

Report on the Occurrence of Industrial Accidents in FY2023 and Safety Activity Plan for FY2024

April 25 2024

Tokyo Electric Power Company Holdings, Inc.

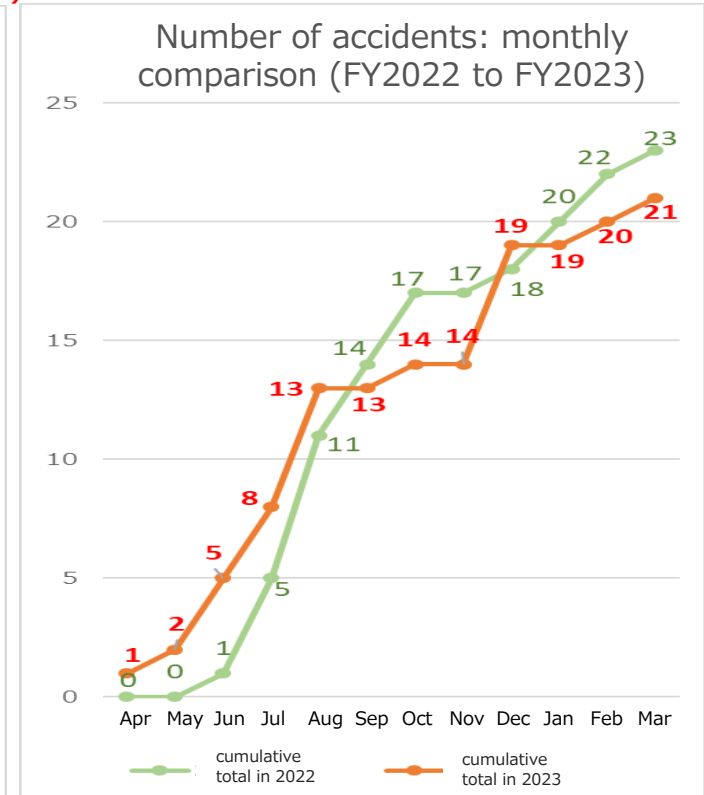
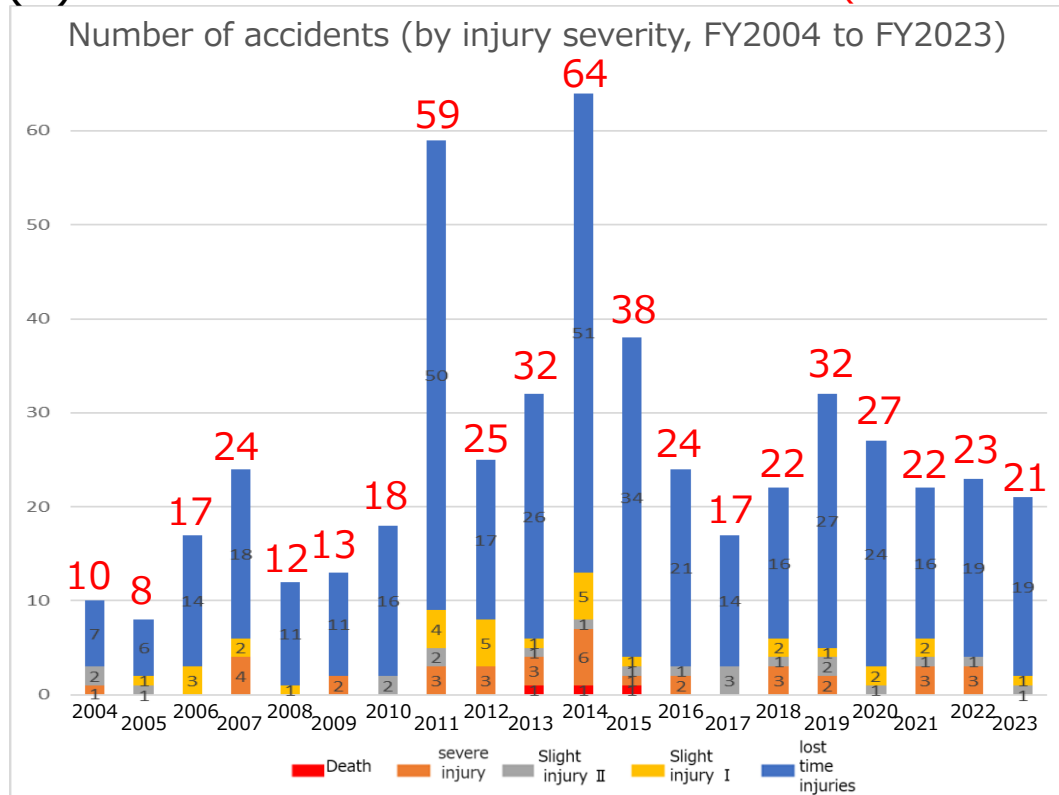
1. Safety Action Plan for FY2023 (Overall)

- With this plan as a guide, partners (contractors) and each group of departments of 1F formulated and implemented the FY2023 safety activity plan taking into account their own issues.

Classification	Action Plan	Status of efforts in FY2023	Implementation period	New/Continued
Measures for personnel	1. Activities to improve safety awareness	(1) Staff and workers should make a concerted effort to set a new record of continuous zero accidents and raise safety awareness (visualizing the record of continuous zero accidents and the number of accidents, sharing of accident cases and information, etc.) (2) Applications for and posting safety slogans and posting safety calendars (using digital signage) (3) Improving safety awareness through safety events (safety rally, etc.) (4) Conforming to safety rules with the use of the work safety handbook, etc. (5) Holding an accident prevention event, the 1F safety challenge (participated by employees and workers)	(1) Every day (2) Every month (3) Held as appropriate (4) Every day (5) Held as appropriate	[Continued] (1)(3)(4) [Reviewed] (2) [Added] (5)
	2. Improvement in safety management skills	(1) Of the education for work team leaders, the new curriculum of safety management should continue to be offered (for the VR-based dangerous experience, create and use the latest version of accident reconstruction CG) (2) Providing safety education for all workers and staff (promote safety-first activities every day) (3) Providing safety education in accepting new workers (use accident reconstruction CG for frequently occurring accidents)	(1) April to March (2) April to March (3) Held as appropriate	[Reviewed] (1)(2)(3)
Measures for activities	3. Activities to improve work environments	(1) Activities to remove hazardous areas (e.g., simultaneous 4S (Sort, Set in order, Shine, Standardize) activity, safety campaign activity, tool overhaul, directly managed activity to remove unsafe areas, and budgetary measure of the responsible group) (2) Improving work environments (Provide safety equipment and refrigerant freezers in accordance with the plans of rest areas and equipment changing places of companies)	(1) April to March (2) April to March	[Reviewed] (1) [Continued] (2)
Measures for management	4. Activities to improve hazard prediction	(1) Identifying hazards through on-site thorough observations based on on-site hazard prediction, that is, on-site actual check just before work. Measures determined in after-Work hazard prediction for next work (review) should be reflected in work procedures and a tool box meeting should be implemented from the next day. (2) Promoting hazard prediction before employees go to a work site (elimination of employee accidents)	(1) April to March (2) April to March	[Continued] (2) [Reviewed] (1)
	5. Elimination of hazardous areas and 5S activities	(1) Activities to eliminate unsafe places through safety patrols (2) Cross-sectional check and evaluation in prior safety evaluation (risk assessment)	(1) April to March (2) April to March	[Continued] (1)(2)
	6. Independent safety and communication activities	(1) Efforts to ensure safe behavior · Eliminating on-site risks thoroughly through a series of safety management including on-site hazard prediction and after-Work hazard prediction for next work. (2) Formulating safety activity plans specific to companies and groups (employees) (3) MO (management observation) activity (holding safety meetings; monitoring and supervision of safety in each group by high-level executives) (4) Efforts to implement safety activities in close cooperation between our company and original contractors · Between a director or senior staff of a partner (contractor) and the counterpart (responsible department) of our company, plan and roll out safety activities appropriate to the issues of each company with determination to prevent any fatal accidents. (5) Safety management and guidance and communication activities at work sites through self-inspection (6) Informing workers of safety information using the website (1 FOR ALL JAPAN).	(1) April to March (2) April to March (3) April to March (4) April to March (5) April to March (6) April to March	[Priority] (1) (4) [Reviewed] (1) [Continued] (2)(3)(4) (5)(6)
	7. Heatstroke prevention activities	(1) Strengthening measures for heatstroke prevention in the period from April to October (e.g., adherence to the rules for heatstroke prevention) (2) Preparing a heatstroke prevention plan for each original contractor and implementing heatstroke management for each type of work (3) Providing a new-refrigerant supply place in the rest areas of the information building in the west part of Units 1 and 2. (4) For workers (especially those who have a past medical history or a disease or condition) who work in the west part of Units 1 and 2, prepare Wi-Fi environments for using IoT wearable devices, watches, etc.	(1) April to October (2) Submission in April	[Continued] (1)(2)(3) [Added] (3)(4)

