

## **Re: Fire fighting statistics**

### **1 Purpose of fire fighting statistics**

Fire fighting statistics are recorded for the purpose of developing all aspects of fire fighting measures and disaster prevention, as well as the prevention of fires and damage due to disasters expected in the future. This is achieved by recording and analyzing a variety of data on fire fighting and disaster prevention activities such as fires, emergency services, rescue services, fire prevention activities, etc.

### **2 A variety of fire fighting statistics**

#### **(1) Statistics recorded by the national government (Fire fighting white paper)**

- These statistics record and analyze a variety of data on fire fighting cases nationwide, and describe the current situation and challenges of various disasters including fires, the organization and activities of fire fighting and disaster prevention services, etc.

#### **(2) Statistics recorded by the Osaka prefectural government (Fire fighting statistics of Osaka prefecture)**

- These statistics summarize the circumstances of fires, the emergency and rescue services, etc. in local municipal areas in Osaka; in order to contribute to the promotion of administrative activities for fire fighting and disaster prevention in Osaka prefecture.
- Outline of the contents and items  
(Data 1)

#### **(3) Statistics recorded by the Osaka city office (Annual report on fire fighting services)**

- These statistics summarize the circumstances of fires, the emergency and rescue services, etc. in Osaka city areas; in order to contribute to the promotion of administrative activities for fire fighting and disaster prevention in Osaka city.
- Outline of the contents and items  
(Data 2)

### **3 Disaster reporting at the Osaka city office**

The most basic data in which the facts concerning disasters, their causes, response, etc. are recorded so that the data can be reflected in the design of future fire fighting measures.

#### **(1) Report on fire fighting services**

Reports should be made promptly on the damage details and any security measures taken, when fire fighting teams are dispatched.

##### **<Report items>**

Time and date the disaster occurred, Time and date of notification, Notification method, Type of fire or disaster, Distance and time to arrive at the disaster site, Start time of hosing, Time when the fire was brought under control, Place of the fire, Use of damaged building, Burn radius, Amount of damage, Details of damage caused by the fire, Rescue activities, Number of people injured or killed, Cause of fire, Weather conditions, Equipment used, Type and number of fire engines dispatched, Outline of fire fighting activities, Outline of the disaster, etc.

#### **(2) Report on the result of rescue activities**

A report should be filed on any rescue activities undertaken in the event of a disaster

##### **<Report items>**

Time and date the disaster occurred, Type of disaster, Date of notification, Names of rescue teams, Rescue methods, Time required to achieve rescue, Number of team members involved, Equipment used, Number of victims saved, Status of injured persons, Outline of the accident, Outline of rescue activities, etc.

#### **(3) Emergency activity record**

A report should be filed on any emergency activities undertaken.

##### **<Report items>**

Time of request, Time of dispatch, Time of arrival on site, Start time of observation, Start time of response, Time spent loading victims into the ambulance, Time of departure from site, Time of arrival at hospital, Condition of patient on arrival at the hospital, Condition of patient when seeing a doctor,

Degree of sickness or injury, Hospital department, Outline of the accident, Surrounding circumstances, First-aid administered on site, First-aid administered in the ambulance, etc.

(4) Survey report on the causes of fires

A report should be made on the details of all fires.

\* Definition of a fire

A fire occurs and expands without intent, or occurs due to arson. The fire becomes a combustion phenomenon which can only be extinguished by people using proper fire extinguishing or equivalent. The phenomenon occurs without intent, and may lead to an explosion if allowed to expand.

<Report items>

Actual conditions of combustion, Place where the fire started, Cause of the fire (Source of the fire, Sequence of events, Ignition point), Route of fire expansion, Cause of fire expansion, Actions taken by evacuees and victims at the fire site, Route of evacuation, Details of the rescue, Operating conditions of fire fighting equipment, etc.

**4 Actual application of statistics**

Basic data for fire fighting measures

<Examples>

Review of fire fighting activity guidelines, Review of fire fighting/rescue/emergency service methods, Review of fire fighting strategies, Review of fire fighting equipment and materials, Maintenance of fire fighting equipment and materials depending on frequency of use, Review of strategies/equipment and materials depending on local characteristics, Supply of fire engines etc. depending on local characteristics, Review of fire fighting equipment etc., Review of preventive measures, Public information for residents, etc.

