

# From National Consumer Affairs Center of Japan Vol.26No.5 January 2015

\*For further details regarding each topic introduced below, refer to the following URL which contains the actual text of the reports released (PDF files) (Japanese only) :http://www.kokusen.go.jp/news/news.html

#### -NCAC information for consumer-

# I. Injury/fatal accident

P1 1. Beware products that use button batteries: Infants and toddlers who swallow batteries are at risk of chemical burns http://www.kokusen.go.jp/pdf/n-20141030 1.pdf

P5 2. Beware "bumping" when heating foods http://www.kokusen.go.jp/pdf/n-20141204\_1.pdf

# II. Property damage

 Have you ever found yourself in trouble after paying with a credit card, e-money or the like? Beware businesses that exploit cashless payment <a href="http://www.kokusen.go.jp/pdf/n-20141118\_1.pdf">http://www.kokusen.go.jp/pdf/n-20141118\_1.pdf</a>

P10 2. Overview of consumer inquiries regarding Consumer Contract Act http://www.kokusen.go.jp/pdf/n-20141127 1.pdf

\* Major abbreviated names: ADR: Alternative Dispute Resolution

NCAC: National Consumer Affairs Center of Japan

PIO-NET: Practical Living Information Online Network System

# I. Injury/fatal accident

1. <u>Beware products that use button batteries: Infants and toddlers who swallow batteries are at risk of chemical burns</u>

# Purpose of Product Testing

Button batteries<sup>(1)</sup> are used in a wide range of household products, including remote controls, kitchen timers, thermometers, and toys.

Since April 2009, PIO-NET has received reports of three incidents<sup>(2)</sup> involving infants who swallowed, or nearly swallowed, a button battery (data registered through the end of September 2014). All of the affected children were less than one year old, and one of the accidents was so severe it required two months of hospitalization.

Between December 2010 and the end of March 2014, the Medical Facilities Network<sup>(3)</sup> received reports of 51 incidents involving children who swallowed button batteries; if suspected cases of battery swallowing are included,



the total number of incidents reported is 93. While the majority of children (50 incidents) were under three years of age, a very high number of incidents involved children less than one year old (38 incidents, or 76%) and some involved products other than toys.

With respect to children's toys, the Japan Toy Association's Toy Safety Standard (ST Standard) state that "button battery covers must be constructed in such a way that they will not open easily without the use of tools." Toys bearing the ST Mark have been shown to maintain a certain degree of safety. Regarding other kinds of products, JIS C8513:2010 "Safety of primary lithium batteries" recommends that "primary lithium battery compartments be constructed in such a way that children cannot easily remove batteries." The Battery Association of Japan further asks that devices be designed with safety in mind by constructing the covers to battery compartments in such a way that small children cannot easily open them. It is just a recommendation, however, and not part of the actual standards.

Accordingly, we decided to investigate the construction of battery compartment covers ("battery covers") in "products in the home that use button batteries" and issue this consumer alert to prevent further button battery injuries as a result of accidental swallowing.

- (1) As defined by JIS C8500:2013 "Primary batteries General," button batteries are small round-shaped batteries with an overall height (thickness) that is less than their diameter. In addition to the term button battery, this report also uses the terms button-type (nominal voltage 1.5V) and coin-type (nominal voltage 3V and other). See "Hazards of Button Batteries" below.
- (2) Incidents reported since April 2009 and registered through September 30, 2014. The number of incidents reflects cases specifically researched for this report.
- (3) The Medical Facilities Network began in December 2010 as a joint initiative by the Consumer Affairs Agency and NCAC. It collects information from patients who have used medical facilities following accidents that caused life-threatening and/or bodily injury as a result of consumer activities.

