

Regarding Guidelines on Anti-Smoking Measures in the Workplace

Reference 10-3

o Regarding Guidelines on Anti-Smoking Measures in the Workplace

(May 9, 2003)

(Ministry of Health, Labour and Welfare Directive to Prefectural Undersecretaries No. 0509001)
(Notification Addressed to the Directors of the Prefectural Health, Labour and Welfare from the Labour Standards Director of the Ministry of Health, Labour and Welfare)
(Official seal omitted)

With regard to workplace smoking policies, and in accordance with Directive No. 75 of February 21, 1996 ("Guidelines for Smoking Policies in the Workplace"; hereinafter "Directive No. 75"), great advances have been made; as a result, certain results have been obtained, such as an increase in efforts regarding anti-smoking measures in the workplace.

Recently, in accordance with the Health Promotion Act enacted on May 1 of this year (Law No. 103 of 2002), it became mandatory for managers of facilities used by large numbers of people—in addition to workplaces—to take measures against passive smoking; and, in June 2002, at a meeting of the Criteria Decision Board on the Effects of Segregated Smoking, new criteria concerning segregated smoking were presented.

Furthermore, as a result of findings, etc., regarding the adverse health effects of passive smoking such as physiological symptoms including watery eyes, nasal congestion, headaches, etc., and physiological responses such as respiratory depression, increased heart rate, and vasoconstriction, even more adequate countermeasures against passive smoking have become necessary.

With these issues as a backdrop, and from the perspective of ensuring the health of workers and promoting the formation of a comfortable working environment, it was decided that passive smoking prevention measures in the workplace should be further enhanced according to the newly developed Attachment 1, "Guidelines for Passive Smoking Prevention Measures in the Workplace" (hereinafter, "New Guidelines"). Along with understanding these guidelines, we request the cooperation of each prefecture in widely disseminating them.

The main points of the new guidelines are as listed below. We request that Attachment 2, "Explanation of Guidelines for Passive Smoking Prevention Measures in the Workplace" be combined with "Guidelines for Passive Smoking Prevention Measures in the Workplace" and treated as one document.

Subsequently, Directive No. 75 will be abolished and replaced with this one.

Notes

1. In Directive No. 75, smoking rooms and smoking corners (hereinafter, "smoking rooms, etc.") were established as facility countermeasures, but in the new guidelines, and with the goal of reliably preventing passive smoking, it shall be recommended that, to the extent possible, smoking rooms be constructed in such a way that tobacco smoke is not dispersed into non-smoking areas.

2. In Directive No. 75, methods to discharge tobacco smoke outdoors before it disperses by using suction, and methods to eliminate tobacco smoke and to ventilate rooms (with air cleaning devices) were established as effective anti-smoking equipment in smoking rooms, etc., but in the new guidelines, because of problems arising from the fact that air cleaning devices cannot eliminate gaseous components, the recommended method for eliminating tobacco smoke shall be the method of discharging it outdoors before it disperses by using suction.

In the case that air cleaning devices are installed as an unavoidable measure, it is noted that special considerations regarding ventilation will be necessary.

3. With regard to standards of air quality in the workplace in the new guidelines, in order to prevent the inflow of tobacco smoke or the smell of tobacco from smoking rooms, etc., into non-smoking areas, necessary measures shall be taken in order to ensure that the wind speed of air flowing toward the smoking rooms, etc., is 0.2 m/s or more at the boundary between smoking rooms, etc., and non-smoking areas.

(Attachment 1)

Guidelines for Anti-Smoking Measures in the Workplace

1. Basic Concepts

The public is increasingly concerned about the health effects of smoking, and the adverse effects of inhaling tobacco smoke by non-smokers (hereinafter "passive smoking") are well reported. Additional adverse effects on non-smokers include discomfort and stress. From the perspective of promoting the formation of a comfortable workplace environment and protecting the health of workers, further measures on occupational health are required in order to prevent passive smoking.

To ensure the efficacy of smoking countermeasures in the workplace, and because it is necessary for business operators to systematically address occupational health management, it is necessary to promote reliable smoking countermeasures with the active participation of all concerned parties, in order to examine procedures in health committees, etc., and to establish standards of behavior for smokers (hereinafter "smoking standards of behavior"), as well as to maintain the facilities and equipment, etc., necessary for implementing smoking countermeasures.