2. Situation of industrial accidents in FY2023 (1/5)

(1) Situation of industrial accidents (all accidents)



- Disasters in FY2023 were **2 fewer** than in FY2022 (**23 ⇒ 21**)
- There were **2 fewer** lost-time accidents in FY2023 than in FY2022. (**4 ⇒ 2**)
- **The incidence rate of lost-time accidents and more severe accidents in FY2023 was 0.15 (0.31 a year earlier), which was lower than the incidence rate of general contractors in 2022, or 1.47 (1.39 a year earlier)*.**

* Source: 2022 Survey on Industrial Accidents, by the Ministry of Health, Labour and Welfare in Japan

- Incidence rate: The value obtained by dividing the number of deaths and injuries due to industrial accidents by the total working hours and by multiplying it by 1 million.

* Degree of Injury: Classification by number of days of absence

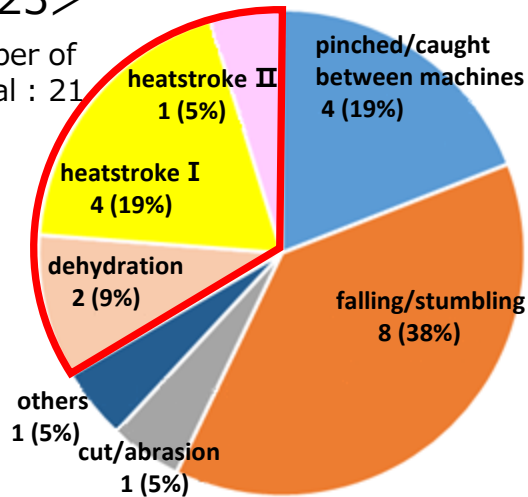
• severe injury: More than 14 days • Slight injury II: 4~13 days • Slight injury I: 1~3 days • Lost time injuries: no absences

2. Situation of industrial accidents in FY2023 (2/5)

(2) Status of injuries by category

<FY2023>

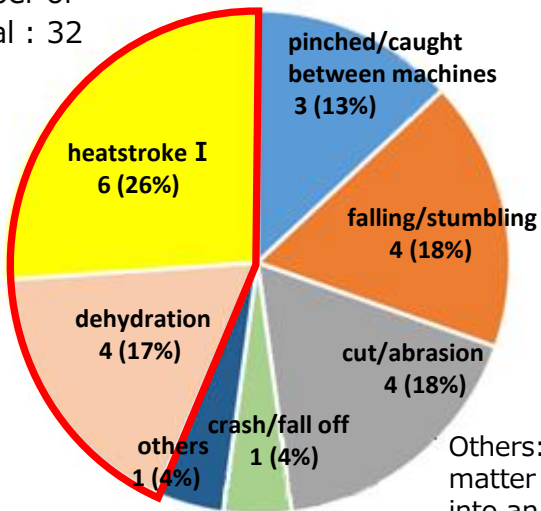
The number of cases total : 21



Others: A single pipe came into contact with an ear.

<FY2022>

The number of cases total : 32



Others: Foreign matter getting into an eye

<Trends of industrial accidents>

- In the industrial accidents in FY2023, the ratio of "falling/stumbling" has risen.

FY2023 8 cases (38%)

FY2022 4 cases (18%)

- Following this, "heatstroke and dehydration" accounts for a high percentage.

FY2023 7 cases (33%)

FY2022 10 cases (43%)

- The breakdown of the FY2023 industrial accidents by accident type is:

"falling /stumbling"

(Slight injury II :1 case , Lost time injuries:7 cases)

"pinched/caught between machines"

(Lost time injuries : 4 cases)

"cut/abrasion"

(Lost time injuries:1 case)

"heatstroke/dehydration"

(Slight injury I :1 case ,Lost time injuries:6 cases)

"others (coming into contact with a single pipe)"

(Lost time injuries:1 case)

<Status of heatstroke incidents>

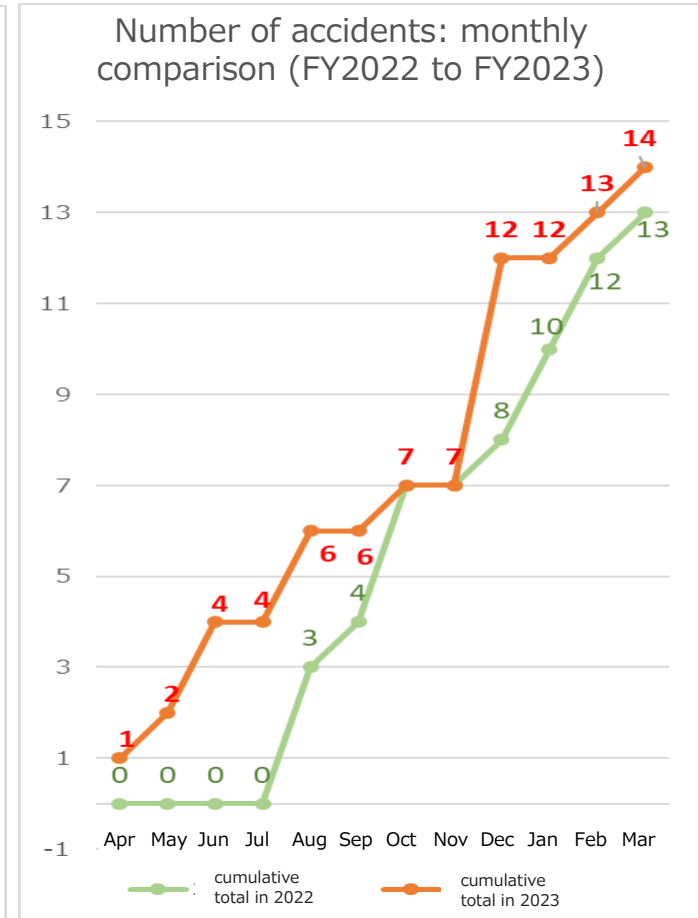
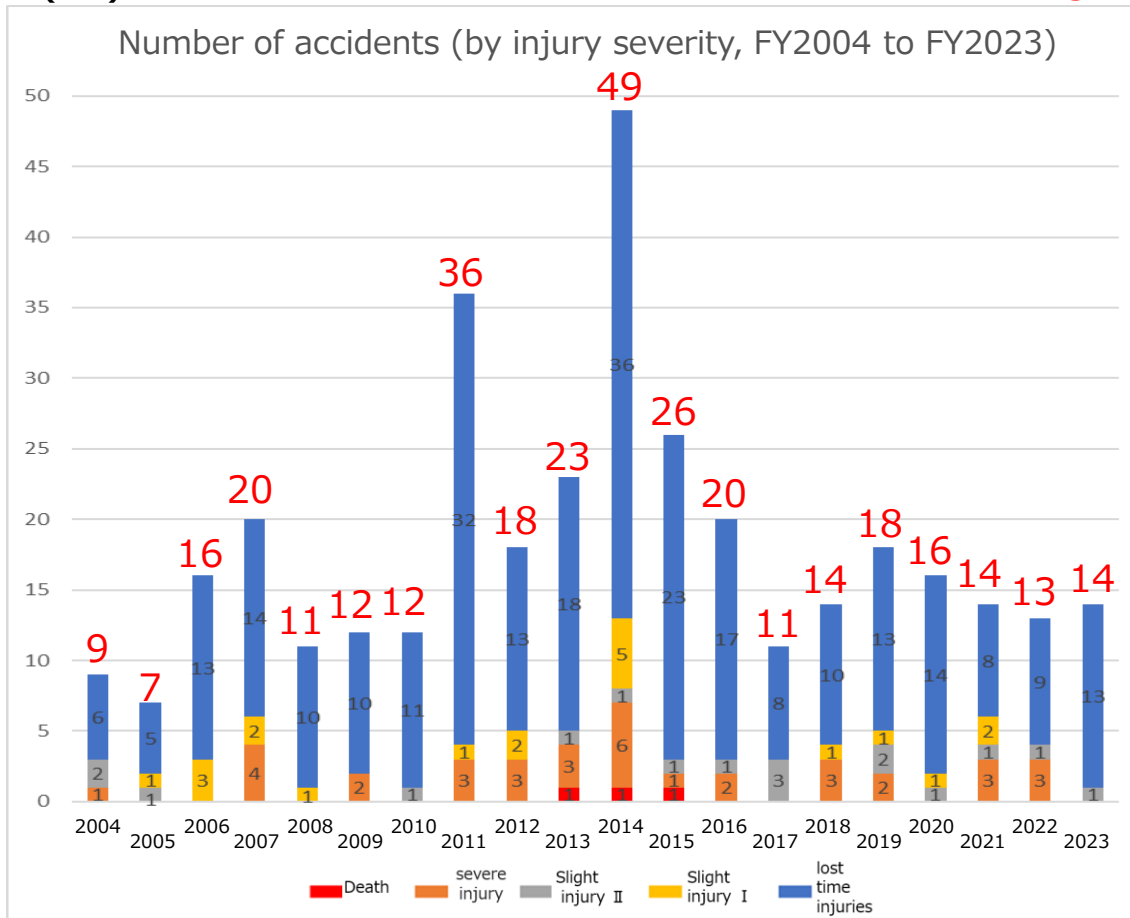
- There was 1 case with a diagnosis of Heatstroke II (In FY2020, 2021, and 2022, only Heatstroke I continued to occur)
- There was 1 incident of heatstroke with slight injury I (with an absence).