### The Hazards of Button Batteries

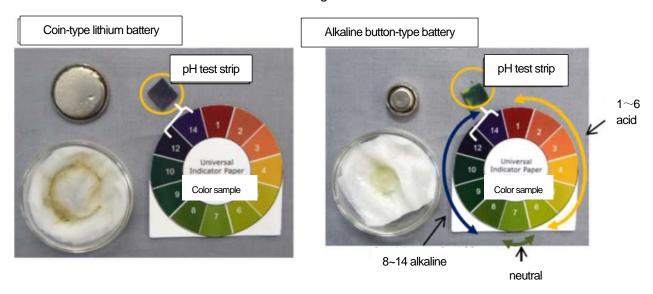
Button batteries are wider than they are thick and fall into one of two types, coin-type or button-type, depending on their shape. Coin-type batteries, which are thinner than button-type batteries and have a larger diameter (around 2cm), bear a strong resemblance to coins. Moreover, the lithium batteries often used in coin-type batteries have a higher discharge voltage (3V compared to button-types, which are 1.5V) and they maintain a consistent voltage until the battery is dead.



Photo 1. Button battery appearance (example)

When a button battery is swallowed and electrical current flows from the battery to the digestive tract, an alkaline liquid is created on the outside surface (negative side) through electrolysis. Because it is capable of dissolving proteins, this alkaline liquid can cause damage to the wall of the digestive tract in a short time. In tests using a saline solution with equal salinity as bodily fluids, it took just one minute for the pH level<sup>(4)</sup> at the point of contact with the battery to exceed 12, a highly alkaline state (Photo 2).

Photo 2. Alkaline solution resulting from button batteries<sup>(5)</sup>



In a test in which a button battery was placed on top of chicken meat, an indentation the shape of the battery was discernible after twenty minutes (Photo 3).

Photo 3. Reconstruction of chemical burn using chicken meat<sup>(6)</sup>

Coin-type lithium battery

Before test

After 20 minutes

After 20 minutes

Because of the high alkalinity, the digestive track can become ulcerated and holes open up if the battery is not removed quickly. The risk is even higher with coin-type lithium batteries in particular, not only because they have a higher electrical discharge but also because their broad, flat shape makes it easier for them to become lodged, for instance, in the esophagus.

Smaller than the coin-type, button-type batteries were even implicated in a case in which a child inserted a battery into his nose and ended up swallowing it. The same alkaline fluid resulted and caused serious tissue damage. (7)

- (4) pH levels are measured on a scale of 0-14, with 7 being "neutral," 1-6 "acid," and 8-14 "alkaline." The pH of the saline solution used in the test was 7 (neutral).
- (5) The button battery was placed negative side down on a tissue moistened with the saline solution. After one minute, a pH test strip was applied to the part of the tissue that had been in contact with the negative side of the battery and its change in color was observed (round orange area).



- (6) The button battery was placed negative side down on a piece of chicken breast meat that had been marinated in the saline solution for twenty-four hours. After twenty minutes at room temperature (25°C), damage to the meat was observed when the battery was removed.
- (7) Citation: Kawame, Hakuhisa, Hiraide, and Funasaka, "CASE REPORT OF MICRO-ALKALINE BUTTON BATTERY FOREIGN BODY IN THE NASAL CAVITY," Jibiinkoka tenbo (Oto-rhino-laryngology, Tokyo), Vol. 39 (1996), No. 3: 273-277.

# Examples of accidents reported to PIO-NET and Medical Facilities Network

Case 1:

He was playing with the electrical remote control that had been on top of the living room TV stand(40cm). Later I noticed that the remote's batteries were missing. He may have swallowed them, but I was not looking at the time. Confirmed that the button battery was in his throat. Removed under x-ray. (One-year-old boy)

# Brands Subjected to Testing

We chose movable products used primarily in the living room, etc. that use button batteries (e.g. thermometers, kitchen timers, thermo-hygrometers, table-top clocks, calculators, lamps, appliance remote-controls, etc.).<sup>(8)</sup>

(8) We chose mainly brands with battery covers that are constructed in such a way that they can be opened without the use of tools, etc.



