Cabinet Order on ISH, 2013

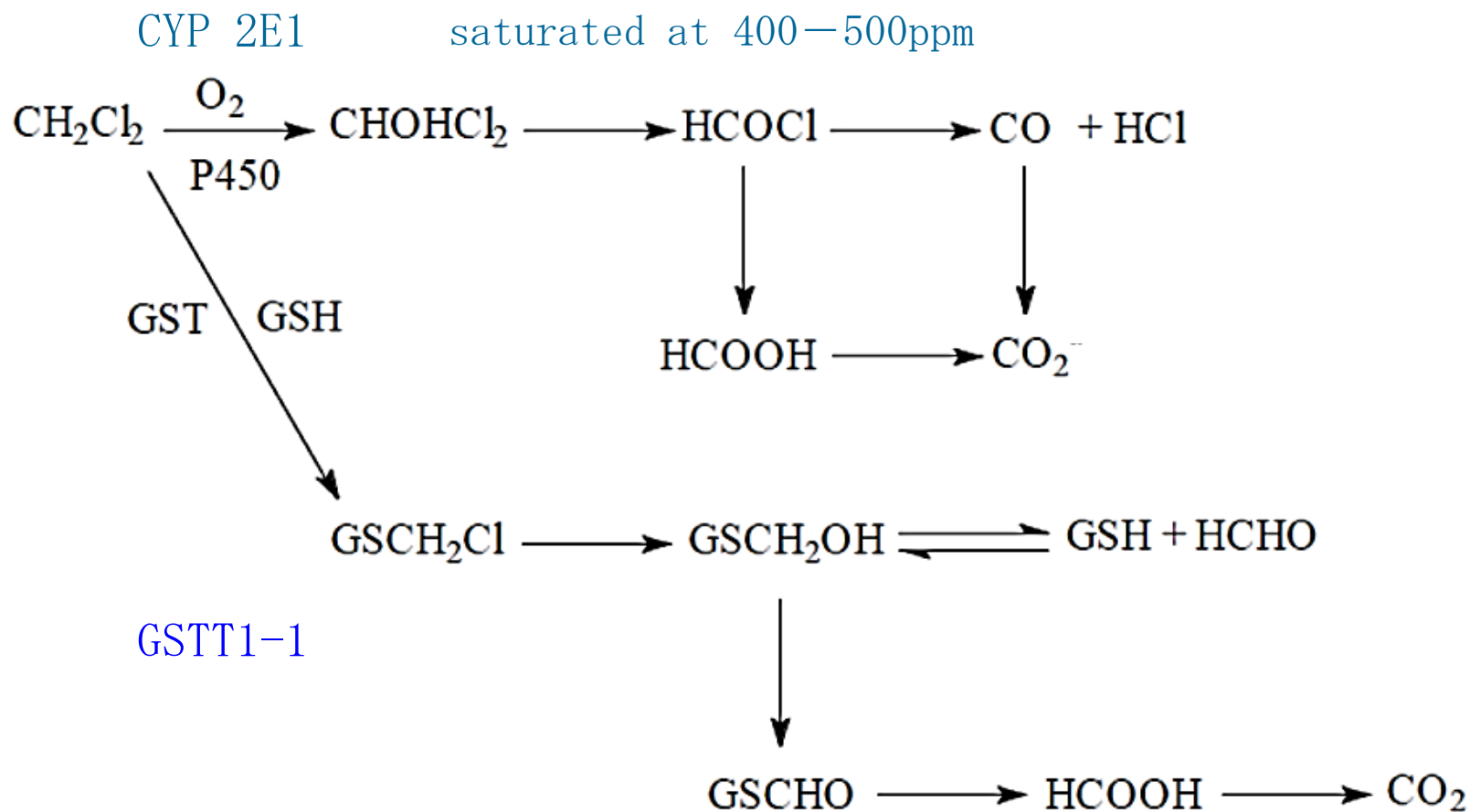
adding 1,2-dichloropropane in the list of specified chemical substances, group 2

6) Amendment of Ordinance on specified chemical substances, 2013

working environmental measurement, installation of local exhaust, implementation of health exam, etc.

B. Newly recognized occupational d. caused by chemicals dichloropropane, dichloromethane

metabolism dichloromethane



C. Mental health care within the framework of OH

1. Historically important cases of work-related psychiatric disease in Japan

- 1) Tokyo Eidan Subway, Ueno Station Case: the first case of psychiatric disease approved as primarily caused by work by Labour Standard Office in 1984
 - (1) his duty was extremely difficult and reasonably judged to cause reactive depression
 - (2) his personal liability to psychiatric diseases was judged as within normal range
 - (3) his personal issues in his life was not judged as strong enough to cause the disease
 - (4) his treating doctor and many of the psychiatrists supported the work-relatedness

C. Mental health care within the framework of OH

1. Historically important cases of work-related psychiatric disease in Japan

- 2) Kakogawa Labour Standard Office Case: the first case of psychiatric disease decided as related to work by the local court in 1996, although the work-relatedness of the case was denied by local Labour Standard Office in 1985, repeatedly denied by prefectural Labour Standard Office in 1988 and by Labour Standard Bureau, Ministry of Labour (at that time) in 1991