Reference: Heatstroke severity classification

- ◆Heatstroke I: Dizziness, faintness, muscle pains, and muscle rigidity
- ◆Heatstroke II: Headache, nausea, vomiting, lethargy, and despondency
- ◆Heatstroke III: Impairment of consciousness, convulsions, and limb movement disorder, in addition to symptoms of Class II

2. Situation of industrial accidents in FY2023 (3/5)

(2) Situation of industrial accidents (Excluding heatstroke)



- The number of industrial accidents (excluding heatstroke) in FY2023 is **14**, of which **1** is slight injury II and **13** are lost time injuries.
- The number of accidents (excluding heatstroke) in FY2023 increased from FY2022 by 1 (**13 cases** ⇒ **14 cases**).

<FY2022>	<FY2023>
13 cases	14 cases
Severe injury : 3 cases	Severe injury : 0 cases
Slight injury II : 1 case	Slight injury II : 1 case
Lost time injuries : 9 cases	Lost time injuries : 13 cases

•severe injury: More than 14 days •Slight injury II: 4~13 days •Slight injury I: 1~3 days •Lost time injuries: no absences

2. Situation of industrial accidents in FY2023 (4/5)

(3-1) Trends of industrial accidents (excluding heatstroke)

Note: Industrial accidents until the end of January 2024 were analyzed.

No.	Date of occurrence	Situation when an accident occurred	Type	Injury severity	Direct cause	Cause of accident (Managerial Physical Human)	state of work		Accident cause				
							Preparation / cleanup / moving	Repetitive work	Contractor	Worker (sufferer)			
									Unidentified risk	Insufficient measures	Failure to comply with work methods	Lack of understanding of tool use	Lack of safety awareness
1	3 Apr.	Near an intake channel of Unit 5, a worker injured his right leg as he stumbled over a step of an iron floor plate when walking to a working site.	Contract	Lost Time injuries	Step (iron floor plate)	(Managerial) A step of an iron floor plate was not subject to risk management as a hazard. (Physical) There was a step of an iron floor plate on a pedestrian passage. (Human) A step was not recognized as a hazard.	When moving	Repetitive	○	○			○
2	30 May.	A worker sprained his right leg at a step (about 5 cm) of an iron floor plate and fell over when he was walking on the top of the iron floor plate on a road on the north side of the building for treating marine organisms within the premises.	Contract	Lost Time injuries	Step (iron floor plate)	(Managerial) Pre-operation check (identifying risks) was not performed prior to operation. (Physical) There was a step of an iron floor plate on the road. (Human) A worker did not pay attention to a step when walking.	When moving		○	○			○
3	1 Jun.	Two workers carried single pipes to a temporary yard and then began placing them. When a worker was placing a single pipe, it got caught in something. As he pulled it backward, it hit the other worker in the ear, who was then injured.	Contract	Lost Time injuries	A single pipe	(Managerial) There was not a clear work procedure for carrying long objects. (Physical) The structure was such that as a single pipe was set, its end came into contact with a support. (Human) Risks in handling heavy objects were identified in a toolbox meeting and hazard prediction, so that risk identification was insufficient for cleanup operations.	Preparation / cleanup		○	○			○
4	12 Jun.	On the platform of a crane truck, a worker began unloading equipment for installing barricade partitions. As he pulled out a single pipe fixed with an iron band, his right little finger got caught between the pipe and a counterweight placed nearby, and then he was injured.	Contract	Lost Time injuries	Counterweight	(Managerial) Pre-operation check (identifying risks) was not performed prior to operation. (Physical) The location of a counterweight that can get in the way of work was not changed. (Human) The counterweight was not recognized as a hazard.	Preparation / cleanup		○	○			○
5	2 Aug.	As a worker surveyed the bodily contamination of workers entering a rest area in the administration building of Units 3 and 4 and then moved partitions for partitioning a decontamination area, he slipped due to sweat, etc. on the floor, and lost his balance, hitting his left hand on the handle of a measuring instrument, and he was then injured.	Contract	Lost Time injuries	Slippery floor	(Managerial) The risk of slipping due to sweat was not identified. (Physical) The floor surface was slippery due to sweat. (Human) The worker assumed that he would not slip and fall.	Main task	Repetitive	○	○			○
6	4 Aug.	When moving in a weir for water-resistant coating repair work inside the weir in the JS tank area, a worker stumbled over a temporary drain hose and fell over; then his right forehead came into contact with a joint bolt of a tube and coupler scaffolding, and he got a bruise.	Contract	Lost Time injuries	Temporary drain hose	(Managerial) Pre-operation check (identifying risks) was not performed prior to operation. (Physical) A hose was routed on an operation flow line on the floor, without a warning sign. (Human) The worker did not assume that he would stumble over a temporary drain hose.	When moving		○	○			○
7	30 Oct.	A worker got his left middle finger caught when he put a hand lifter, which had been used for a cleanup operation related to decontamination equipment, back in its original position and then restored the fork width to the state before use.	Contract	Lost Time injuries	Hand lifter	(Managerial) The handling of a hand lifter was not clarified in procedures. (Physical) The hand lifter had such a structure that hands were caught. (Human) The sufferer was engaged in work other than assigned.	Preparation / cleanup		○	○		○	○
8	4 Dec.	A worker engaged in pouring concrete around pipes injured his right ankle when he looked back on a flat concrete surface.	Contract	Lost Time injuries	Shoes	(Managerial) The worker assumed that there were no risks on concrete surfaces on the ground. (Physical) The sufferer, who is of a large build, wore long boots that don't fit. (Human) The worker often sprained his ankle.	Preparation / cleanup						○
9	5 Dec.	To return medical supplies that had been on the upper part of an X-ray room in an emergency room, a worker stood in sandals on two stacked stools, and put the supplies back in their original position. As he was about to step from the stools, the stacked stools slipped out of place, and he tried to support his body with his right hand but was caught on an upper corner in the X-ray room, and was injured.	Contract	Lost Time injuries	Stools (vertically stacked)	(Managerial) It was allowed to wear sandals in an emergency room. (Physical) A stepladder for taking an object from a high place was not provided. (Human) The worker stood in sandals on stacked stools and loaded and unloaded objects.	Preparation / cleanup		○	○	○		○
10	8 Dec.	As the sufferer was about to put his foot on a step to go down to the ground in order to guide a forklift to help it roll backward, he lost his balance and fell, hitting the right side of his head on the fender of a forklift nearby; then he was injured.	Contract	Lost Time injuries	Step	(Managerial) Platforms and steps were not managed as hazards. (Physical) The work environment was such that three-point support was not possible when workers went up and down. (Human) The sufferer was a veteran guide who had a long experience in this operation, which was a routine task such that there was carelessness arising from familiarity.	Preparation / cleanup	Repetitive	○	○			○
11	18 Dec.	As a worker walked with a hose to wash away washing bubbles on a washer in the washing area of the supply center of meals and then put his foot on a rail for containers, he slipped and fell, hitting his right knee on the rail; then he was injured.	Contract	Slight injury II	Slippery rail	(Managerial) There were no rules for moving between slippery rails. (Physical) The rail was slippery. (Human) The worker ran without watching his step when moving.	Main task	Repetitive	○	○			○
12	20 Dec.	A worker injured his left index finger when he cut a nylon rope with scissors in a waiting room of a company on the second floor of a base-isolated building.	Contract	Lost Time injuries	Scissors	(Managerial) Management was insufficient for the use of scissors (edge). (Physical) Scissors were used to cut a rope. (Human) Awareness of danger in using scissors was insufficient in daily operations.	Preparation / cleanup	Repetitive	○	○	○		○