Photo 4. Brands Subjected to Testing (Exterior)

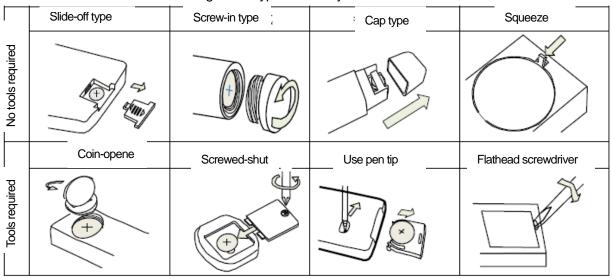
# **Test Results**

(1) Battery cover construction

While some products were constructed in such a way that a screwdriver or other tool had to be used to open the battery cover, there were others from which the batteries could be removed without any such tools.



Diagram 1. Types of battery covers



# (2) Drop test

In our drop test, in which products were dropped onto a hard floor, battery covers opened and batteries fell out in the case of four brands dropped from a height of 30cm and five brands dropped from a height of 138cm.

# (3) Warning labels about accidental swallowing, etc.

Roughly 70% of all brands had warning labels about accidental swallowing, etc. None, however, had warning labels about the hazards associated with accidental swallowing, such as the possibility that accidentally swallowed batteries can cause chemical burns.

# Video

Low-resolution video

http://www.kokusen.go.jp/douga/20141030\_1\_news/n-20141030\_1\_low.html

High-resolution video

http://www.kokusen.go.jp/douga/20141030\_1\_news/n-20141030\_1\_high.html

# Advice for Consumers

- 1. Some products that use button batteries had batteries that could be removed without the use of tools, etc. Homes with infants and toddlers should take care when using and storing them.
- 2. If a child should happen to swallow a battery, consult a doctor immediately.

# Beware "bumping" when heating foods

# Product Testing Background

When heating beverages and the like, a phenomenon called "bumping" can occur in which the liquid comes to a rapid boil, causing its contents to spew out.

In September 2003, NCAC published "To use a microwave oven safely" to provide consumers with information on incidents of bumping that could occur when liquids are boiled using a microwave oven.



Since then, however, reports of bumping-related "harmful and hazardous incident data" are still continually received. PIO-NET has received 68 reports of bumping-related "harmful and hazardous incident data" since April 2009, (10) while the Medical Facilities Network has received two reports of burns as a result of bumping since December 2010 (data received through the end of September 2014).

In addition to bumping accidents involving microwave ovens, accidents have also occurred with gas burners, as well as with induction cooktops (not yet prevalent in 2003).

Accordingly, we decided to provide consumers with information by performing tests to re-create "bumping" when heating foods using gas burners and IH cooktops in addition to microwave ovens.

- (9) "To use a microwave oven safely" (published September 2003) http://www.kokusen.go.jp/test/data/s\_test/n-20030905\_1.html
- (10) Incidents reported since April 2009 and registered through September 30, 2014. The number of incidents reflects cases of bumping, etc. involving food that were specifically researched for this report based on bumping-related inquiries on PIO-NET.

# What is "bumping"?

If the food being heated is a liquid, there is a chance that bumping may occur. When heating such foods, bumping can occur regardless of the cooking device (microwave oven, gas burner, IH cooktop, etc.). Yet bumping does not always occur; it only occurs when a combination of factors (type of food, dish, pot, cooking device, heating time, etc.) coincide.

When a liquid is heated to its boiling point (in the case of water, 100°C), it first begins to bubble and then churn with increasing force. This phenomenon is called "boiling." On rare occasions, a liquid will reach its boiling point but not start to churn. This is called superheating. When the superheated liquid is then disturbed (e.g. by jostling it or adding seasonings), it suddenly boils in an explosive fashion and spews its contents. This phenomenon is called "bumping."

When beverages like coffee and soy milk are heated rapidly, they can exceed their boiling point and become superheated if there are no nucleation points to generate bubbles (e.g. scratches on the surface of the container, small solids in the liquid, etc.). In such cases, superheating will occur when the liquid is jostled, has seasonings added to it, or is otherwise disturbed in some way.