These guidelines convey the basic measures to be taken by concerned parties in the workplace. With these guidelines, business operators should actively address smoking countermeasures in the workplace while at the same time considering the actual conditions of the work site.

With regard to appropriate methods for implementing smoking countermeasures, a workplace may be entirely smoke-free (entirely non-smoking) or may be partially smoke-free by utilizing only smoking rooms or smoking corners (hereinafter "smoking rooms, etc.") that meet certain requirements while the rest of the workplace is non-smoking (spatial smoke separation or segregated smoking). However, these guidelines primarily assume measures to be taken concerning segregated smoking.

2. The Role of Management Leaders, Management, and Employees

Because anti-smoking measures in the workplace are to be implemented within the organization, it is very important for individuals in management leadership positions (hereinafter "management leaders"),

individuals in managerial positions (hereinafter "management") and employees to work cooperatively together and to each work toward fully satisfying the following roles.

1) Management Leaders

The basic policies and attitudes of management leaders have a significant impact on the success or failure of anti-smoking measures in the workplace. Therefore, in order to promote adequate smoking countermeasures that encourage the formation of a comfortable workplace environment and protect the health of workers, it is essential that management leaders possess a strong interest in anti-smoking measures. In addition to taking the opportunity to educate all employees on such countermeasures, management leaders should take the initiative to smoothly implement these measures.

In addition, management leaders should fully grasp the opinions of employees regarding smoking countermeasures, which are expressed through venues such as health committees, etc.

2) Managers

Because management attitudes about smoking countermeasures have a significant impact on the promotion of anti-smoking measures in the workplace, managers should pro-actively address smoking countermeasures in order to smoothly implement such measures in accordance with the basic policies of management leaders.

In addition, managers should provide adequate guidance to individuals who do not adhere to smoking standards of behavior.

3) Employees

Because it is especially important for employees themselves to promote anti-smoking measures in the workplace, employees should try to actively express their opinions on anti-smoking measures through a proxy or representative at health committee meetings, etc.

In addition, labor unions should support the smooth implementation of anti-smoking measures enacted by business operators by working to promote the anti-smoking measures adopted by management leaders, by collecting the requests, etc. of employees regarding smoking, and by encouraging participation, etc., in segregated smoking education efforts and the health management, etc. of employees.

3. Anti-Smoking Measures Promotion Plan

In order to promote anti-smoking measures, urgent plans and mid- to long-term plans regarding concrete methods, etc., to clarify and solve problems shall be established after assessing the actual conditions of smoking in the workplace, the results of air quality measurements, and the opinions, etc., of employees.

In order to reliably implement such plans, management leaders shall obtain the active cooperation of employees and fully evaluate all issues in health committee meetings, etc.

4. System for Promoting Anti-Smoking Measures

Considering the problem of smoking as a problem between individuals (smokers and non-smokers) and leaving the resolution of such problems to the concerned parties may cause worsened human relations between smokers and non-smokers, and thus make it more difficult to solve the problem.

In order to avoid such a situation, and to effectively promote anti-smoking measures, the following system for promoting anti-smoking measures shall be maintained as one necessary element of occupation health management, for which business operators are responsible.

1) Committee on Anti-Smoking Measures

To smoothly implement anti-smoking measures, a "Committee on Anti-Smoking Measures" for smokers and non-smokers will be formed under the guidance of health committees, etc., which will be composed of health officials and representatives, etc.. In addition to studying the ways by which to undertake consensus building for the promotion of anti-smoking measures, the committee will examine standards of smoking behavior as well as ways to concretely proceed with anti-smoking measures, and will report their findings to health committees, etc.

2) Departments Responsible for Anti-Smoking Measures, etc.

Business operators will determine which departments and individuals will be responsible for anti-smoking measures; these departments will be responsible for general matters concerning anti-smoking measures and will administer the Committee on Anti-Smoking Measures, hold discussions regarding anti-smoking measures, and respond to grievances/complaints, as well as periodically assess the progress of anti-smoking promotion measures in each workplace and provide guidance in order to resolve problems in the workplace, etc.

5. Facilities and Equipment

The installation, etc., of smoking rooms, etc., is one element of facility and equipment measures to promote anti-smoking.

To the extent possible, smoking rooms shall be installed; if difficulties arise in the installation of smoking rooms, a smoking corner shall be established.

