



Mechanism of earthquake insurance and reinsurance

Earthquake insurance is to be entered into as an optional rider to fire insurance* which covers buildings for residential use and/or movables for living. No one can buy earthquake insurance alone. When you conclude a fire insurance contract without earthquake insurance, you are required to put your seal in the earthquake insurance check column of a fire insurance contract application form.

Suppose that you have entered into a fire insurance contract without earthquake insurance, and you will be able to buy earthquake insurance while your fire insurance contract is valid. In the event that a warning statement is issued, you may not be able to buy earthquake insurance in some area.

*For detail, see p.38 Glossary.

Insurance Coverage

Loss of or damage to the buildings for residential use and/or movables for living by fire, destruction, burial or being washed-away caused directly or indirectly by any earthquake or volcanic eruption, or resulting tsunami (referred, hereinafter, to as earthquake and so on).

Fire insurance does not cover

1. any of losses caused by fire (spread thereof, and expanded loss) resulting from earthquake and so on, and
 2. any of fires spread and expanded due to earthquake and so on.
- Earthquake insurance is needed to compensate these kinds of loss.

Insurable interests

Buildings for residential use and/or movables for living

None of the following is insurable:

A building used as a plant or office, and not used for dwelling purposes, noble metal, gemstones

or antiques valued at ¥300,000 or higher per piece, currency, securities (checks, share certificates, gift certificates), deposits certificates, revenue stamps, postal stamps, automobiles and some others.

Term insured

Short-term, 1 year, and long-term (2 - 5 years)

Amount insured

The policyholder is required to set the amount insured of earthquake insurance within a scope of 30 - 50% of that of his/her fire insurance. Pro-

vided, however, that the amount insured is limited to a maximum of ¥50 million for a building and ¥10 million for movables for living.

Fire insurance

Ordinary fire insurance, long-term comprehensive insurance, deposit life comprehensive insurance, dwelling fire insurance, householders' comprehensive insurance, storekeepers' comprehensive insurance and some others.

The amount insured of a comparted-ownership building such as apartment building is limited to ¥50 million, totaling exclusively possessed parts and jointly owned parts by comparted-owners.

Payment of insurance claims

Insurance claims will be paid according to the policyholder's earthquake insurance to cover total, half or partial loss of his/her residential building and/or movables for living.

Insurable objects	Degree of loss	Amount of insurance claim paid
Residential buildings, movables for living	Total loss	100% of amount insured (up to the current price* of the insurable objects)
	Half loss	50% of amount insured (up to 50% of the current price of the insurable objects)
	Partial loss	5% of amount insured (up to 5% of the current price of the insurable objects)

Authorization criteria of losses

Total loss, half loss or partial loss is applicable to any the following cases

Degree of loss	Residential building		Movables for living
	Amount of loss of major structural parts	Area of floor burnt down or washed away (partial loss applies when the residential building is flooded above the floor level)	Degree of loss of or damage to the movables for living
Total loss	50% or higher of the current price of the residential building	70% or higher of the total floor area of the residential building	80% or higher of the current price of the movables for living
Half loss	20% or higher to less than 50% of the current price of the residential building	20% or higher to less than 70% of the total floor area of the residential building	30% or higher to less than 80% of the current price of the movables for living
Partial loss	3% or higher to less than 20% of the current price of the residential building	The residential building was damaged but not totally or half lost although it was flooded above the floor level or above 45 cm or higher from the ground level.	10% or higher to less than 30% of the current price of the movables for living

Cases when no insurance claim is payable:

- Loss or damage due to willful acts or gross negligence or violation of law
- Loss or damage due to war or rebellion
- Loss or damage which occurred 10 days or longer after the earthquake
- Loss or robbery of the objects of the insurance

Limit of total amount of insurance claims to be paid

Limit of total amount of insurance claims to be paid* is limited to 5,000 billion yen as revised in April 2005 per earthquake and so on. In the event the total amount of insurance claims payable exceeds the limit, law allows insurance claims per contract to be reduced.

*Current price

The current price is such that the amount of depreciation according the service year is deducted from the price of a newly constructed building.

*Limit of total amount of insurance claims to be paid

Law concerning Earthquake Insurance stipulates the limit to the total insurance claims payable by the government and private insurance company per earthquake and so on. For detail, see p.10 Insurance liability held by JER, non-life insurance companies and the government, and p.38 Glossary.