With foods like miso soup and other thick liquids, variations in temperature can exist within a pot because of poor convection. As a result, areas of cooler temperature can prevent hotter areas from boiling, sometimes causing bumping to occur.

# Sample Cases of Inquiries & Complaints

"Harmful and hazardous incident data" from PIO-NET (68 incidents) and data from the Medical Facilities Network (2 incidents) were specifically researched for this report to calculate the total number of incidents per cooking device using our own categorizations. There was a total of 30 incidents reported for microwave ovens, 14 incidents for gas burners, and 11 incidents for IH cooktops.

With respect to the foods that were being prepared using these cooking devices, coffee and soy milk were common in incidents involving microwave ovens, while boiling water and miso soup were common in incidents involving gas burners and IH cooktops.

#### Case 1:

I heated soy milk in my microwave oven. Once it started to boil, I removed it from the oven. A few moments later, as I looked over the top, the milk exploded into my face and burned me. The right side of my face and the iris in my right eye were injured. The area around my right eye suffered second-degree burns.

(Women in her 20s)

#### Case 2:

I was reheating a pot of miso soup I had made, when suddenly an exploding sound came from the soup and the pot flew off the stove. (Women in her 60s)



# **Test Results**

# (1) Bumping in the case of microwave ovens

1. Bumping occurred when coffee and soy milk were overheated in a microwave oven.

Photo 1. Bumping when coffee is heated in a microwave oven

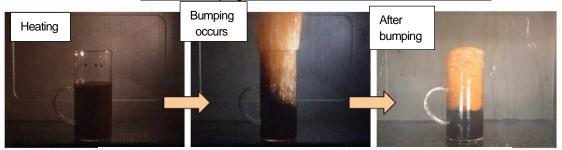


Photo 2. Bumping when sov milk is heated in a microwave oven

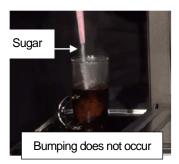


2. Bumping was less likely to occur when overheated coffee was let to cool for one minute in a microwave oven.

Photo 3. When removed immediately after heating



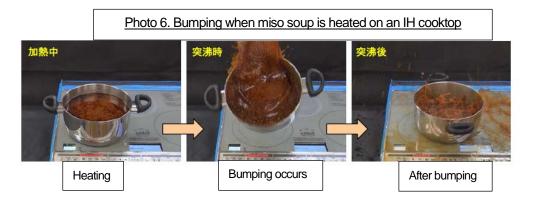
Photo 4. When removed after cooling for one minute in a microwave oven



# (2) Bumping in the case of gas burners and IH cooktops

1. Bumping occurred when miso soup was reheated on a gas burner.

2. Bumping similarly occurred when miso soup was reheated on an IH cooktop.



3. Bumping did not occur if the miso soup was stirred while being reheated.

Video

Low-resolution video

http://www.kokusen.go.jp/douga/20141204\_1\_news/n-20141204\_1\_low.html

High-resolution video

http://www.kokusen.go.jp/douga/20141204\_1\_news/n-20141204\_1\_high.html

# Advice for Consumers

- 1. When heating beverages in a microwave oven, take care not to overheat them.
- 2. To avoid bumping if you accidentally overheat a beverage in the microwave, let it cool untouched in the oven for one to two minutes after the microwave has stopped.
- 3. When reheating liquids on a gas burner or IH cooktop, use low heat and stir the liquid.

# II. Property damage

1. <u>Have you ever found yourself in trouble after paying with a credit card, e-money or the like?</u> Beware businesses that exploit cashless payment

# Overview of Inquiries

Forms of cashless payment have grown in recent years as more and more places have begun accepting credit cards, forms of e-money such as prepaid cards, and the like. Because these forms of payment make it convenient and efficient to quickly purchase things, even online, without the use of cash, the National Consumer Affairs Center of Japan and local consumer centers nationwide have received reports of consumers facing new kinds of trouble, such as dubious businesses that cause consumers trouble using various payment schemes, as well as unscrupulous businesses seeking to wrongfully obtain prepaid cards, etc.