In the case that the workplace is located in a newly constructed or renovated building, segregated smoking areas will be assumed from the design stage, and the installation of smoking rooms, etc., will be planned. For existing buildings, the installation of smoking rooms, etc., will be planned using creative ingenuity. In this case, the ease of use of the smoking room, etc., will be considered, and it is desirable that the room be established in an area close to the workplace.

Smoking rooms, etc., shall utilize machines for smoking countermeasures, such as those that discharge tobacco smoke outdoors via suction before it disperses to other areas. Along with ensuring that these machines function properly, such machinery shall be periodically inspected and adequately maintained.

In the case that, as an unavoidable measure, air cleaning devices that discharge tobacco smoke within a room are installed, such devices shall function properly, and inspections, etc., shall be undertaken, in addition to adequate maintenance. Furthermore, managers shall be especially mindful of the ventilation in smoking rooms, etc.

Managers should also be mindful of measures concerning tobacco odor.

6. Workplace Air Environment

Recognizing the fact that tobacco smoke has an impact on workplace air environment, and in accordance with the Ordinance on Health Standards in Offices (MHLW Ordinance No. 43 of 1972), the air environment in workplaces shall be measured, and all necessary steps shall be taken to ensure that the concentration of airborne dust is 0.15 m/m³ or less, and the concentration of carbon monoxide is 10 ppm or less. In addition, in order to prevent the dispersal of tobacco odor from smoking rooms, etc., to non-smoking areas, all necessary measures shall be taken to ensure that the wind speed of air flowing toward the smoking rooms, etc., at the boundary between non-smoking areas and smoking rooms, etc., is 0.2 m/s or greater.

Please see the Attachment "Measurement Methods, etc., of Workplace Air Environments" regarding measurement methods, etc.

7. Education About Smoking, etc.

Business operators shall hold discussions and training sessions for managers and employees concerning the impact of passive smoking on health, the content of anti-smoking measures, and standards of smoking behavior, etc., with the goal of increasing awareness about anti-smoking measures.

In addition, it is desirable that business operators provide guidance to smokers about appropriate disposal methods of cigarette butts, as well as individual guidance, consultation and advice from physicians and public health nurses, etc., at periodic checkups, etc., concerning the health impacts, etc., of smoking.

8. Evaluation of Anti-Smoking Measures

The department(s) responsible for anti-smoking measures shall periodically evaluate the progress and effectiveness of anti-smoking measures.

The results of such evaluations should be reported to management leaders and to health committees, etc., and suggestions for the improvement of anti-smoking policies should be formulated as necessary.

9. Other Considerations for Promoting Anti-Smoking Measures

1) Mutual Understanding Between Smokers and Non-Smokers

In order to smoothly implement anti-smoking measures, it is essential that both smokers and non-smokers adequately understand the other's position.

It is desirable that smokers pay considerable attention in order to prevent passive smoking by non-smokers; conversely, non-smokers should understand that smokers will smoke in smoking rooms, etc.

2) Consideration for Pregnant Women, etc.

Due to the fact that pregnant employees and/or employees with respiratory or cardiovascular diseases, etc., are more susceptible to the adverse health effects of passive smoking, special consideration shall be given to such employees by thoroughly enforcing smoking segregation.

3) Publicizing Anti-Smoking Measures

In order to widely publicize anti-smoking measures, posters shall be displayed, pamphlets shall be distributed, and signs denoting non-smoking areas shall be posted. In addition, the cooperation and understanding of outsiders regarding anti-smoking measures shall be requested.

4) Provision of Information, etc.

The departments, etc., responsible for anti-smoking measures shall compile information on research studies concerning the health impacts of passive smoking, as well as material concerning smoking and workplace air environments, examples of anti-smoking measures in other workplaces, and progress reports on anti-smoking measures in each workplace, etc., and shall suitably provide this information to health committees, etc.

Attachment

Methods, etc., for Measuring the Workplace Air Environment

1. Measurement Objectives

Efforts shall be undertaken to measure the concentration of airborne dust and carbon monoxide in the workplace air environment, as well as the wind speed of air flowing toward smoking rooms, etc., from non-smoking areas, with the goal of maintaining and managing anti-smoking measures, as well as assessing the effects of anti-smoking measures and understanding the workplace air environment prior to the implementation of anti-smoking measures.