C. Mental health care within the framework of OH

1. Historically important cases of work-related psychiatric disease in Japan

- 3) Governmental Guideline for judging work-relatedness of psychiatric disease in 1999

C. Mental health care within the framework of OH

1. Historically important cases of work-related psychiatric disease in Japan

4) Dentsu Case: the first case of psychiatric disease decided as caused by illegal order at work in 2000 by Tokyo Local Court, reached to reconciliation fee of 168,000,000 yen, the court admitted the strong causal relationship between the stressful work and the suicide and the existence of comprehensive obligation of employer to secure safety and health of the worker; the case was widely broadcasted and drew attention of the public in Japan and triggered the establishment of the regulation to prohibit long working hours and the guideline to prevent psychiatric diseases at workplace.

C. Mental health care within the framework of OH

2. Employers' obligation of consideration for safety and health by judicial decision

Supreme Court, 1975

Under the labor contract, employer carries the obligation to perform necessary effort to guarantee safety and health of the worker, if the risk is reasonably foreseeable.

Civil Law, Article 415

If an obligor fails to perform consistent with the purpose of its obligation, the obligee shall be entitled to demand damages arising from such failure.

C. Mental health care within the framework of OH

2. Employers' obligation of consideration for safety and health by judicial decision

Labor Contract Law, Article 5

Employer shall endeavor to give the necessary considerations at work for the security of the worker's life and body.

Workers' Accident Compensation Insurance Law

full compensation for standard medical cost, up to 80% compensation for the average salary of recent 3 months 80%, no compensation for psychological damage or indirect expenditure.

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

1) Guideline for judging work-relatedness on psychiatric disorders due to psychological stressor, 1999

the first criteria for judging work-relatedness of the psychiatric disease

used as a manual at local Workers' Compensation Review Board composed of 3 psychiatrists also knowledgeable in occupational health policy of the government

thereafter, the number of claimed case was markedly increased

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

2) Amendment of the Guideline for judging work-relatedness on psychiatric disorders due to psychological stressor, 2008

adding “harassment at work” as a possible cause of the psychiatric disease

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

3) Amendment of Ordinance for Enforcement of the Labor Standards Act, Article 35, 2010

No.9: Psychiatric and behavioral disorders or other relevant diseases resulting from work associated with encounter of life-threatening accidents or other events which put psychologically excessive burden

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

4) Amendment of the Guideline for judging work-relatedness on psychiatric disorders due to psychological stressor, 2011

used by officers at Labour Standard Office as a manual for making decision

only the complicated cases are sent to local Workers' Compensation Review Board

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

4) Amendment of the Guideline for judging work-relatedness on psychiatric disorders due to psychological stressor, 2011

I. special event at work

(1) extreme level of psychological burden (eg. life-threatening event, industrial accident killed a worker, sexual abuse), (2) extreme level of long working hours (eg. 160 or more hrs/m of overtime work, 120 or more hrs/3wks of overtime work)

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

4) Amendment of the Guideline for judging work-relatedness on psychiatric disorders due to psychological stressor, 2011

II. event at work (categorized into “heavy”, “moderate”, or “mild”)

(1) experience of accident or disaster, (2) failure or occurrence of excessive responsibility at work, (3) heavy duty or change of amount or nature of work, (4) change of role or position at work, (5) trouble in human relationship, (6) sexual harassment (multiple events of “moderate” may be judged as “heavy”)

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

4) Amendment of the Guideline for judging work-relatedness on psychiatric disorders due to psychological stressor, 2011

III. off-the-job issues

(1) personal event, (2) familial event, (3) money problem, (4) criminal case, accident, disaster, (5) change of living condition, (6) human relationship

judgment: N (unrelated to work) or Y (related to work)

III (+) N

I (+) and III (-)Y

I (-), II (+),and III (-)Y if “heavy”, otherwise N

C. Mental health care within the framework of OH

3. Amendments of policies for judging work-relatedness of psychiatric disease

5) Statistical number of work-related psychiatric diseases

both the numbers of claims and those of admitted cases are increasing as follows

C. Mental health care within the framework of OH

4. Guideline for the prevention of psychiatric diseases of workers

1) Guidelines for Promoting Mental Health Care in Enterprises, 2000

the first guideline aimed to promote preventive activities for mental health of workers

2) Guideline for return-to-work of workers took sick leave because of psychiatric diseases, 2009

the guideline aimed to support healthy return of workers with psychiatric diseases to work and to prevent relapse of the disease, by facilitating the communication among treating doctor, occupational health physician, health supervisor, employer, co-workers

C. Mental health care within the framework of OH

4. Guideline for the prevention of psychiatric diseases of workers

3) Guidelines for Promoting Mental Health Care of Workers, 2006

Employer should establish the plan by comprehending the actual status of mental healthcare at the workplace, by elucidating obstacles, and by proposing the exact countermeasures to solve the problems. The plan should include following activities: (a) education, training, etc.; (b) effective promotion of self-care, line-care, professional care and outsourced care, so-called “four care activities”; (c) improvement of working environment; (d) response to workers with mental health problems; (e) support for return-to-work.