With the Tokyo 2020 Olympic and Paralympic Games set to be held in Tokyo and a greater number of foreign visitors expected to visit Japan, the reach of Japan's "cashless society" will only continue to grow. Yet it would be fair to say that consumers do not adequately understand these rapidly growing, if convenient forms of payment.

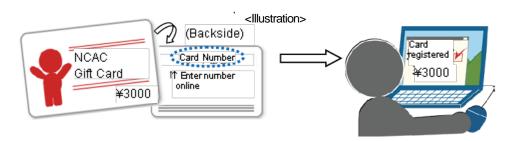
Accordingly, we have decided to present recent cases and call on consumers to exercise caution.

# About Recent Prepaid Cards

Prepaid cards allow consumers to "charge" (add credit) their cards to add "value" to them so they can be used to pay for products and services. Because no pre-screening is required, many such cards have no names and can be used by anyone, which is why some can even be given to others as gifts.

In recent years, a growing number of prepaid cards are "server-type" cards that allow prepaid card companies to store and manage the charged value on a card. Such cards make it possible for consumers to make purchases using just their card number, even if they do not have the actual card with them. There are also prepaid cards with international brand names<sup>(11)</sup> that can be used widely in stores, as well as electronic gift certificates issued with just a number that enables consumers to make purchases using just their email address.

(11) Companies such as VISA, MasterCard and JCB that offer global payment systems.



# Sample Cases of Inquiries & Complaints

(1) Trouble involving unscrupulous businesses seeking to wrongfully obtain prepaid cards, etc. Case 1:

As directed, I made my payment at a convenience store but the e-money was credited to the other party.

(Women in her 50s)

# Case 2:

As directed, I used my credit card to purchase an e-gift certificate that got sent to the business.

(Women in her 20s)

# (2) Other trouble involving unscrupulous businesses making use of various payment schemes Case 3:

A product I purchased using a credit card was a counterfeit so I requested a return but I got no response.

(Man in his 30s)

#### Case 4:

I bought an informational product with a money-back guarantee, but didn't earn the kind of money in the advertisement. (Man in his 40s)

#### Case 5:

I was billed on my mobile phone company's bill for a pair of brand name sneakers that I bought but the shoes were counterfeit.

(Man in his 30s)



# Advice for Consumers

- 1. Be sure you fully understand the instructions and amount before executing a payment.
- 2. Never give a business your prepaid card number verbally, over email, etc. or add credit to a card number, even if directed.
- 3. If you get in trouble after telling someone your prepaid card number or crediting a card number as directed, contact the prepaid card company immediately.
- 4. In case of trouble or concern, consult your nearest local consumer center or other agency immediately.

# 2. Overview of consumer inquiries regarding Consumer Contract Act

Local consumer centers across Japan have received numerous inquiries regarding product and service agreements between businesses and consumers and are engaged in activities at local centers to help consumers get relief for such damages in accordance with laws, etc. In particular, the Consumer Contract Act ("the Act"), which applies to consumer contracts of all kinds and makes it possible for consumers to get relief after they have suffered damages as the result of unfair solicitation or unfair contract provisions by a business, is being used as an effective means of resolving consumer contract-related trouble.

NCAC has analyzed consumer inquiries regarding the Act to summarize illustrations and trends regarding unfair solicitation and unfair contract provisions by businesses. (12)

(12) See Table 2 Act-related illegal activities.

# Overview of Inquiries

The following table summarizes the number of consumer inquiries regarding the Act ("Unfair solicitation," in relation to Article 4, and "Unfair contract provisions," in relation to Articles 8-10) for the previous three years with illustrative examples (Table 1).