2. Types of Measurement, etc.

Although measurements shall be taken prior to the implementation of anti-smoking measures, testing will also be undertaken following implementation, in order to effectively maintain anti-smoking policies.

1) Measurements to be Taken Prior to the Implementation of Anti-Smoking Measures

Measurements taken prior to the implementation of anti-smoking measures shall be performed in rooms, etc., where smoking occurs, for one or more days on regular work days.

In the case that the number of smokers in such rooms increases or decreases, measurements will be taken separately for one day or more, on days when there are many smokers, and on days when there are few smokers.

2) Measurements to be Taken Following the Implementation of Anti-Smoking Measures

Following the implementation of anti-smoking measures, tests to measure their efficacy will be performed within non-smoking areas and within smoking rooms, etc., as well as at the boundaries between non-smoking areas and smoking rooms, etc., for one or more days on regular work days. In addition, the wind speed at the boundaries between non-smoking areas and smoking rooms, etc., shall be measured for one or more days on regular work days.

In addition, in the case of changes or modifications to equipment used for anti-smoking measures, etc. following the implementation of anti-smoking measures, similar testing shall be carried out.

3) Measurements to Maintain the Effects of Anti-Smoking Measures

The target testing areas for measurements to maintain the effects of anti-smoking policies are the interiors of non-smoking areas and smoking rooms, etc., as well as the boundaries between non-smoking areas and smoking rooms, etc. In addition, the target testing areas for the measurement of wind speed are the boundaries between non-smoking areas and smoking rooms, etc. Testing shall be performed periodically on one or more established days every three months, and factors such as the concentration within rooms depending on the season shall be considered. In addition, in the case that employees, etc., wish to conduct certain tests, they shall be conducted in accordance with (2) above.

In the case that the results of tests show that favorable conditions have continued for one or more years, a study shall be conducted by health committees, etc., and the frequency of tests may be reduced, or tests for non-smoking areas may be omitted.

3. Testing Frequency

Tests in offices shall be conducted three or more times a day, at certain intervals, during normal working hours. In this case, testing should be done roughly one hour after opening, roughly one hour before closing, and at a time between those two times (during working hours).

In addition, in order to understand changes over time, frequent testing is desirable.

With regard to smoking rooms, etc., and non-smoking areas other than offices, testing shall be conducted one or more times during a time in which such rooms, etc., are in use.

4. Measurement Points

As a general rule, measurement points shall be at a set height approximately 1.2 to 1.5 meters above the floor in a room, depending on the floor area, etc., air-conditioning equipment systems, the installation condition of office equipment, etc., and other conditions in rooms, etc. In addition, five or more measurement points shall be established per room; however, this shall not apply to smoking rooms.

Three points shall be established for measuring the wind speed of air flowing toward smoking rooms, etc., from non smoking areas: at the top, middle, and bottom of the main entrances of non-smoking areas and smoking rooms, etc.

In places where tobacco smoke accumulates, or in places at which employees, etc., specifically request that testing be done, measurement points separate from or in addition to those stated above shall be established.

5. Evaluation, etc.

By determining the values at each measurement point, and by understanding periodic changes, etc., the workplace shall be managed in such a way to ensure that the concentration of airborne dust is at or below 0.15 mg/m³, the concentration of carbon dioxide is at or below 10 ppm, and the wind speed of air flowing toward smoking rooms, etc., from non-smoking areas is at or greater than 0.2 m/s.

Measurement results shall be recorded for reference on the attached record sheet, and shall be kept for three years.

6. Measurement Equipment

The amount of airborne dust shall be calculated with a standardized relative dust concentration detector or a spectroscopic dust meter. The concentration of carbon monoxide shall be calculated using equipment with gas detecting tubes or equipment with equivalent or greater capabilities. Wind speed shall be calculated with a general wind gauge (anemometer). In the case that a standardized relative dust concentration detector is used to measure airborne dust, for each measurement, the concentration shall be measured for ten or more consecutive minutes in one-minute intervals, and then converted to the concentration using a mass concentration conversion factor.