C. Mental health care within the framework of OH

4. Guideline for the prevention of psychiatric diseases of workers

3) Guidelines for Promoting Mental Health Care of Workers, 2006

(1) Self Care: Workers should understand by themselves various problems relating to stress and mental health and take measures to prevent, reduce or treat such problems as necessary

(2) Line Care: Managers and supervisors who have daily contact with workers should improve the working environment and consult with workers wishing to discuss their mental health

C. Mental health care within the framework of OH

4. Guideline for the prevention of psychiatric diseases of workers

3) Guidelines for Promoting Mental Health Care of Workers, 2006

(3) Professional Care: Occupational health physicians, occupational health nurses, health supervisors or other personnel responsible for health management at workplaces should make proposals relating to the mental healthcare to promote the relevant activities and to support workers and other managers and supervisors.

(4) Outsourced Care: Services of professional organizations and staff from outside the enterprise should be utilized to support mental healthcare activities

C. Mental health care within the framework of OH

5. Draft of ISH Law amendment

4) Planning of amendment of Industrial Safety and Health Law for newly stipulating the framework for checking psychological burden of worker from stress at work

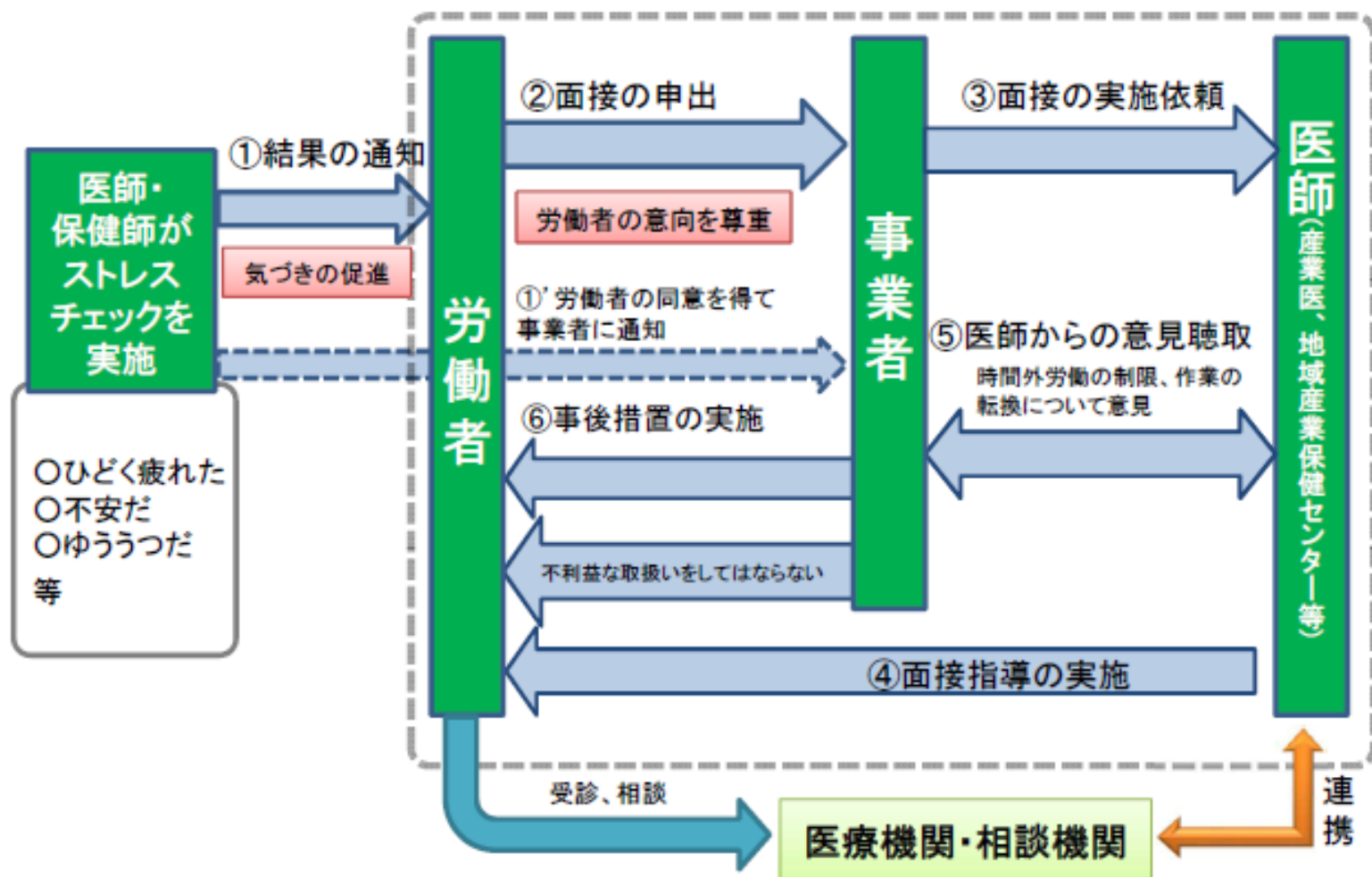
supposed to be numbered as Article 66-10

(now in discussion at congress since March, 2014)

C. Mental health care within the framework of OH

5. Draft of ISH Law amendment

精神的健康の状況を把握するための検査(ストレスチェック)と面接指導



C. Mental health care within the framework of OH

5. Draft of ISH Law amendment

USPSTF (US Preventive Service Task Force)

even at the clinical setting and with co-operation from the patients, the sensitivities and the specificities of questionnaires to screen depression is around 0.8

eg. if the prevalence rate is 3%

89% with positive results will not have depression

$$0.97 \times 0.2 / (0.97 \times 0.2 + 0.03 \times 0.8) = 0.89$$

Can be appropriately done at work setting?

accurate diagnosis?

effective treatment?

careful follow-up?