《Trend of FY2023》

- Many industrial accidents occurred during preparation, cleanup, and moving (supplemental tasks).

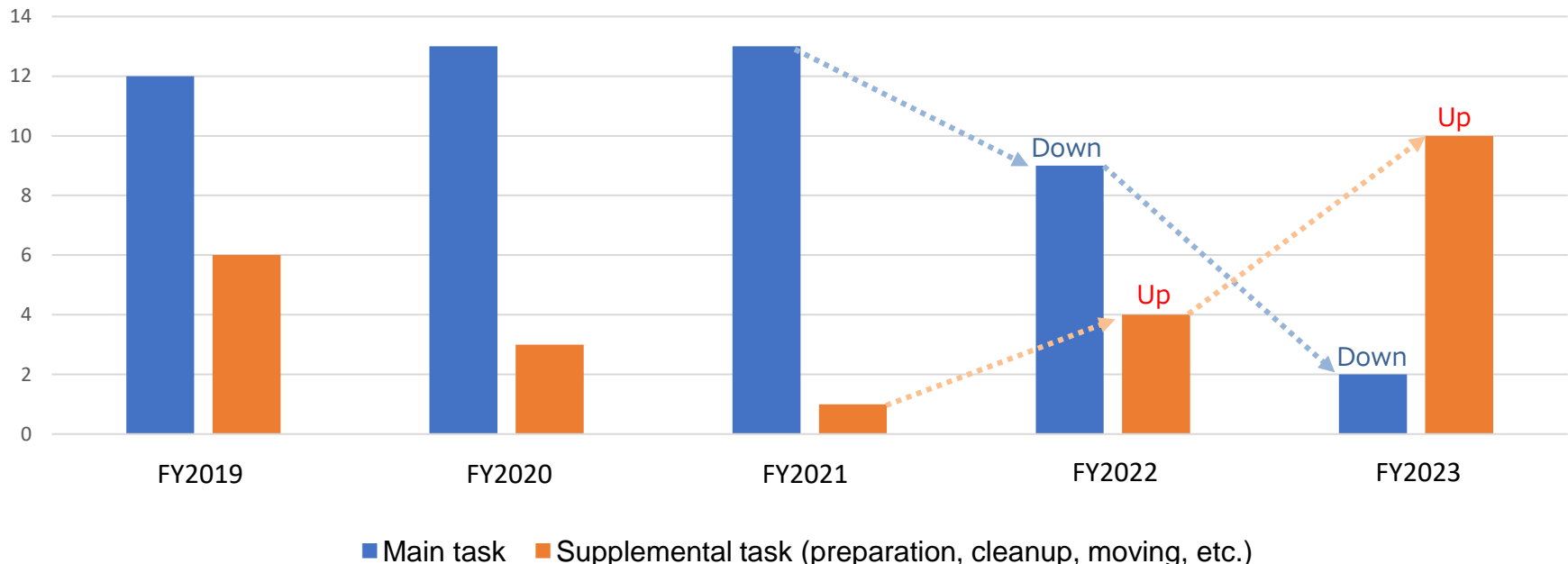
2. Situation of industrial accidents in FY2023 (5/5)

(3-2) Trends of causes of accidents (Excluding heatstroke) (in-depth analysis)

- Twelve industrial accidents (excluding heatstroke) can be grouped by task into: 2 main tasks and 10 supplemental tasks.
- Examining the trends of industrial accidents in the past five years revealed the following:
 - The number of industrial accidents during a main task has been on the decrease since FY2022 (favorable).
 - At the same time, the number of industrial accidents during preparation, cleanup, or moving (supplemental tasks) has been on the increase since FY2022 (problem).

Industrial accident work type (past 5 years)

Note: Industrial accidents until the end of January 2024 were analyzed



• Reference: Efforts to Ensure Safe Behavior were started from February 2022.

3. Reviewing safety activities in FY2023 (1/3)

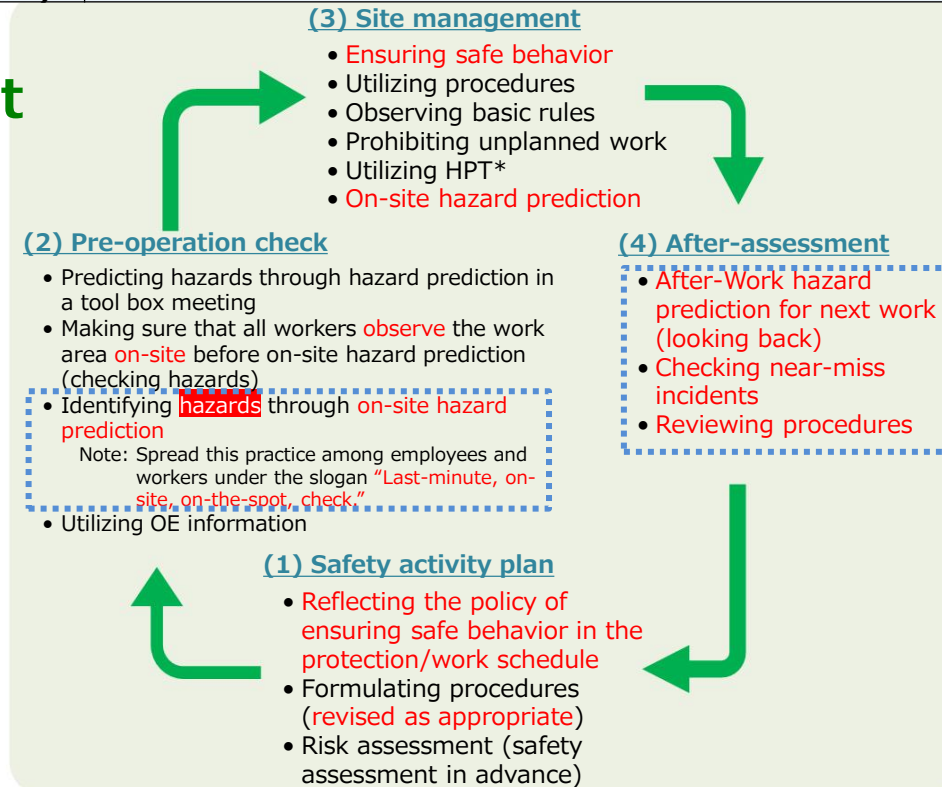
Note: Assessment
as of February 2024

<Results of FY2023 safety activities (partners)>

- The safety activities in FY2023 were quite good because the number of industrial accidents during a main task decreased significantly (9 ⇒ 2).
- We conducted a hearing with a number of contractors to have them list particularly effective safety measures.