(Attachment)

Record Sheet for Determining the Effects of Smoking in the Workplace

1. Measurement practitioner (name)
2. Purpose of Measurement (○ seal)
 - 1) Measurements Prior to the Implementation of Anti-Smoking Measures
 - 2) Measurements Conducted to Assess the Effects of Anti-Smoking Measures Following the Implementation of Anti-smoking Policies
 - 3) Measurements to Maintain the Effects of Anti-Smoking Policies
3. Date of Measurement, etc.

Date performed	Smoking Conditions	Height of Measurement Point	
		Airborne dust	cm
Measurement Location		CO	
		cm	
Wind speed		Top	cm
		Middle	cm
	Bottom	cm	

4 Schematic drawing of smoking rooms, etc. (main equipment, arrangement of measuring devices)

[Blank box]

*In the drawing, measurement points, information pertaining to each measurement point, and whether the windows are opened or closed are denoted; the airflow of ventilation equipment is indicated by an arrow.

In the case that use of an air-cleaning device is unavoidable, the direction of the ventilation of said device will be indicated with an arrow.

5. Number of people permitted to smoke (capacity) (people)

Number of people smoking at the time of measurement (maximum people)

Number of cigarettes smoked during testing (cigarettes)

6. Size of smoking rooms, etc. (area: m² , ceiling height: m)

7. Operational status of anti-smoking equipment, etc.

(1) Operational status of anti-smoking equipment

- ① If exhaust systems are installed
 - Exhaust fans, etc. (24-hour continuous operation, operating until : ~
: , none)
- ② If air cleaning devices are installed as an unavoidable measure
 - Air-cleaning devices (24-hour continuous operation, operating until : ~
: , none)

(2) Volume of air processed by anti-smoking equipment

- ① If exhaust systems are installed
 - Exhaust fans, etc. (m³/min x units)
- ② If air cleaning devices are installed as an unavoidable measure
 - Air-cleaning devices (m³/min x units)
- (3) Humidity (C°), Temperature (%)
- (4) Date of performance of previous maintenance (m /d /y)

8. Evaluation criteria for anti-smoking measures

Measurement Location	Measurement Items	First time : ~:	Second time : ~:	Third time : ~:
Boundary between smoking rooms, etc., and non-smoking areas	• Average concentration of airborne dust	mg/m ³ ppm	mg/m ³ ppm	mg/m ³ ppm
	• CO concentration	Top: m/s	Top: m/s	Top: m/s
	• Air speed of air flowing from non-smoking areas toward smoking rooms, etc.	Middle: m/s	Middle: m/s	Middle: m/s
	• Visual/olfactory leakage of cigarette smoke	Bottom: m/s	Bottom: m/s	Bottom: m/s
		Present/Absent	Present/Absent	Present/Absent

Smoking rooms, etc.	<ul style="list-style-type: none"> • Average concentration of airborne dust • CO concentration 	mg/m ³ ppm	mg/m ³ ppm	mg/m ³ ppm
Non-smoking area(s)	<ul style="list-style-type: none"> • Average concentration of airborne dust • CO concentration 	mg/m ³ ppm	mg/m ³ ppm	mg/m ³ ppm

(References)

1. Air environment standards

	Standard value
Airborne dust	0.15 mg/m ³ or less
CO	10 ppm or less
Airflow	<ul style="list-style-type: none"> ① Wind speed: 0.2 m/s or greater ② Wind direction: direction toward smoking rooms, etc., from non-smoking areas

2. Regarding countermeasures based on testing results

If the air environment standards described in 1 cannot be maintained, it will be necessary to make improvements by performing the checklist below.

(1) If smoking rooms are installed

- ① Is the exhaust volume of exhaust equipment such as ventilation fans insufficient?
- ② (If doors are closed), are air-intake openings attached to the door(s)?
- ③ (If doors are open), have ways been devised to minimize entrances and exits, such as by using curtains?
- ④ Are the policies regarding the allowable number of smokers being followed?
- ⑤ Are people smoking outside of smoking areas?
- ⑥ Is anti-smoking equipment being properly maintained?

(2) If a smoking corner is installed

- ① Is the exhaust volume of exhaust equipment such as ventilation fans insufficient?
- ② Are there wall panels, partitions, etc., suspended from the ceiling?
- ③ Are the policies regarding the allowable number of smokers being followed?
- ④ Are people smoking outside of smoking areas?
- ⑤ Is anti-smoking equipment being properly maintained?