## Statistics of the Osaka prefectural government

### No. 1 Definition of terms

Details of fires

Current situation of fire fighting

Prevention of fires

Emergency services

Rescue services

Financial affairs of fire fighting services

### No. 2 Details of fires

Details of fires in 2002

Overview of finding fires from the number of fires that occurred

Overview of damage due to fires

Statistical graphs and tables

Details of damage classified by month in Osaka prefecture

Details of damage in respective local municipal areas

Details of damage classified by the use of the building where fires started

Details of damage classified by time of occurrence

Details of damage classified by cause of fire

Number of fires classified by time of occurrence and cause of fire

Burned floor areas classified by the use of building

Amount of damage classified by the use of building

Number of fires in local municipal areas, classified by cause of fire

Number of fires in local municipal areas, classified by origin of fire

Number of fires classified by the use of the building where fire started and by origin of fire

Details of damage classified by weather conditions

Record of significant fires

Record of school fires

Details of forest fires

No. 3 Current situation of fire fighting

Organizational chart of fire departments in Osaka prefecture

Statistical graphs and tables

Overview of fire fighting services

Number of fire fighters and officers classified by position & number of fire fighters in local fire brigades

Number of fire engines etc. currently held (by fire fighting headquarters and local fire departments)

Number of fire engines etc. currently held (by local fire brigades)

Current situation of water use for fire fighting

Details of earthquake-proof reservoir installations

Fire information systems

Wireless communication systems (Fire fighting headquarters)

Wireless communication systems (Fire fighting brigades)

Self-defense force fire fighting capabilities

Current situation of voluntary anti-disaster organizations

Current situation of boys and girls' fire fighting clubs

Current situation of children's fire fighting clubs

Current situation of women's fire preventions clubs

#### No. 4 Fire prevention

List of objects for fire prevention

List of high-rise buildings

High-rise buildings (Top 10 buildings)

Details of the appointment of fire-prevention administrators, etc.

Seminars for obtaining qualifications of fire-prevention administrators

Details of the execution of fire-prevention standard conformity indication systems

List of facilities where dangerous materials etc. are produced

Result of the test for “specialist in handling dangerous objects” in 2002

Result of the test for “fire fighting equipment mechanic” in 2002

No. 5 Emergency services

Diagram of the details of emergency services performed in local municipal areas in Osaka prefecture

Details of emergency services performed in local municipal areas in Osaka prefecture

Details of emergency services in 2002

Statistical graphs and tables

Current situation of emergency service systems

Details of emergency activities in respective local municipal areas

Details of the number of transfer cases

The number of transfer cases and details of cause of transfer cases

Details of victims transported classified by type of accident and level of sickness or injury

Details of first-aid administered by rescue team members

Details of transportation services classified by length of hospitalization

Details of transportation services classified by name of hospital

Number of emergency medical technicians in local municipal areas of Osaka prefecture

Number of high-grade ambulances introduced in local municipal areas of Osaka prefecture

Table of the number of medical institutions based on the survey results

#### No. 6 Rescue services

Details of rescue services performed in local municipal areas of Osaka prefecture

Current situation of rescue service systems

Details of dispatches and activities for rescue services classified by type of accident

Details of victims saved classified by type of accident

Details of dispatches and activities for rescue services classified by place of accident

Details of victims saved classified by place of accident

#### No. 7 Disaster prevention measures

Management of the Osaka prefectural disaster prevention council etc.

Instructions for amendment of local municipal area disaster prevention schemes etc.

Conducting disaster prevention training etc.

Conducting of first-aid measures for disasters

Details of projects to raise awareness of anti-disaster measures

Current situation of local disaster prevention schemes

Current situation of the disaster prevention council



Current situation of disaster prevention and anti-earthquake training

Details of stockpiling warehouses (owned by individuals)

Details of stockpiling warehouses (leased)

Details of stockpiled relief supplies (owned by individuals)

Details of stockpiled relief supplies (secured under agreement)

Maintenance, management and operation of anti-disaster radio systems of administrative bodies

Annual report on disasters (1992 ~ 2002)

No. 8 Financial affairs of fire fighting services

Statistical graphs and tables

Breakdowns of annual expenditures for fire fighting services of local municipalities in 2002 (Initial budget)

Breakdowns of revenue sources for fire fighting services of local municipalities in 2002 (Initial budget)

Details of subsidies for upgrade of fire fighting facilities in local municipal areas

No. 9 Fire fighting education etc.

Profile of the Osaka prefectural fire fighting school

The 46th Osaka prefectural fire fighting conference

The 46th Osaka prefectural fire fighting conference on operational training

Commendations for fire fighting services

List of full-time fire fighting organizations

List of temporary fire fighting organizations

Statistics of the Osaka city office

Statistics

Statistics on prevention of disasters

Objects for fire prevention

Table 1 Current situation of objects for fire prevention  
(Controlled objects)

Table 2 Current situation of buildings of more than 4 stories  
(classified by fire department and the number of stories)

Table 3 Current situation of buildings of more than 4 stories  
(classified by the number of stories, fire department, and use)

Table 4 Current situation of objects for fire prevention which are higher than 31 meters  
(classified by item, fire department, and the number of stories)

Table 5 Overview of underground shopping malls

Table 6 Details of submissions of agendas on objects for common fire prevention  
management (classified by item)

Table 7 Details of objects for fire prevention according to Article 8 of the law  
(classified by item)

Table 8 Number of facilities manufacturing dangerous objects etc. classified by fire  
department

Table 9 Number of facilities manufacturing dangerous objects etc. classified by type and  
the quantity

Table 10 Number of facilities where outdoor tanks are installed classified by capacity and  
the type

## On-the-spot inspections

Table 11 Details of on-the-spot inspections for controlled objects

Table 12 Details of on-the-spot inspections for facilities manufacturing dangerous objects etc.