Effective measures	(1) On-site hazard prediction	On-site hazard prediction before main tasks has become so firmly rooted that it has become possible to identify hazards and call for attention more appropriately.
	(2) After-Work hazard prediction for next (looking back)	<ul style="list-style-type: none"> • After-Work hazard prediction for next work has also become rooted, helping persons involved in work communicate with each other. • Workers were able to look back at their work (such as checking near-miss incidents, reviewing procedures, and checking the next day's work).

[Safety management cycle]



The blue-framed measures () were particularly effective in a main task.

• Written in red: Strengthened in the safety activities in FY2023

* HPT (Human Performance Tool)

3. Reviewing safety activities in FY2023 (2/3)

Note: Assessment
as of February 2024

<Problems with the safety activities in FY2023 (partners)>

- The number of industrial accidents during preparation, cleanup, or moving (supplemental tasks) has increased; we conducted a hearing with a number of contractors to identify its causes.

Reasons why there were many industrial accidents during preparation, cleanup, or moving		Background factors
Managerial factor	• Failure to give clear instructions using work procedures, etc.	<ul style="list-style-type: none"> • For supplemental tasks, it is difficult to set specific work procedures in advance. • Directions (work procedure, role sharing, etc.) from a manager are likely to be unclear. • It is also hard for managers to grasp workers' shortcuts and unplanned work.
	• It is unlikely to become a target of hazard prediction	<ul style="list-style-type: none"> • In hazard prediction in a toolbox meeting, on-site hazard prediction, and after-Work hazard prediction for next work, priority is given to main tasks because of time constraints, and there is not enough time to do hazard prediction for supplemental tasks (preparation, cleanup, moving).
	<ul style="list-style-type: none"> • Insufficient identification of risks • Stereotyped safety management 	<ul style="list-style-type: none"> • Procedures are so simple that safety measures are insufficient (work risks are not analyzed in depth). • Descriptions in work plans and protection instructions are always almost same. • Risks and measures found in hazard prediction are the same. • If a worker notices that something is wrong, he is not aware of the need to stop, so he continues his usual work.
Human factor	• Carelessness during light work	<ul style="list-style-type: none"> • A worker does not notice latent risks in light work or assumes that it is safe (lack of hazards sensitivity, overconfidence).
	• Carelessness and lower safety awareness during repetitive work	<ul style="list-style-type: none"> • For latent risks in daily accustomed work, there is carelessness or lower safety awareness (ex. Falling or stumbling in a working place where you walk every day).
	• Insufficient ability and experience of a manager	<ul style="list-style-type: none"> • Some leaders and workers lack skills and experience, and there are worries about work management, quality control, and safety management.
Physical factor	• Insufficient physical measures (wearing protective equipment, etc.)	<ul style="list-style-type: none"> • Directions for safety measures (using suitable tools, wearing protective equipment) from a person in charge of construction work are likely to be careless (ex. a worker does not wear wound protective gloves when using a cutter or scissors).

3. Reviewing safety activities in FY2023 (3/3)

Note: Assessment as of February 2024

(1) Trends of industrial accidents in FY2023

- We were able to **reduce industrial accidents during a main task** by promoting a series of safety management efforts: efforts to ensure safe behavior, on-site hazard prediction, and after-Work hazard prediction for next work.
- We were able to **continue zero incidents with severe injury*** by reducing industrial accidents during a main task.

(1-1) Reviewing safety activities in FY2023 (results of hearings with partners)

- A series of safety management efforts (efforts to ensure safe behavior, on-site hazard prediction, and after-Work hazard prediction for next work) in the priority activities were practiced by cooperative companies.
 - On-site hazard prediction: **On-site hazard prediction before main tasks has become so firmly rooted that it has become possible to identify hazards and call for attention more appropriately.**
 - After-Work hazard prediction for next work: **Workers were able to look back at their work, and persons involved in work were able to communicate with each other.**

* The number of industrial accidents with severe injury or more serious damage has continued to be zero since the accident "when moving on a tread of a crawler crane, a worker fell and was injured (March 13, 2023, severe injury)."

(2) Trends of industrial accidents in FY2023

- **The number of industrial accidents during preparation, cleanup, or moving (supplemental tasks) increased.**

(2-1) Reviewing safety activities in FY2023 (results of hearings with partners)

- Compared with main tasks of contract work, supplemental tasks such as preparation, cleanup, and moving still have problems with the implementation of a series of safety management efforts: efforts to ensure safe behavior, on-site hazard prediction, and after-Work hazard prediction for next work.
 - Major problems: **Insufficient instructions in work procedures, etc.; it is unlikely to become a target of hazard prediction; insufficient identification of risks; carelessness in light work and repetitive work and lower safety awareness; and others**

4. FY2024 safety activity policy and safety activity plan based on the results of reviewing FY2023 10

■ Policies of the FY2024 safety activity plan

- We can see the fruits of a series of safety management efforts including on-site hazard prediction and after-Work hazard prediction for next work in addition to the priority activity "efforts to ensure safe behavior." We will continue these efforts as the priority activity in FY2024 as well.
- Strengthen (improve, add) safety management on preparation/cleanup/moving (supplemental tasks), light work, and repetitive work.
- Through communications with persons involved in work, such as an on-site visit by our company and contractors, we will try to make sure that efforts to ensure safe behavior, and safe behavior of individual workers are more firmly established.



■ Incorporating the policies into the safety activity plan in FY2024

<Priority activity> (continue the activities in FY2023)

- 1. A series of safety management efforts including on-site hazard prediction and after-Work hazard prediction for next work in addition to efforts to ensure safe behavior**
- 2. Joint efforts for safety activities by partners and our company**

<Activity for enhancement (improvement, addition)>

1. Strengthen (improve, add) safety management on preparation/cleanup/moving, light work, and repetitive work.
 - Implementation item 1: Set measures suitable for your own organization, reflect them in the safety activity plan, and practice them.
 - Implementation item 2: Create a regular opportunity to share information and roll out good practices, etc.
2. Promote the establishment of safe behavior by on-site visits.
 - Implementation item 1: Set measures suitable for your own organization, reflect them in the safety activity plan, and practice them.
 - Implementation item 2: Review the operations of leader patrols and Safety Promotion Conference patrols.

5. Safety Action Plan for FY2024 (Overall)

■ With this plan as a guide, partners (contractors) and each group of departments of 1F should formulate and roll out the FY2024 safety activity plan that takes into account their own issues.