{Entry example} Record sheet for determining the effects of segregated smoking in the workplace

1. Measurement practitioner: Kasumigaseki Taro, General Affairs Section

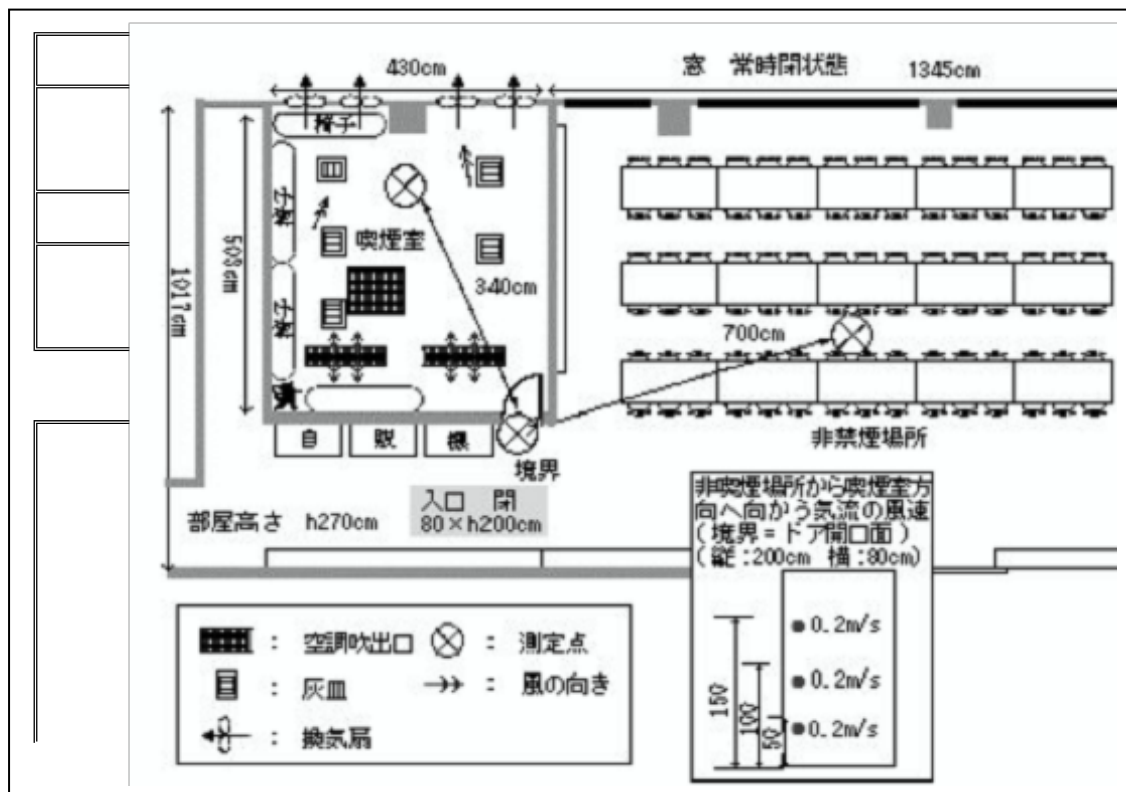
2. Purpose of Measurement (○ seal)

- 1) Measurements Prior to the Implementation of Anti-Smoking Measures
- 2) Measurements Conducted to Assess the Effects of Anti-Smoking Measures Following the Implementation of Anti-smoking Policies
- 3) Measurements to Maintain the Effects of Anti-Smoking Policies

3. Date of the performance of measurements, etc.

Date performed	Smoking Conditions	Height of Measurement Point		
May 9, 2003	• Smoking is concentrated during the lunch break. • Total number of cigarettes smoked in one day is approximately 35.	Airborne dust	120 cm	
Measurement Location		CO	120 cm	
Kasumigaseki Hall, 5F Smoking room		Wind speed	Top	150 cm
			Middle	100 cm
Bottom	50 cm			

4. Schematic drawing of smoking rooms, etc. (main equipment, arrangement of measuring devices)



*In the drawing, measurement points, information pertaining to each measurement point, and whether the windows are opened or closed are denoted; the airflow of ventilation equipment is indicated by an arrow. In the case that use of an air-cleaning device is unavoidable, the direction of the ventilation of said device will be indicated with an arrow.