D. Health impairment from overwork

karoshi

- 1 Notion of “karoshi,” cardiovascular diseases and strokes caused by overwork, was proposed by Dr. Uehata in 1978
- 2 Many epidemiological studies in 1990’s suggested short sleeping hours and long working hours may be one of the probable aggravating factor of circulatory diseases

D. Health impairment from overwork

work-relatedness on CHD and strokes

3 Development and amendment of labour policies

1) Guideline for judging work-relatedness on cardiovascular diseases and brain stroke due to abnormal event at work, 1961

causal event should be occurred within 24 hours;
including overnight work

2) Guideline for judging work-relatedness on cardiovascular diseases and brain stroke due to overwork was amended, 1987

notion of overwork was induced; including long working hours for one week

D. Health impairment from overwork

work-relatedness on CHD and strokes

3 Development and amendment of labour policies

3) Guideline for judging work-relatedness on cardiovascular diseases and brain stroke due to overwork was amended, 1995

mechanism of comprehensive evaluation of overwork was induced

D. Health impairment from overwork

work-relatedness on CHD and strokes

3 Development and amendment of labour policies

4) Guideline for judging work-relatedness on cardiovascular diseases and brain stroke due to overwork was amended, 1996

arrhythmia was included in the list of work-related CHD

5) Yokohama-minami Labour Standard Office Case (Supreme Court, 2000)

decision for not reimbursing the medical fee for the case of driver of insurance company attacked by subarachnoid hemorrhage by Yokohama-minami Labour Standard Office was denied

D. Health impairment from overwork

work-relatedness on CHD and strokes

3 Development and amendment of labour policies

6) System engineer Case (Supreme Court, 2000)

the software company was ordered reparation payment of 32 million yen to the bereaved family of the system engineer died of brain stem hemorrhage, based on the negligence of the legal requirement of appropriate countermeasures based on the result of high blood pressure recorded at health exam stipulated by ISH Law.

D. Health impairment from overwork

work-relatedness on CHD and strokes

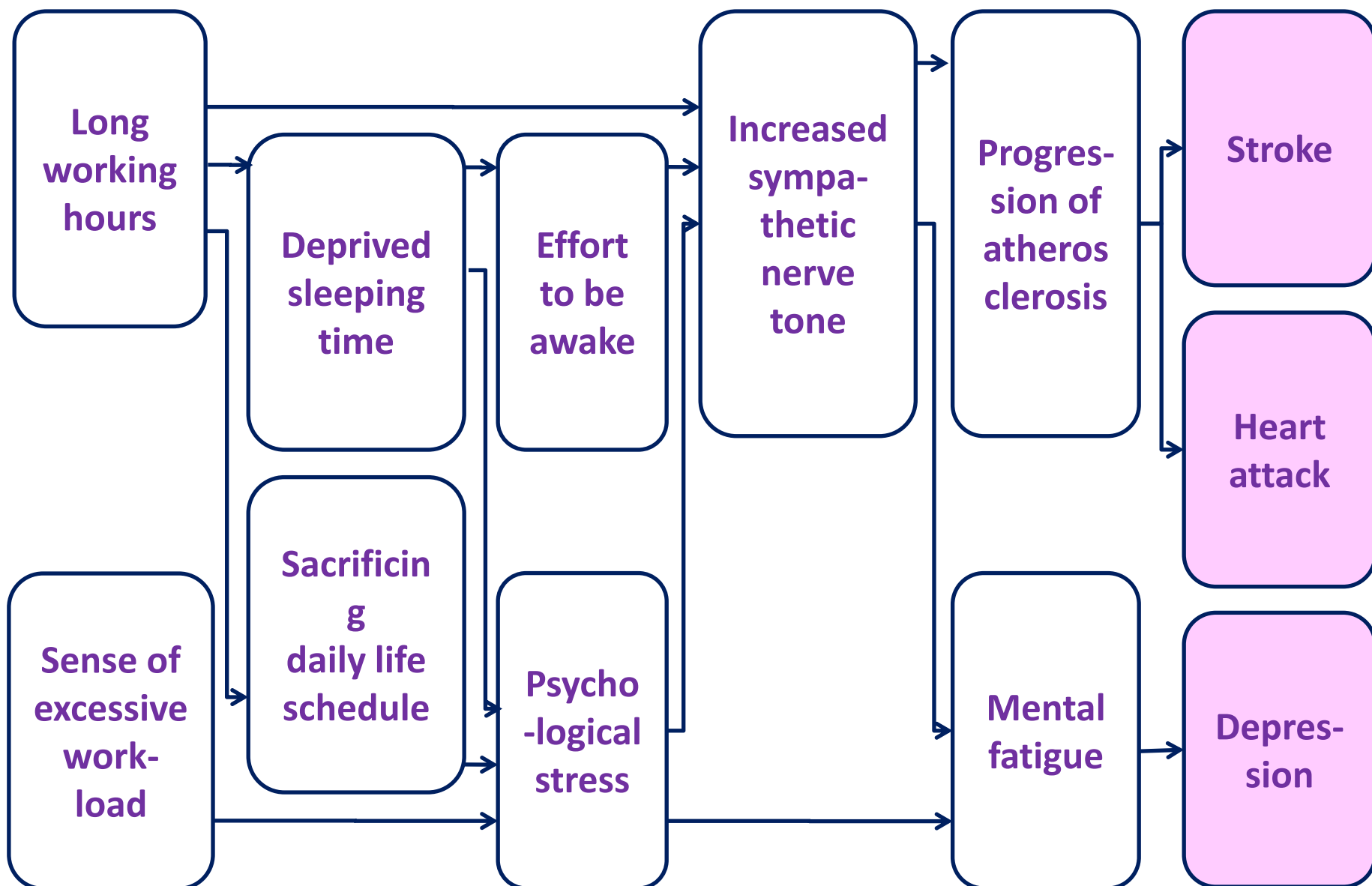
3 Development and amendment of labour policies