Premium rate

Premium rate for earthquake insurance is calculated by the Non-life Insurance Rating Organization of Japan* on the basis of Law concerning Non-life Insurance Rating Organizations.

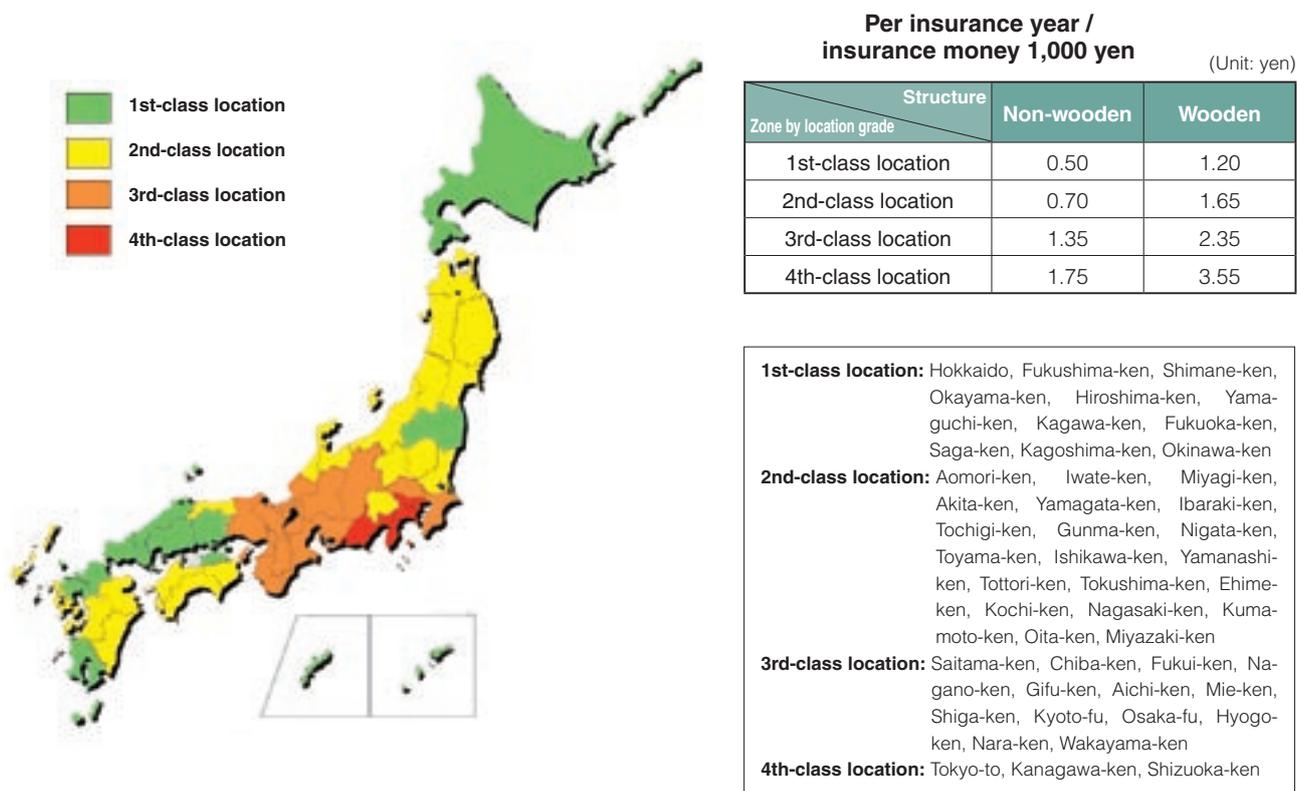
Premium rate = Risk premium rate + Loading rate

The basic rate of insurance premium is composed of risk premium rate applicable to or appropriate for future payment of insurance claims and loading premium rate applicable to or appropriate for non-life insurance companies' expenses and agents' commissions.

Risk premium rate is actually calculated on such data as related to past 375 earthquakes which caused damages for the past 500 years approximately appearing on a chronological scientific table edited by the National Astronomical Observatory of Japan.

Basic rate (applicable to buildings and movables for living)

The basic rate is set according to the residential building, the structure of the building to accommodate the movables for living and the building location.