## Receipt of reports and applications

Table 13 Details of receipt of various reports and applications

## Statistics on fires

### Details of fires

Table 14 Details of fires that occurred in the past 5 years

Table 15 Details of fires classified by month and administrative area

Table 16 Details of fires classified by cause of fire (and by month and administrative area)

Table 17 Number of fires classified by month and administrative area

Table 18 Details of fires classified by cause of fire (and by time of occurrence)

Table 19 Details of fires classified by cause of fire (and by degree of damage)

Table 20 Details of fires classified by the use of the building (and by degree of damage)

Table 21 Details of fires classified by the use of the building (and by month and administrative area)

Table 22 Details of fires classified by the use of the building (and by the causes of fires)

Table 23 Details of fires classified by the use of the building (and by building structure)

Table 24 Details of fires classified by the use of the building (and by time of occurrence)

Table 25 Details of fires classified by the use of the building (and by the type of fire extinguisher used initially)

Table 26 Details of fires classified by date of occurrence

Table 27 Details of fires classified by the number of stories (and by degree of damage)

Table 28 Details of fires classified by weather conditions

Table 29 Details of fires classified by day of the week

Table 30 Details of fires classified by notification method

Table 31 Details of fires classified by time of occurrence

Table 32 Details of fires classified by amount of burned floor area  
(and by month and administration area)

Table 33 Details of fires classified by amount of damage  
(and by month and administration area)

Table 34 Details of fires classified by the number of families which suffer from the disaster  
(and by month and administration area)

Cause of fires

Table 35 Source and cause of fires

(Building fires)

Table 36 Source and cause of fires

(Car fires, ship fires, other fires)

Table 37 Source and progress of fires

(Electric heating elements)

Table 38 Source and progress of fires

(Tools and devices which use gases and oils as fuels)

Table 39 Source and progress of fires

(Tools and devices which use firewood, charcoal, coal (coke) as fuels)

Table 40 Source and progress of fires

(Kindling material (self-igniting material))

Table 41 Source and progress of fires

(High temperature solid bodies)

Table 42 Source and progress of fires

(Materials which ignite naturally or reignite easily)

Table 43 Source and progress of fires

(Dangerous objects)

Table 44 Details of fires that occurred due to arson (including those suspected of occurring due to arson) and playing with fire

Table 45 Cause of fires that occurred during deep-frying

Casualties due to fires

Table 46 Fatalities due to fires (in the past 5 years)

Table 47 Details of fatalities due to fires

Significant fires

Table 48 Significant fires

Fires that occurred in Osaka city since 1948 inclusive

Table 49 Details of fires that occurred since 1948 inclusive (1)

Details of fires that occurred since 1948 inclusive (2)

Statistics on security and anti-disaster activities

Fire fighting activities

Table 50 Details of fire fighting activities

Table 51 Details of equipment, materials and chemicals used in fire fighting activities

Table 52 Details of water use and hosing activities

Table 53 Details of troubles in fire fighting activities

Fire department activities other than fire fighting and emergency services

Table 54 Details of fire department activities other than fire fighting and emergency services

Table 55 Details of rescue activities

Table 56 Details of fire department activities other than fire fighting and emergency

services classified by method of notification

Table 57 Details of equipment, materials and chemicals used on a monthly basis in fire department activities other than fire fighting and emergency services

Details of collaboration with other cities

Table 58 Details of collaboration with other cities (Fire fighting)

Table 59 Details of collaboration with other cities (Fire department activities other than fire fighting and emergency services)

Statistics on emergency services

Emergency activities

Table 60 Details of emergency activities classified by type of accident

Table 61 Details of activities classified by months and name of team

Table 62 Number of dispatches & Number of victims saved classified by months

Table 63 Details of emergency activities classified by administrative area

Table 64 Number of dispatches & Number of victims saved; classified by weekday, holiday, and time of occurrence

Table 65 Number of dispatches classified by date

Table 66 Number of victims transported classified by gender and type of accident

Table 67 Details of emergency activities classified by place of emergency

Table 68 Number of emergency accidents classified by method of notification



Table 69 Number of victims transported classified by hospital department

Table 70 Number of first-aid treatments administered

Table 71 Number of victims transported classified by posture of victims during transportation

No. 72 Details of transportation of sick or injured people who required special protection

No. 73 Number of dispatches classified by type of activity

No. 74 Distance traveled & Time required by ambulance

No. 75 Details of collaboration with other municipalities

No. 76 Ranking of various items

No. 77 Details of emergency activities in each year

## Appendixes

History of the Osaka municipal fire department

Record of fires in Osaka (before 1947 inclusive)

Record of fires in Osaka (since 1948 inclusive)

Record of disasters in Osaka due to typhoons and heavy rain (since 1926 inclusive)

Record of disasters in the Kansai region due to earthquakes