5. Number of people permitted to smoke (capacity) (10 people)

Number of people smoking at the time of measurement (maximum 9 people)

Number of cigarettes smoked during testing (24 cigarettes)

6. Size of smoking rooms, etc. (area: 21.6 m²; ceiling height: 2.7 m)

7. Operational status of anti-smoking equipment, etc.

(1) Operational status of anti-smoking equipment

① If exhaust systems are installed

- Exhaust fans, etc. (24-hour continuous operation, operating from 9:00 until 17:00, none)

② If air cleaning devices are installed as an unavoidable measure

- Air-cleaning devices (24-hour continuous operation, operating from : until : , none)

(2) Volume of air processed by anti-smoking equipment

① If exhaust systems are installed

- Exhaust fans, etc. (15 m³/min x 4 units)

② If air cleaning devices are installed as an unavoidable measure

- Air-cleaning devices (m³/min x units)

(3) Humidity (28 C°), Temperature (55%)

(4) Date of performance of previous maintenance (m /d /y)

8. Evaluation criteria for anti-smoking measures

Measurement Location	Measurement Items	First time : ~:	Second time : ~:	Third time : ~:
Boundary between smoking rooms, etc., and non-smoking areas	<ul style="list-style-type: none"> • Average concentration of airborne dust • CO concentration • Air speed of air flowing from non-smoking areas toward smoking rooms, etc. • Visual/olfactory leakage of 	<p>0.01 mg/m³ ppm</p> <p>Top: 0.2 m/s</p> <p>Middle: 0.1 m/s</p> <p>Bottom: -- m/s</p>	<p>0.01 mg/m³ ppm</p> <p>Top: 0.2 m/s</p> <p>Middle: 0.1 m/s</p> <p>Bottom: Accumulating</p>	<p>0.01 mg/m³ ppm</p> <p>Top: 0.2 m/s</p> <p>Middle: 0.1 m/s</p> <p>Bottom: -- m/s</p>

	cigarette smoke	Present/Absent	Present/Absent	Present/Absent
Smoking rooms, etc.	<ul style="list-style-type: none"> • Average concentration of airborne dust • CO concentration 	<p>0.14 mg/m³</p> <p>1 ppm</p>	<p>0.15 mg/m³</p> <p>2 ppm</p>	<p>0.14 mg/m³</p> <p>1 ppm</p>
Non-smoking area(s)	<ul style="list-style-type: none"> • Average concentration of airborne dust • CO concentration 	<p>0.01 mg/m³</p> <p>1 ppm</p>	<p>0.01 mg/m³</p> <p>Less than 1 ppm</p>	<p>0.01 mg/m³</p> <p>1 ppm</p>

(Attachment 1)

Explanation of Guidelines for Anti-Smoking Measures in the Workplace

Regarding 1

One problem related to smoking in the workplace is passive smoking by non-smokers. From the perspectives of safeguarding employee health and creating a comfortable workplace environment, measures to deal with occupational health are necessary.

These guidelines set forth basic measures to be taken in order to prevent passive smoking in the workplace. In addition, to promote anti-smoking measures in the workplace, it is necessary to deal with this issue in terms of the actual conditions of each workplace. Already-published guidelines for measures to be taken by business operators in order to create a comfortable workplace environment are based on Article 71, Section 3, Paragraph 1 of the Occupational Health and Safety Act (Department of Labor Notice No. 59 of 1992; hereinafter "Comfortable Workplace Guidelines"). These current guidelines are based on the Comfortable Workplace Guidelines, and they explain the specific measures that should be taken in the workplace to avoid passive smoking, as one part of a plan to improve the air environment.

Methods for implementing appropriate anti-smoking measures in the workplace are: making a workplace entirely smoke-free, or instituting separate smoking areas. Among these, segregated smoking is defined as "establishing an area where smoking is permitted while all other areas are smoke free"; and to implement this policy, it is necessary to prevent the leakage of tobacco smoke and/or odor into non-smoking areas from smoking rooms, etc., and to maintain good air quality, to the extent possible.

Regarding 2

To make anti-smoking measures effective, management leaders and managers must possess an active interest in anti-smoking measures; employees must also be actively involved, and each group must fulfill its own separate role.

Regarding 3

The efforts of management leaders are essential when determining plans because they are the individuals within an organization who possess the authority and can take action.