*Non-life Insurance Rating Organization of Japan

This is the organization which was established in accordance with Law concerning Non-life Insurance Rating Organization and aims at providing a fair basis premium rate applicable to non-life insurance.

*Chronological scientific table

A data book annually edited and published by the National Observatory Japan, Ministry of Education and Science, containing up-to-date researches and observations in the fields of natural science such as astronomy, weather and physical geography. The damage-causing earthquakes chronological table in the book is used when calculating the risk premium rate.

Discount rate

Either discount rate will be applied to the foregoing basic premiums rate when the building and movables for living come under any of the following:

(a) Construction age discount rate

When the building was constructed in and after June 1981 and accommodated movables for living.

Discount rate	10%
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(b) Earthquake-resistance class discount rate

When the building and movables for living correspond to the earthquake-resistance class* as provided for by law.

Earthquake-resistance class	1	2	3
Discount rate	10%	20%	30%

Premium rate of a long-term contract

Premium rate of a long-term contract will be calculated as follows:

(Basic rate - discount rate) x applicable coefficient = premium rate of a long-term contract (2 to 5 year contract with special conditions of premiums paid).

Contract period	2 years	3 years	4 years	5 years
Coefficient	1.90	2.75	3.60	4.45

■ An example of insurance premiums calculated

A wooden residential building constructed in January 2000 in Hyogo-ken:

Fire insurance (principal contract) amount insured: Building 20 million yen; movables for living 6 million yen

- Setting the amount insured of earthquake insurance: In this case, the proportion insured (*) will be 50%.
Residential building: 20 million yen x 50% = 10 million yen
Movables for living: 6 million yen x 50% = 3 million yen
- Confirming the premium rate applicable: Hyogo-ken (3rd-class location), wooden → 2.35
- Confirming the discount rate applicable: Building constructed in and after June 1981 → 10%

$$\begin{array}{l}
 \text{Earthquake insurance premium on residential building} \\
 = \text{Earthquake amount insured} \times \underbrace{\text{Earthquake insurance premium rate} \times \text{Discount rate}}_{2.12} = 21,200 \text{ (yen)} \\
 = 10,000 \text{ (1,000yen)} \times \underbrace{2.35 \times (100\% - 10\%)}_{2.12} \\
 \\
 \text{Earthquake insurance premium on movables for living} \\
 = \text{Earthquake amount insured} \times \underbrace{\text{Earthquake insurance premium rate} \times \text{Discount rate}}_{2.12} = 6,360 \text{ (yen)} \\
 = 3,000 \text{ (1,000yen)} \times \underbrace{2.35 \times (100\% - 10\%)}_{2.12}
 \end{array}$$

Earthquake-resistance class

The earthquake-resistance class of a residential building is an indicator of earthquake-resistance class as stipulated in the Japanese Housing Performance Designation Standards based on the Housing Quality Guarantee Law or one to evaluate the building for earthquake-resistance performance as provided for in the assessment guideline to earthquake-resistance diagnosis based earthquake-resistance class (as to the body of the building) established by the Ministry of Land, Infrastructure and Transport. See below for the classes.

Earthquake-resistance class 3	Class suggesting that no building falls down or collapses against force 1.5 times stronger than such force of earthquake (as provided for in Section 3, Article 88, Enforcement Order of the Construction Standard Act) which happens very rarely (once every some hundred times)
Earthquake-resistance class 2	Class suggesting that no building falls down or collapses against force 1.25 times stronger than such force of earthquake which happens very rarely
Earthquake-resistance class 1	Class suggesting that no building falls down or collapses against force of earthquake which happens very rarely

Proportion Insured

The rate of earthquake amount insured over fire amount insured. Earthquake amount insured is supposed to be set within 30 - 50% of fire insurance amount insured.

Mechanism of reinsurance

In the event that a great earthquake happens, it can result in large payouts of insurance claim by insurance companies. Because there is a certain limit, however, to the capability of payment on the part of non-life insurance companies, the government shares insurance responsibility with them by reinsurance.

We reinsure the earthquake insurance contracts underwritten by non-life insurance companies to take the full liability, which we homogenize before we pass on the risk proportionally to the non-insurance companies and the government by retrocession according to the limit indemnity, and we take up the remaining indemnity.