7) Guideline for judging work-relatedness on cardiovascular diseases and brain stroke due to overwork was amended, 2001

notion of overwork was expanded to long-term overwork exceeding 100 hours of overwork, which may affect health status for 6 months

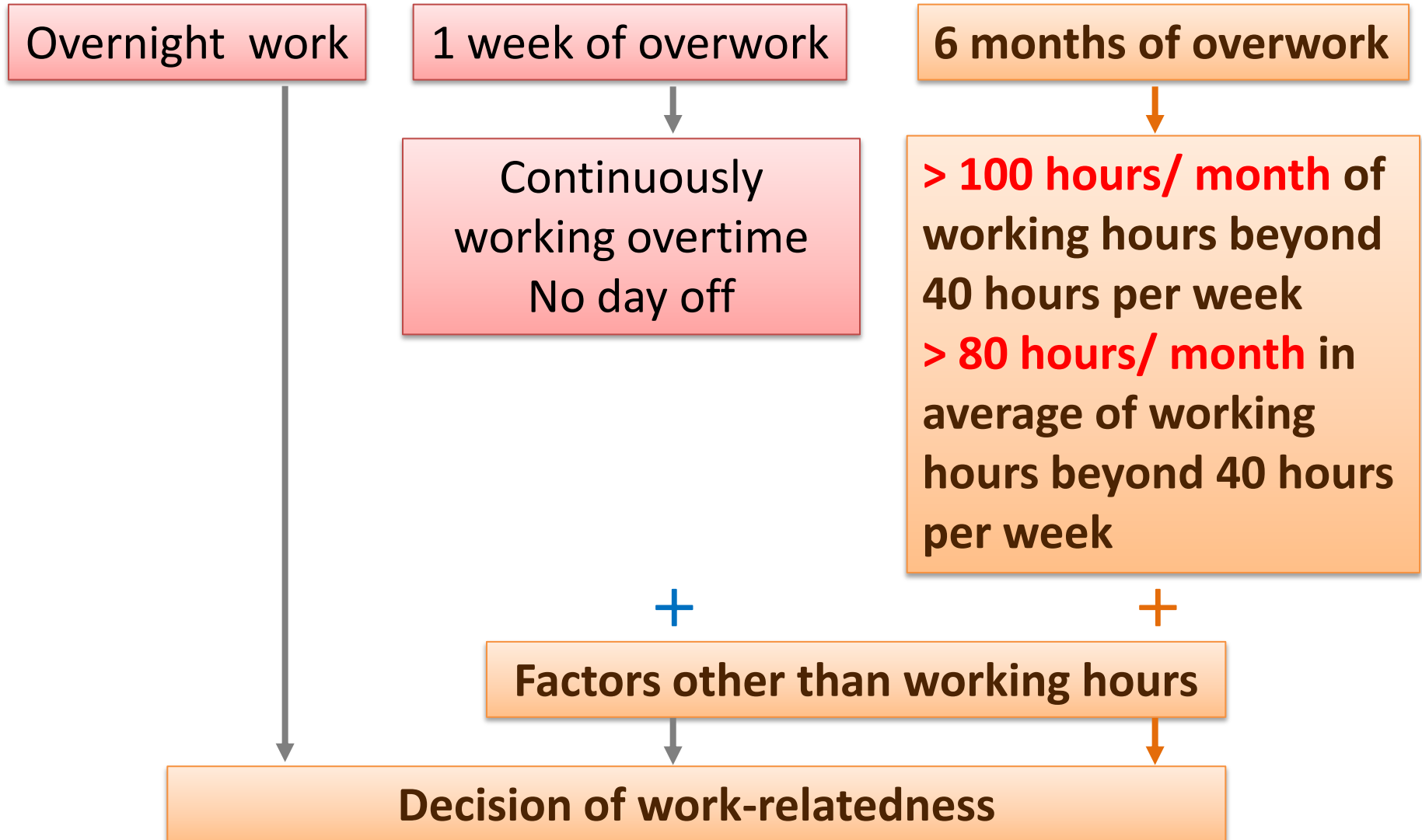
D. Health impairment from overwork

work-relatedness on CHD and strokes



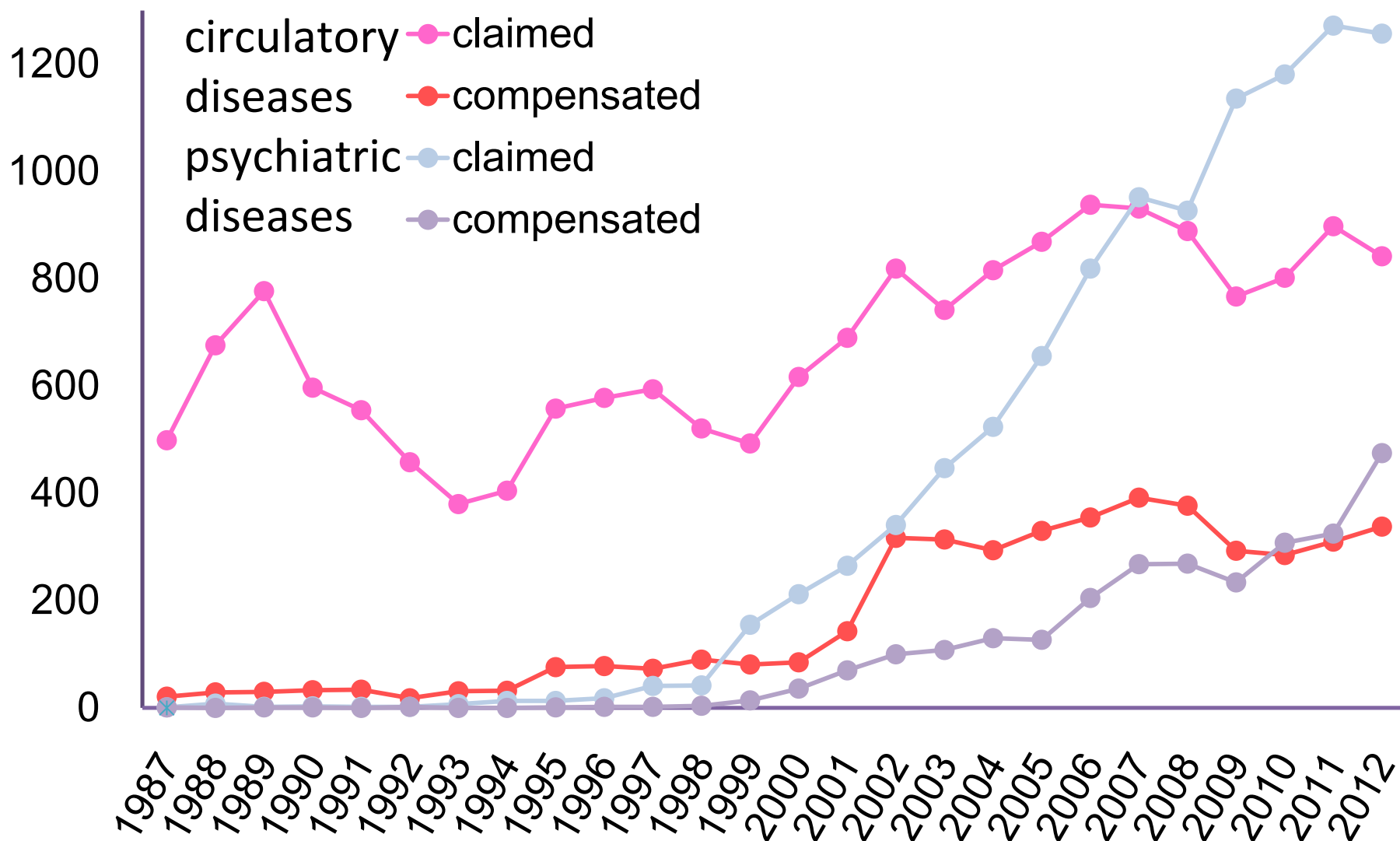
D. Health impairment from overwork

work-relatedness on CHD and strokes



D. Health impairment from overwork

work-relatedness on CHD and strokes



D. Health impairment from overwork

work-relatedness on CHD and strokes

overtime work hours	year						total	(deaths)		
	2007	2008	2009	2010	2011	2012				
<45 hrs	0	1	0	0	0	0	1	0%	(0)	0%
45-59	0	1	1	1	1	0	4	0%	(4)	0%
60-79	28	21	17	18	20	20	124	6%	(73)	7%
80-99	135	131	119	92	105	116	698	35%	(420)	37%
100-119	92	103	76	84	58	69	482	24%	(278)	25%
120-139	39	49	30	31	46	50	245	12%	(126)	11%
140-159	34	31	19	13	16	16	129	6%	(72)	6%
160 =<	35	24	18	20	21	31	149	7%	(64)	6%
others*	30	16	13	26	43	36	164	8%	(85)	8%
total	393	377	293	285	310	338	1,996	100%	(1122)	100%