Regarding 4

"Health committees, etc.," refers to a health committee or a health and safety committee; however, in workplaces where the establishment of health committees is not required, it refers to a venue in which workplace health-related items are discussed, such as labor-management meetings.

In addition, the departments responsible for anti-smoking measures will correspond to the departments in charge of general affairs and/or health management.

In addition, points that are to constitute standards of smoking behavior are as follows.

- ① Compliance with rules regarding smoking areas in smoking rooms, etc.
- ② Number of allowable smokers
- ③ Treatment of ash trays, chairs, tables, etc.
- ④ Treatment of cigarette butts

Regarding 5

Measures concerning facilities and equipment in order to promote effective segregated smoking are important, and basic measures regarding these are noted. A "smoking room" is an independent room used for smoking that has very few openings other than an entrance/exit. A "smoking corner" is an area where smoking is permitted, and which is separated by walls, partitions, etc., suspended from the ceiling. These areas reflect basic measures to prevent the spread of tobacco smoke from smoking rooms, etc., to non-smoking areas. However, from the perspective of more reliably preventing the leakage of tobacco smoke or odor, a smoking room is preferable to a smoking corner.

In addition, because air-cleaning devices cannot eliminate gaseous components, a recommendation was made for "anti-smoking equipment that discharges tobacco smoke outside before it spreads by using suction." This kind of equipment includes ventilation fans and local air exhausters. To prevent passive smoking by installing anti-smoking equipment such as these, it is necessary to select equipment that has the appropriate design and capacity suited to the room(s), as well as to actual smoking conditions.

If, as an unavoidable measure, tobacco smoke is eliminated within a room by using an air-cleaning device, it is necessary to take measures to ensure the same degree of effectiveness as is achieved by using anti-tobacco devices that utilize suction to discharge tobacco smoke outdoors before it disperses.

When installing devices, it is necessary ① to maintain air flow toward smoking rooms, etc., from non-smoking areas, ② to reduce the size, to the extent possible, of openings into non-smoking areas by using wall panels, partitions, etc., suspended from the ceiling, ③ to clarify the smoking area in smoking rooms, etc., and ④ to establish and indicate the maximum allowable number of smokers.

In the case that centrally-controlled air conditioning systems are installed in a building, and there is a certain degree of reverse air flow due to these systems, necessary measures will be required due to the fact that tobacco smoke from smoking rooms, etc., will be sucked into air vents and spread throughout the entire building.

It is necessary to prevent passive smoking by taking the following steps in individual rooms such as conference rooms.

(1) Conference Rooms and Reception Rooms

To make these non-smoking. In addition, to request the cooperation of outsiders regarding non-smoking.

(2) Cafeterias, Break rooms, Restrooms, etc.

To make these non-smoking. However, this shall not apply in the case that segregated smoking measures are taken in cafeterias, break rooms, and rest rooms, etc.

(3) Common use areas such as hallways and elevators shall be non-smoking.

Regarding 6

A variety of materials are contained in cigarette smoke but carbon monoxide and airborne dust are representative determinants of the impact of tobacco smoke on the air environment; therefore, these values shall be measured, and their standard [allowable] concentrations within the air environment have been noted. In addition, the determinant of tobacco smoke leakage shall be the wind speed of air flowing toward smoking rooms, etc., from non-smoking areas, and so this value shall be measured, and the standard wind speed has been noted.

Regarding 8

When a smoking room is installed, or in the period following the initiation of use of smoking rooms, etc., in addition to evaluating 1) the conditions of a smoking room, 2) compliance with standards of smoking behavior, and 3) the implementation status of machine maintenance, the departments which are responsible for anti-smoking measures must evaluate the efficacy of anti-smoking measures by determining whether criteria regarding 1) the concentration of airborne dust within smoking rooms, etc., 2) the concentration of airborne dust at the boundaries between smoking areas and smoking rooms, etc., 3) the concentration of carbon monoxide, 4) the wind speed of flowing air, are being satisfied.

In the case that the effects of anti-smoking measures are insufficient, the cause for this will be investigated and the measures will be studied by the departments, etc., responsible for anti-smoking measures, who should then make the recommendations necessary for improvement.

Regarding the Attachment

With regard to measuring the concentration of carbon monoxide, "equipment with capabilities equivalent to or greater than those with gas detecting tubes" refers to devices using electrochemical sensors and devices that function using chronoamperometry.