Red letter : Priority measures

Blue letter : Measures to be added or reviewed

Classification	Action Plan	Status of efforts in FY2024	Implementation period	New/Continued
Measures for personnel	1. Activities to improve safety awareness	(1) Staff and workers should make a concerted effort to set a new record of continuous zero accidents and raise safety awareness (visualizing the record of continuous zero accidents and the number of accidents, sharing of accident cases and information, etc.) (2) Applications for and posting safety slogans and posting safety calendars (using digital signage) (3) Improving safety awareness through safety events (safety rally, etc.) (4) Conforming to safety rules with the use of the work safety handbook, etc. (5) Holding an accident prevention event, the 1F safety challenge (participated by employees and workers)	(1) Every day (2) Every month (3) Held as appropriate (4) Every day (5) Held as appropriate	[Continued] ①②③④⑤
	2. Improvement in safety management skills	(1) Of the education for work team leaders, the new curriculum of safety management should continue to be offered (for the VR-based dangerous experience, create and use the latest version of accident reconstruction CG) (2) Determine the details of safety education to improve the hazard sensitivity of staff and workers, persons who provide safety education, targets, and the schedule in the safety activity plan, and carry out the safety education properly. (3) Providing safety education in accepting new workers (utilizing CG reproducing industrial accidents)	(1) April to March (2) April to March (3) Held as appropriate	[Continued] ①②③
Measures for activities	3. Activities to improve work environments	(1) Activities to remove hazardous areas (e.g., simultaneous 4S (Sort, Set in order, Shine, Standardize) activity, safety campaign activity, tool overhaul, directly managed activity to remove unsafe areas, and budgetary measure of the responsible group) (2) Improving work environments (Provide safety equipment and refrigerant freezers in accordance with the plans of rest areas and equipment changing places of companies)	(1) April to March (2) April to March (3) April to March	[priority] ② [Continued] ①③
Measures for management	4. Activities to improve hazard prediction	(1) Identify hazards by thorough on-site observation based on on-site prediction under the slogan "Last-minute, on-site, on-the-spot, check." Make sure that measures determined through after-Work hazard prediction for next work (review) are reflected in work procedures and toolbox meetings from the next day. (2) Encourage staff to perform hazard prediction before going to a work site (elimination of industrial accidents of employees)	(1) April to March (2) April to March	[priority] ① [Continued] ②
	5. Elimination of hazardous areas and 5S activities	(1) Activities to eliminate unsafe places through safety patrols (2) Cross-sectional check and evaluation in prior safety evaluation (risk assessment)	(1) April to March (2) April to March	[Continued] ①②
	6. Independent safety and communication activities	(1) Efforts to ensure safe behavior · Eliminating on-site risks thoroughly through a series of safety management including on-site hazard prediction and after-Work hazard prediction for next work. (2) Strengthen safety management on preparation/cleanup/moving (supplemental tasks), light work, and repetitive work. · Set measures suitable for your own organization, reflect them in the safety activity plan, and practice them. (3) Have each organization (staff, contractors) review the previous year, and incorporate appropriate measures into the safety activity plan (PDCA cycle) (4) Through communications with persons involved in work, such as an on-site visit by our company and contractors, make sure that efforts to ensure safe behavior, and safe behavior of individual workers are more firmly established. · Set measures suitable for your own organization, reflect them in the safety activity plan, and practice them. · Review the operations of leader patrols and Safety Promotion Conference patrols. · MO&C activity (behavior observation) (5) Efforts to implement safety activities in close cooperation between our company and original contractors · Between a director or senior staff of a partner (contractor) and the counterpart (responsible department) of our company, plan and roll out safety activities appropriate to the issues of each company with determination to prevent any fatal accidents. (6) Share information periodically and roll out good practices, etc.	(1) April to March (2) April to March (3) April to March (4) April to March (5) April to March (6) April to March	[Priority] ①⑤ [Reviewed] ②④⑥ [Continued] ③④
	7. Heatstroke prevention activities	(1) Strengthening measures for heatstroke prevention in the period from April to October (e.g., adherence to the rules for heatstroke prevention) (2) Preparing a heatstroke prevention plan for each original contractor and implementing heatstroke management for each type of work (3) Providing a new-refrigerant supply place in the rest areas of the information building in the west part of Units 1 and 2. (4) For workers (especially those who have a past medical history or a disease or condition) who work in the west part of Units 1 and 2, prepare Wi-Fi environments for using IoT wearable devices, watches, etc.	(1) April to October (2) April to October (3) Submission in April (4) From April	[Continued] ①③ [Reviewed] ②④

6. FY2023 Heatstroke Prevention Measures Action Plan

12

- We formulated the heatstroke prevention measures action plan and promoted preventive measures.

Heatstroke Prevention measures (From April to October)

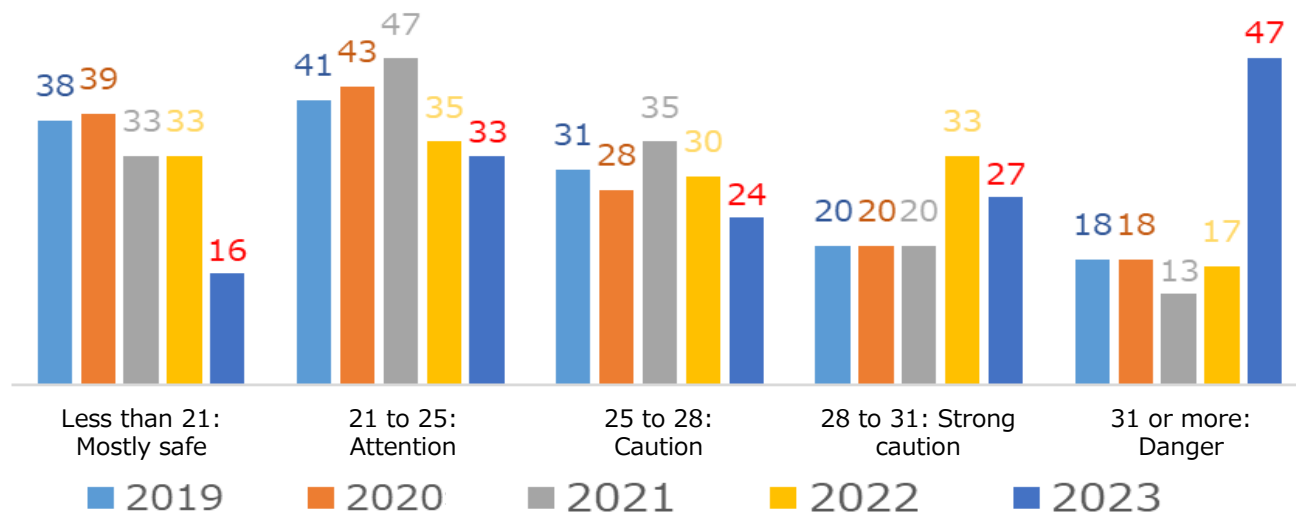
Red letter : reviewed portion of FY2023

Policy	Purpose	Measure (Action Plan)
Improve awareness of heatstroke (Education)	Implementation of heatstroke education	Implementation of heatstroke education for TEPCO staff/cooperative companies. Confirm the education contents for heatstroke prevention measures of cooperative companies
	Planning and Dissemination of heatstroke prevention measures	Call for wearing cool vests and ice packs (WBGT value 25°C or higher). Strengthen responses by the heatstroke prevention plan of each company (e.g., consideration to people with a past medical history and new workers, and strengthening full face mask management). Use a signage monitor to call attention to heatstroke, inform of periods when the temperature is rising, and call for acclimation to heat.
	Prevention of heatstroke and onset	Cool vest, new type ice pack (Yellow zone – overall clothes area, Green Zone – normal work clothes area), refrigerator deployment and management, air-conditioned clothes promotion. (Green zone), verification of IoT watches Place a large WBGT display. Operation of WBGT measuring devices and notification of predicted WBGT values Secure first aid and emergency transport operation in the emergency medical room (ER). Provide refrigerants for rest areas and equipment changing places and manage them.
Adequate heatstroke prevention in collaboration with original contractors	Implement the total heatstroke prevention rule	Daily guidance by managers for heatstroke (health condition management, water/salt intake, wearing ice packs etc.). Wear ice packs and regulate continuous work, in principle. ① WBGT value less than 25–28°C (warning): 2 hours or less. ② WBGT value less than 28–31°C (strict warning) light work: 2 hours or less. ③ WBGT value less than 28–31°C (strict warning) heavy work: 1 hour or less. ④ WBGT value 31°C or higher (dangerous) in principle, stop work (excluding work permitted by the responsible department). Health condition management before work by the managers of cooperative company (measure body temperature, blood pressure, alcohol checker). Health check results by the managers of cooperative company, medical history confirmation including heatstroke and consideration according to the situation. In principle, work is prohibited during the hottest hours July 1 – August 31 (14:00–17:00). Confirm and manage the WBGT values of each work area. Strengthening management ① For fully-masked workers, add a correction value of +1°C to the WBGT value. ② For workers at risk of heatstroke*, give consideration to safety measures and add a correction value of +1°C to the WBGT value during the period from the end of the rainy season to the end of September and under high temperatures (an environment where sweating is induced regardless of the season). * Workers who have a past medical history (heatstroke, diabetes, high blood pressure, etc.) and have no experience of working at 1F in the summer season (April to October a year earlier). Identify “workers who have no experience of summer work (April–October) in the 1F site,” and implement through measures against heatstroke prevention. Face-to-face health condition management before starting work. Check the weather forecast in advance (WBGT value, temperature change), and when the temperature change is high, have the workers take heatstroke prevention measures before starting work.
		Promote changing equipment with less physical load according to each zone. Use air-conditioning clothes and IoT watches
		Recommend the use of sunshades when working outdoors (implement specific safety measures for each work).
	Reduce physical load due to changes of work environment	Promote changing equipment with less physical load according to each zone. Use air-conditioning clothes and IoT watches Recommend the use of sunshades when working outdoors (implement specific safety measures for each work).