D. Health impairment from overwork

prevention policy on work-related CHD and strokes

- 3 Development and amendment of labour policies
- 8) Guideline for preventing cardiovascular diseases and brain stroke due to overwork was announced, 2002, 2006
- 9) Industrial Safety and Health Law was amended to stipulate the framework for medical interview of worker engaged in work with long working hours, 2005, 2006, 2008

D. Health impairment from overwork

list of occupational disease

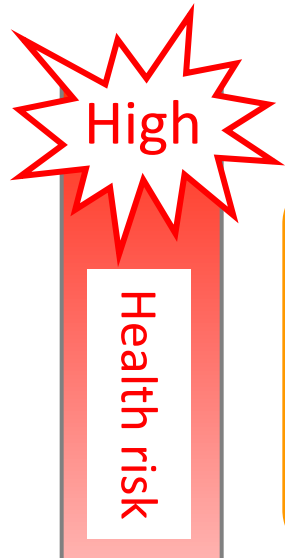
3 Development and amendment of labour policies

10) Amendment of Ordinance for Enforcement of the Labor Standards Act, Article 35, 2010

No.8: brain hemorrhage, subarachnoid hemorrhage, brain infarction, hypertensive encephalopathy, myocardial infarction, angina pectoris, cardiac arrest including sudden cardiac death, or dissecting aneurysm of the aorta or other relevant diseases resulting from long period of long working hours or other jobs which exaggerate vascular pathology

D. Health impairment from overwork

prevention policy on work-related CHD and strokes



100 hrs

Workers with high risk
(obligatory)

Article 66-8, ISH Law

- ➔ 1. whose total working hours exceeding 40 hrs/w exceed 100 hrs/m
- 2. who suffer from accumulated fatigue
- 3. who requests FFG

80 hrs

Workers with moderate risk
(recommended)

Article 66-9 , ISH Law

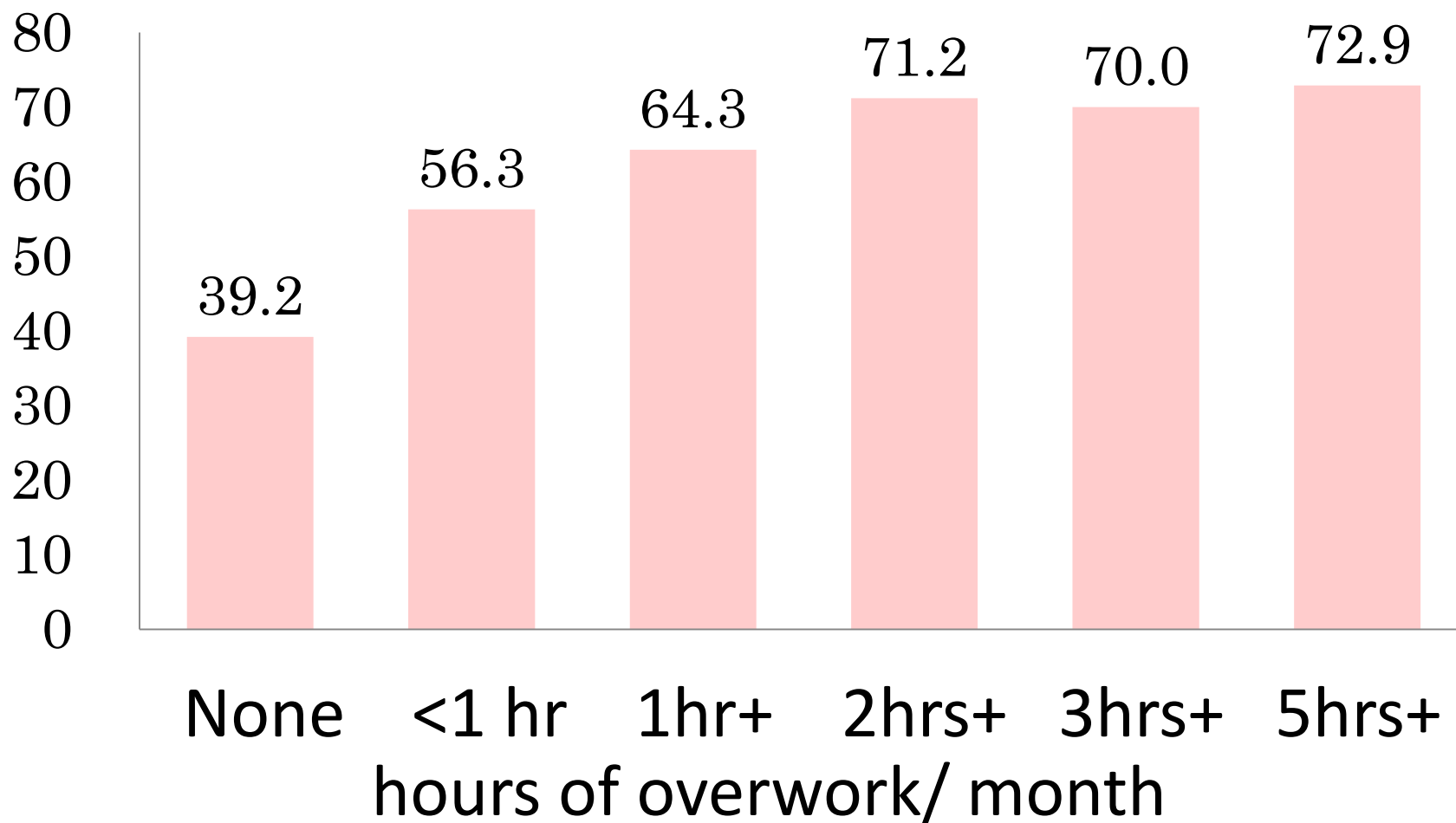
- ➔ who suffer from accumulated fatigue
- ➔ who worries about own health
- ➔ who qualifies other criteria of the workplace