Reinsurance by JER for non-life insurance companies (Treaty A reinsurance on earthquake insurance)

Treaty A

JER has entered into a treaty reinsurance contract with non-life insurance companies operated in Japan. According to the contract, the non-life insurance companies conclude a reinsurance contract with JER on the earthquake insurance contracts in full underwritten by them conforming to Law concerning Earthquake Insurance, and JER is supposed to take up the full liability for such an earthquake insurance without fail.

Retrocession by JER on non-life insurance companies (Treaty B reinsurance on earthquake insurance)

Treaty B

JER enters into a treaty reinsurance contract individually with the non-life insurance companies, and retrocedes to each company part of insurance liability taken up by JER to the limit as determined according to the balance of earthquake insurance risk reserves and so on.

Retrocession by JER on the government (Excess of loss reinsurance)

Treaty C

JER has entered into an Excess of loss reinsurance with the government on earthquake insurance for loss exceeding the amount payable by JER, according to which JER retrocedes to the government part of insurance liability taken up according to Treaty A to the indemnity limit as approved by the Diet.

Mechanism of payment of insurance claims

The policyholder claims insurance money to the non-life insurance company when he / she suffered a certain loss or damage because of earthquake and so on, and the company will pay insurance claim to him / her.

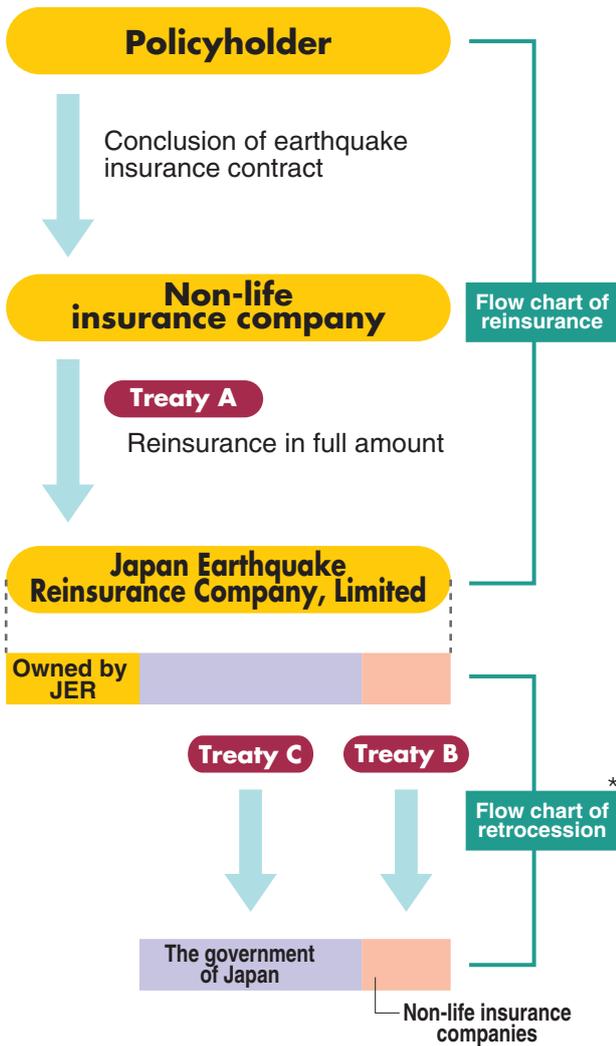
The non-insurance company which paid insurance claim to the policyholder will claim the full

amount to JER by reinsurance. JER will pay the reinsurance claim in full amount to the non-life insurance company.

This means that the amount of reinsurance claim paid by JER is the same in amount as the insurance claim paid to the policyholder by the non-life insurance company.

☞ See p.11 Top 10 earthquakes as to reinsurance claims paid.