## (1) Unfair solicitation (in relation to Article 4)

The table shows representative examples of sales tactics, etc. for inquiries included under "Sales methods." "False explanations," "Inadequate explanation," and "Side-business schemes" under "Misleading consumer solicitations" include primarily cases in which there were problems with a business's sales pitch. "Concealed purpose of sale," "Free-offer schemes," "Inspection schemes," and "Identity theft" are primarily tactics to lure consumers into a sales pitch by misleading them. "Aggressive consumer solicitations" has a growing number of inquiries related to "pressure/intimidation."

#### (2) Unfair contract provisions (in relation to Articles 8-10)

The table shows inquiries related to unfair provisions for inquiries included under "Contracting/cancellation."



Table 1. Overview of consumer inquiries regarding the Act*										
Year Total number of all inquiries			FY2011 883.890		2012 860,497		2013 939.043		Notes	
Number of "Sales methods"-related inquiries			401,669		407,255		471,779			
Number of "Contracting/cancellation"- related inquiries			619,996	(70.1%)	607,117	(70.6%)	663,038	(70.6%)		
									stactics covered by the Consumer Contract Act,	
		including misrepreser False explanations	30,452		32,589		41,437		Inquiries regarding misunderstanding as a result of false explanations, etc. Does not include incidents involving other specific tactics, even if false explanations were made. Excludes inquiries regarding false or improper billing.	
		Inadequate explanation	37,383	(9.3%)	38,392	(9.4%)	41,005	(8.7%)	Inquiries regarding misunderstanding caused by inadequate explanation during a solicitation Includes inadequate explanation when processing claims.	
		Side-business schemes	8,564	(2.1%)	8,263	(2.0%)	7,804	(1.7%)	Inquiries regarding misunderstanding as a result of sales tactics offering a "side business," "freedom from employment," and the like.	
		Concealed purpose of sale	11,844	(2.9%)	11,978	(2.9%)	12,766	(2.7%)	Inquiries regarding misunderstanding as a result of a concealed purpose of sale. Includes "appointment sales" schemes.	
		Free-offer schemes	27,728	(6.9%)	25,559	(6.3%)	29,542	(6.3%)	Inquiries regarding misunderstanding as a result of tactics that offer "free services," "free invitations," "free trials," or other "free" items.	
Unfair solicitation (Article 4)	ive sales tactics, etc.	Inspection schemes	5,000	(1.2%)	5,299	(1.3%)	6,074	(1.3%)	Inquiries regarding misunderstanding as a result of tactics that involve businesses that "perform an inspection" and say, for instance, "water quality is problem," "futon has bed bugs," etc., when it is not true.	
		Identity theft	4,985		6,172		11,210		Inquiries regarding misunderstanding as a result of tactics that lead consumers to believe the seller is the employee or affiliate of a public institution or recognized company.	
nfair sc	Representative	(2) Aggressive consumer solicitations: Inquiries regarding issues related to sales tactics covered by the Consumer Contract Act, including refusing to leave and preventing a consumer from leaving.								
j	Repri	Pressure/intimidation	53,921	(13.4%)	60,960	(15.0%)	68,515	(14.5%)	Inquiries regarding aggressive tactics such as pressure and intimidation. Includes claims processing-related actions, etc., as well as telephone solicitations. Excludes inquiries regarding false or improper billing.	
		Protracted solicitations	3,988	(1.0%)	3,831	(0.9%)	3,673	(0.8%)	Inquiries regarding aggressive tactics such as protracted solicitations. Includes telephone solicitations.	
		Nighttime solicitations	1,873		1,739	(0.4%)	1,760	(0.4%)	Inquiries regarding aggressive tactics such as nighttime solicitations. Includes telephone solicitations.	
		` ' ' '			•	U			methods that are arguably considered t Consumer Contract Act.	
		Secondary damages	16,879		14,631		12,126		Tactic in which a person who previously suffered damages is solicited again and suffers secondary damages.	
		Repeated sales	9,160	(2.3%)	8,722	(2.1%)	8,670	(1.8%)	Tactic in which a person is lured into a string of new contracts. Inquiries regarding consumers who could not refuse solicitors and purchased products they did not need.	
		Contracts with persons who have impaired judgment	7,644	(1.9%)	8,717	(2.1%)	10,252	(2.2%)	Inquiries regarding issues related to contracts involving persons who are unable to exercise due judgment for some reason. Inquiries related to so-called "principle of appropriateness."	
Unfair contract provisions (Articles 8-10)	Description of related inquiries	Cancellation fees	26,298	(4.2%)	28,959	(4.8%)	30,657	(4.6%)	General inquiries regarding cancellation fees, including inquiries regarding provisions that charge unfair compensation for damages because of contract cancellation.	
		Late fees	5,993	(1.0%)	6,420	(1.1%)	6,035	(0.9%)	General inquiries regarding compensation (late fees, late damages, late interest, etc.) as a result of late debt repayment, including inquiries regarding provisions that charge unfair compensation for late payments.	
		Security deposits, etc.	17,540	(2.8%)	16,364	(2.7%)	16,510	(2.5%)	General inquiries regarding advance money (earnest money, deposit, key money, down payment, etc.) given to a creditor, etc. by a borrower when entering a property lease contract, including inquiries regarding provisions that impose unfair restoration charges on consumers.	