Low

D. Health impairment from overwork

prevention policy on work-related CHD and strokes

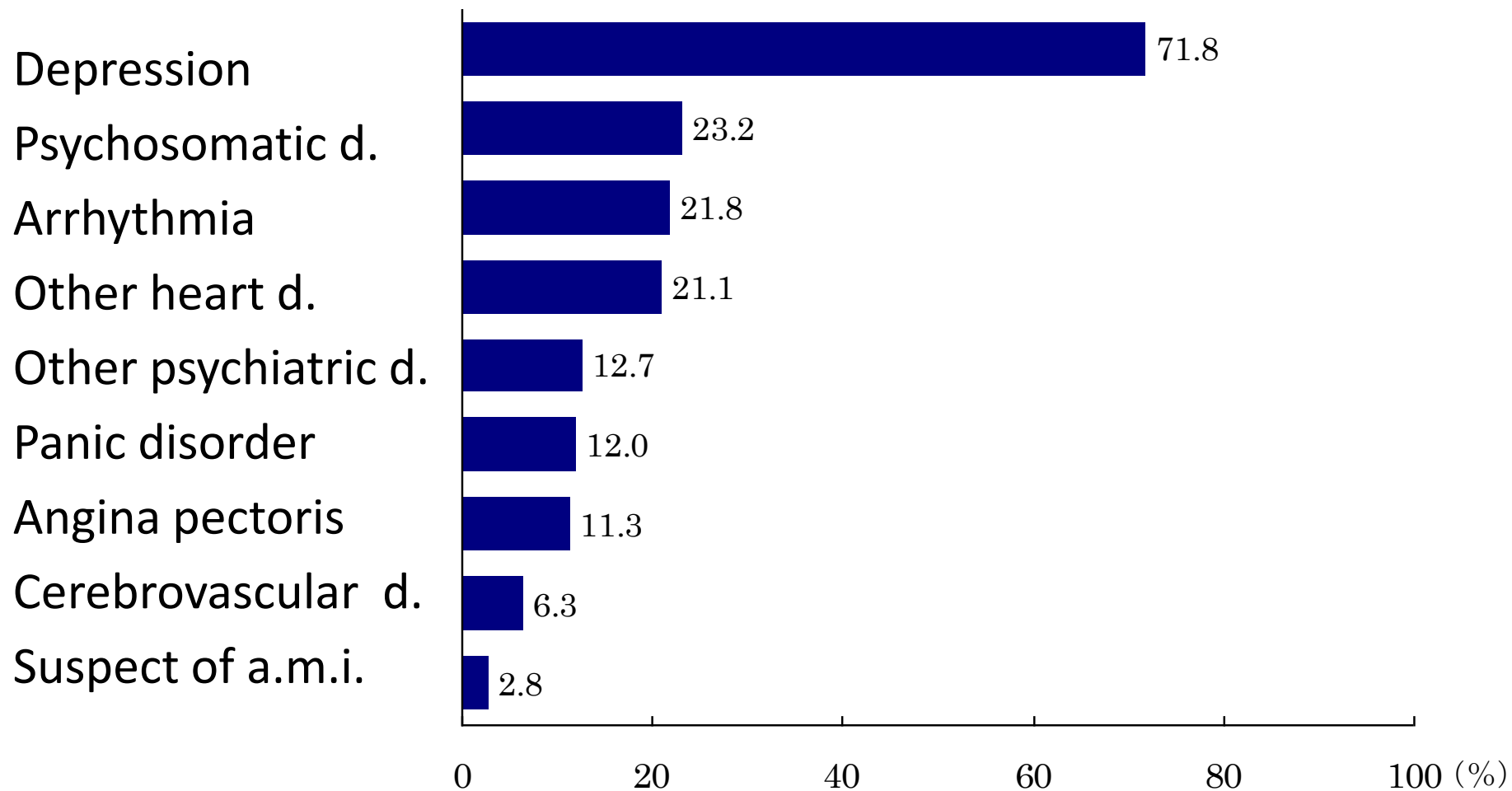
Overwork and psychological stress



D. Health impairment from overwork

prevention policy on work-related CHD and strokes

Diseases discovered at interview of overworked workers



Thank you for your attention