WBGT (Wet Bulb Globe Temperature) refers to a heat index that focuses on the exchange of heat (heat balance) between the human body and the outside air and takes into account three factors that have a significant influence on the heat balance of the human body: (1) humidity, (2) surrounding thermal environment such as solar radiation and radiant heat, and (3) temperature.

7. Status of WBGT Values in 2023

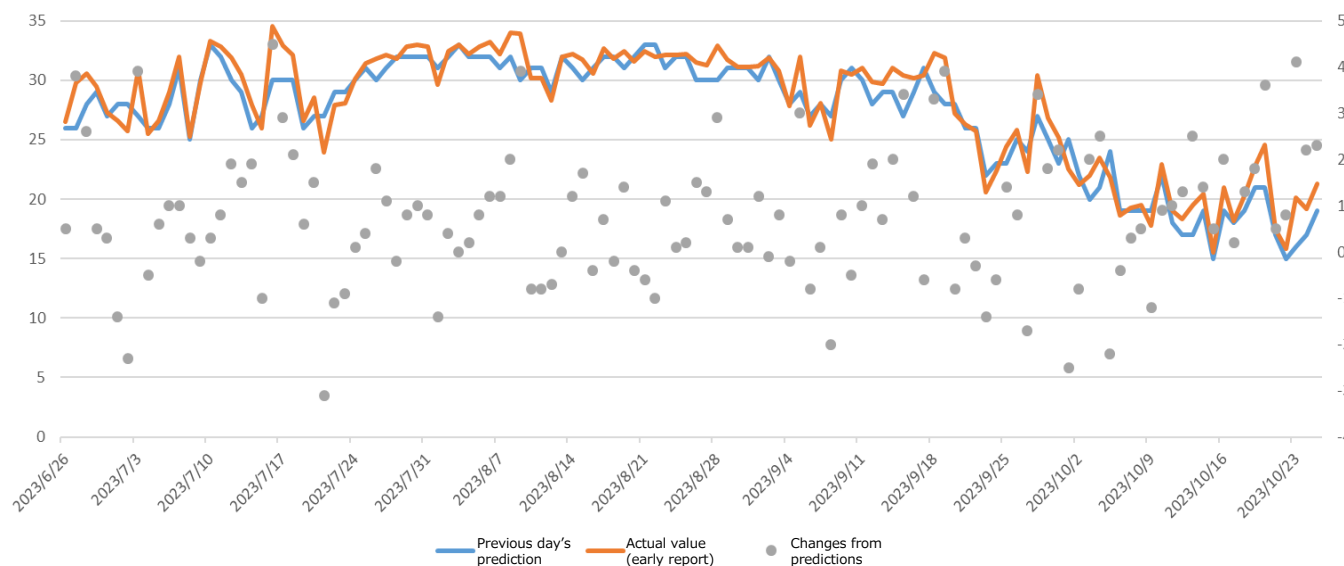
Changes in the number of days regarding maximum WBGT values at a point in Namie (June to October, year by year)



The summer of 2023 tended to be much hotter than usual

- The number of days with a temperature of less than 21°C decreased by half.
- The number of days with a temperature of less than 28°C also decreased.
- The number of days with a temperature of 31°C or more **increased rapidly by a factor of 2.5.**

Differences between actual and predicted WBGT values

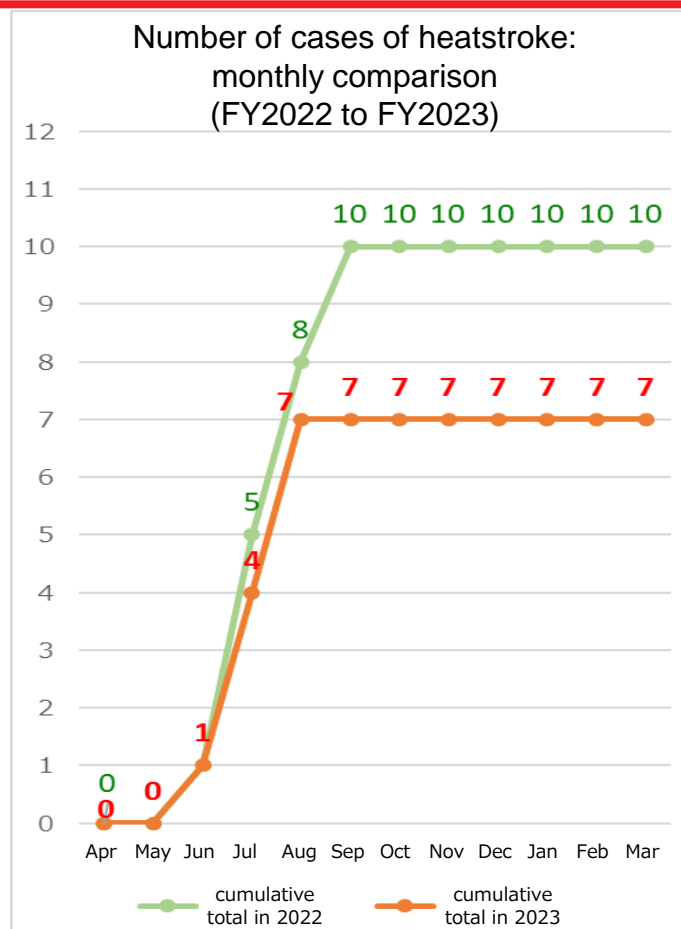
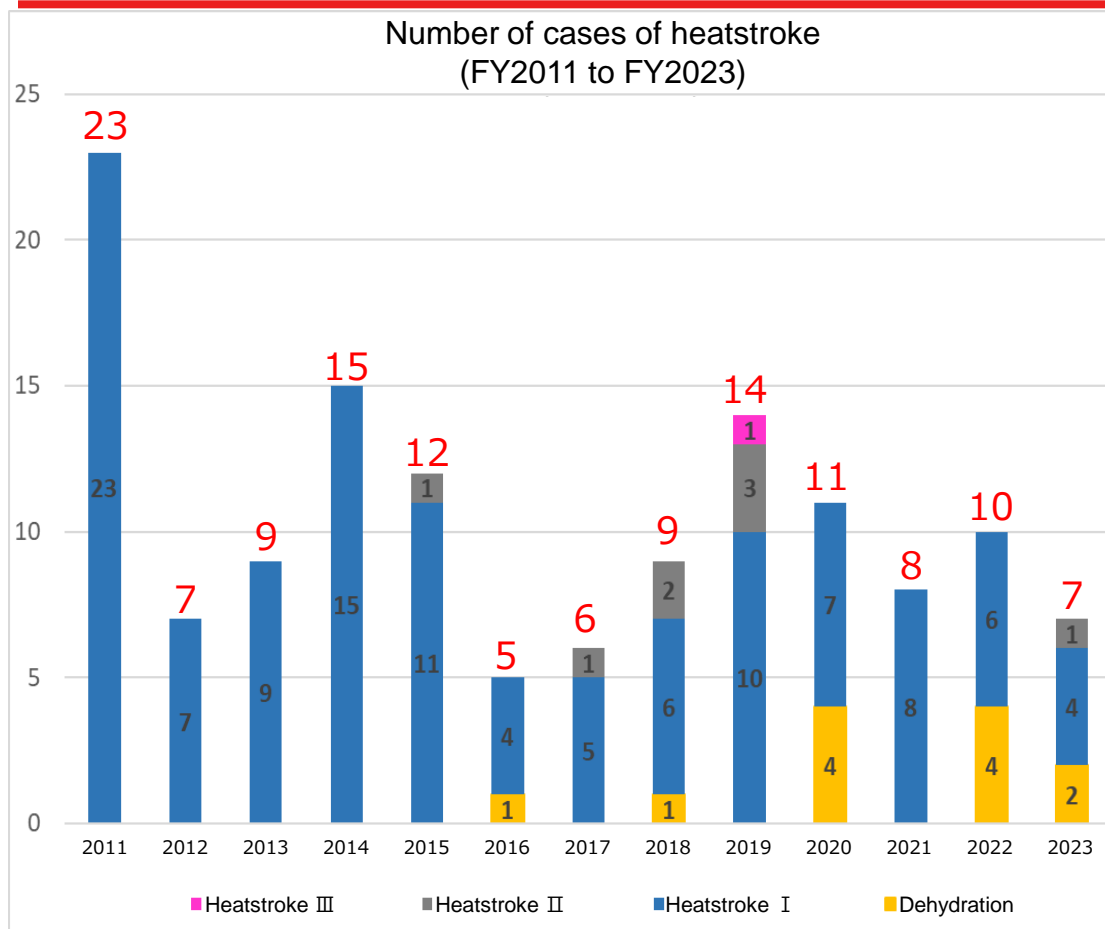