- \* Figures in parentheses are percentages (%). "Sales methods"-related inquiries and "Contracting/cancellation"-related inquiries are percentages of all inquiries. "Unfair solicitation" (in relation to Article 4) are percentages of "Sales methods"-related inquiries. "Unfair contract provisions" (in relation to Articles 8-10) are percentages of "Contracting/cancellation"-related inquiries.
- \* Shows "representative sales tactics" for inquiries regarding "sales methods" for unfair solicitation (in relation to Article 4), and "description of (unfair provisions) related inquiries" for inquiries regarding "contracting/cancellation" for unfair contract provisions (in relation to Articles 8-10).
- \* Entries for "sales methods"/"contracting/cancellation" and "representative sales tactics"/"description of related inquiries" are all multiple answer.
- \* Entries for unfair solicitation (in relation to Article 4) and unfair contract provisions (in relation to Articles 8-10) include inquiries subject to the Consumer Contract Act, but not all entries are subject to the Act.
- \* Data registered to PIO-NET (Practical Living Information Online Network System) through the last day of September 2014.

Table 2. Examples of unfair practices under the Consumer Contract Act

Table 2. Examples of unfair practices under the Consumer Contract Act							
	Types	s of unfair practices	Concrete examples of unfair solicitation practices and unfair contract provisions				
	standing	(1) Misrepresentations (Article 4.1.1)	Claiming that "consumers who install this device will reduce their phone bills," but the device sold offers no such benefits				
ctices	Misunder	(2) Conclusive evaluations (Article 4.1.2)	Selling unsecured financial products with a statement that "they are guaranteed to increase in value"				
Unfair solicitation practices	. (1)	(3) Failure to disclose disadvantageous facts (Article 4.2)	Selling a condominium knowing there are plans to construct an adjoining building that will obstruct views/light while failing to disclose the construction plans and explaining the condominium has "good views/light"				
Unfail	. •	(4) Refusing to leave (Article 4.3.1)	Soliciting at a consumer's residence, etc. for an extended period of time, even after being asked to leave by the consumer				
	Categories Distress	(5) Preventing a consumer from leaving (Article 4.3.2)	Soliciting at a place of business, etc. for an extended period of time, even after the consumer has expressed a desire to leave				
Use of unfair contract provisions		Provisions that exempt a siness from liability for damages (Article 8)	Provisions that exempt a business from all liability for damages regardless of the reason				
	p	Provisions that stipulate a enalty to be paid by a consumer (Article 9)	Provisions that state no money will be returned for payment already paid in the event of cancellation by the consumer				
	ir	Provisions that impair the nterests of consumers nilaterally (Article 10)	Provisions that impose too heavy obligations of restoration on the lessee in a lease contract				