As for WBGT values in 2023, actual values exceeded the previous day's predictions in many days.

- Many of the changes from the previous day's predictions were within the range of -1°C to +2°C.
- For **about 70%** of the days, the actual value **was on the positive side.**

Note: Created from public data in the heat illness prevention information website of the Ministry of the Environment.

8. Situation at the onset of heatstroke in FY2023



- The number of cases of heatstroke (including dehydration) occurred in 1 case of heatstroke II, 4 cases of heatstroke I, and 2 cases of dehydration in FY2023.
- The number of cases of heatstroke (including dehydration) in FY2023 decreased from FY2022 by 3 (10 cases \Rightarrow 7 cases).

<FY2022>

10 cases

Heatstroke II : 0 cases

Heatstroke I : 6 cases

Dehydration : 4 cases

<FY2023>

7 cases

Heatstroke II : 1 case

Heatstroke I : 4 cases

Dehydration : 2 cases

Heatstroke severity classification

◆ Heatstroke I: Dizziness, faintness, muscle pains, and muscle rigidity

◆ Heatstroke II: Headache, nausea, vomiting, lethargy, and despondency

◆ Heatstroke III: Impairment of consciousness, convulsions, and limb movement disorder, in addition to symptoms of Class II

9. Trends of Heatstroke Incidents in FY2023

(As of the end of January 2024)

No.	Date of occurrence	Work description	Severity of instance	Diagnosis	WBGT value	Outfit	Work situation	Past history, chronic disease, no experience in 1F work in summer
						Mask	(Total working hours)	
1	27 June	A worker who was inspecting valves in a shared pool building felt ill.	No leave	Dehydration	28.5°C (after correction)	Full face mask	Indoor work (1 hours 30 minutes)	Not applicable
2	13 July	A worker who was engaged in frame assembly operations felt ill.	Slight injury I	Heatstroke I	30.0°C (after correction)	Full face mask	Outdoor work (1 hours 40 minutes)	Not applicable
3	18 July	A worker who was engaged in anchor bolt installation operations felt ill.	No leave	Heatstroke I	30.0°C (after correction)	Full face mask	Outdoor work (0 hours 50 minutes)	No experience in 1F work in summer
4	25 July	A worker who was engaged in sub-drain water collection operations felt ill.	No leave	Dehydration	27.2°C (after correction)	Full face mask	Outdoor work (2 hours 0 minutes)	Not applicable
5	8 Aug	A worker who was engaged in covering a cut section of a main exhaust duct in rubble demolition work felt ill.	No leave	Heatstroke I	27.2°C (after correction)	Full face mask	Outdoor work (2 hours 0 minutes)	Not applicable
6	17 Aug	A worker who was engaged in carrying equipment felt ill.	No leave	Heatstroke II	29.0°C (after correction)	Full face mask	Outdoor work (3 hours 30 minutes)	Not applicable
7	30 Aug	A worker who was engaged in pump assembly operations felt ill.	No leave	Heatstroke I	30.2°C (after correction)	Full face mask	Outdoor work (1 hours 30 minutes)	Not applicable

- Incidents occurred during work with a full-face mask put on (7 out of 7 cases).
- An incident often occurred during work where the WBGT value after correction is 28°C or more (5 out of 7 cases).
- As in FY2022, many incidents occurred within two hours from the start of work (4 out of 7 cases).
 - ⇒There were many cases where a worker felt ill during the first rest period and did not notice a change in physical condition during work.
 - ⇒The risk of heatstroke tends to be higher under the following conditions: with a full-face mask, 1.5 hours or more, and during the first operation.
- Heatstroke II and heatstroke causing an absence occurred (1 incident with Heatstroke II, 1 incident with slight injury).

10. Reviewing Heatstroke Prevention Measures Action Plan in FY2023

1. Good points

- We were able to reduce heatstroke incidents despite the hot summer (10 cases in FY2022 ⇒ 7 cases in FY2023).
- There were zero incidents of heatstroke and dehydration in general zones and G-equipped zones.
- There was a decrease in heatstroke incidents during a heat acclimation period prepared.
- Among those with a chronic disease or medical history and those with no experience of working at 1F during summer, the number of heatstroke incidents decreased to one.
- Heatstroke incidents were not concentrated on specific companies.

2. Problems (major requests from partners [questionnaire results])

- Request 1: Additional rest areas
 - Providing rest areas and toilets near working areas around Units 1 to 4
 - Supplying sports drinks and salt tablets to places lacking them.
- Request 2: Speeding up response to a failed air conditioner in a rest area and avoiding work under a power failure
 - There were rest areas where a failure was not fixed for a long period.
- Request 3: It is desirable to determine WBGT values (including correction values) that serve as criteria for suspending work at 1F during a hot weather period.
 - Work was performed after determining the criteria for suspending work through discussions between our responsible groups and partners.
- Request 4: Reconsidering construction periods
 - It is preferable that work such as facility inspection is conducted during periods other than the summer season.

3. Evaluation of heatstroke prevention measures

- It was quite good that in the summer of record hot weather in FY2023, there was no increase in heatstroke incidents from FY2022, and there were zero incidents of heatstroke with aggravated conditions and zero incidents among workers with a medical history or chronic disease.
- In FY2024, we will realize partners' requests (problems) regarding our measures against heatstroke.

11. FY2024 Heatstroke Prevention Measures Action Plan

1. Priority activities of heatstroke prevention measures

(Implementation: Our company and partners)

- Set the first rest early because many incidents occurred within two hours from the start of work.
- Give enough thought to how to take rests, etc. because many workers suffered heatstroke when working with a full mask.
- For each work, determine and implement criteria for suspending the work after discussion between our responsible department and companies.

2. Improvement of working environments (Implementation: Our company)

- Provision of water trucks, etc. (addition)
 - Deployment of water trucks and toilets: Three places (near Units 1 to 4 and others)
- Provision at rest areas (continuation)
 - Basically, deploy a water supply system (water, sports drinks) and salt tablets.
- Preparedness for failure of air conditioners (improvement)
 - Take measures such as purchasing spares and securing repairers so that early repair is possible.

3. Provision of information related to heatstroke prevention measures

(Implementation: Our company)

- Provision of information by digital signage (improvement)
 - Provision of information such as weather forecasts and WBGT predictions
 - Additional installation place: One place (before the PP gate of the access control building)
- Provision of WBGT predictions on the internal common bulletin board (intranet) (continuation).

4. Efforts to reduce severe cases (Implementation: Our company and partners)

- Continue to encourage workers to make an early visit to an emergency room (ER) (continuation).