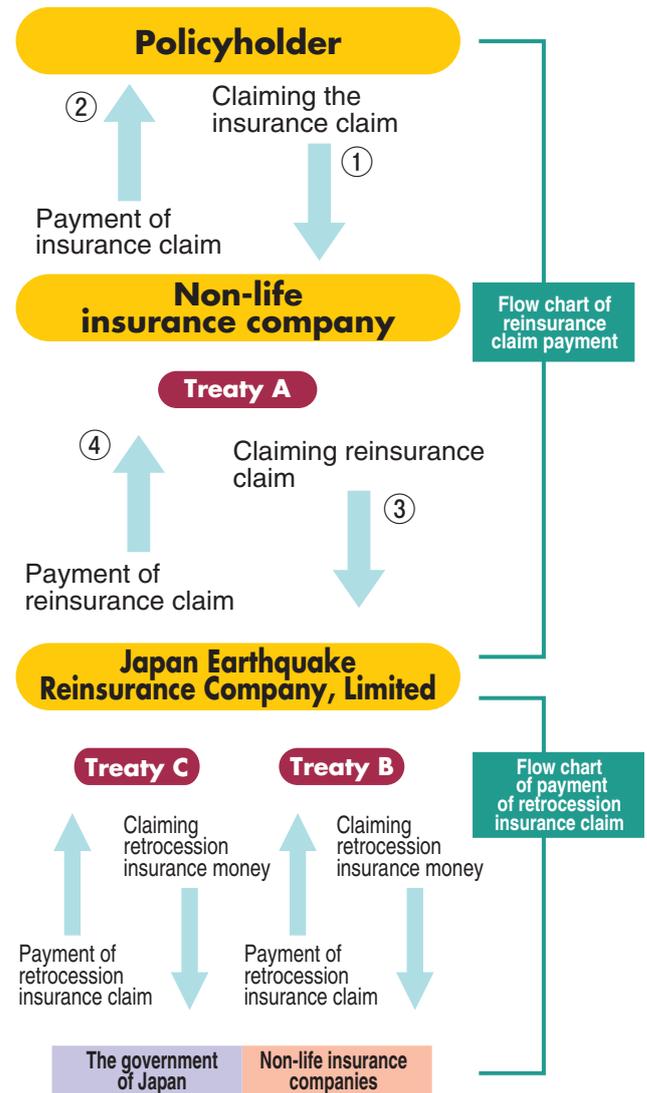
Flow chart of reinsurance on earthquake insurance



When you want to buy earthquake insurance:

Contact your non-life insurance company when you have already entered into a fire insurance or a household comprehensive insurance. If not, directly contact your selected non-life insurance company or a non-life insurance agent. The internet home page of The General Insurance Association of Japan will be of help to you.

*JER retrocedes the insurance liability taken by JER according to Treaty A to the non-life insurance companies and the government, and we hold the remaining liability so that insurance liability will be shared among the parties.



When you suffered an earthquake caused loss or damage:

Contact your non-life insurance company or agent when you have bought earthquake insurance.

When a non-life insurance company became insolvent:

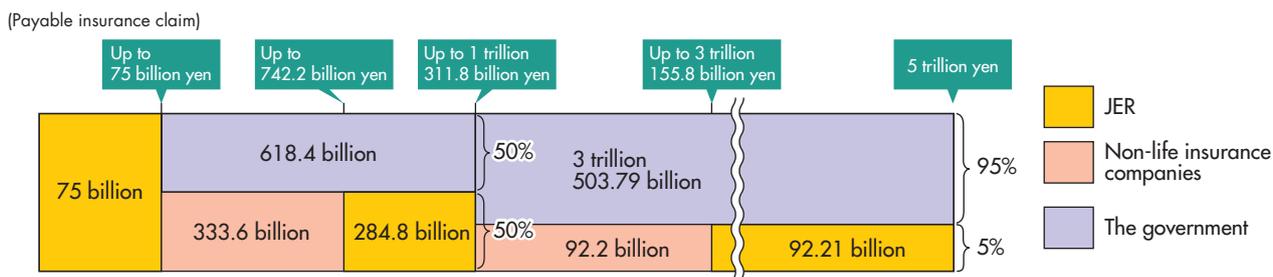
As to earthquake insurance, insurance claim will be indemnified in full amount by the Non-life Insurance Policy-holders Protection Corporation of Japan for the company when the policyholder is an individual, a corporate of a small scale or a condominium management union.

Insurance liability held by JER, non-life insurance companies and the government

The following is the reinsurance scheme showing how much each of JER, non-life insurance companies and the government shares insurance liability*, and the way each performs shared liability.

The total amount of insurance claims to be paid due to a single earthquake is limited to 5 trillion yen, starting on April 1, 2005. See below for the reinsurance scheme and the total maximum liability limit.

How to perform liability (reinsurance scheme)



*See p.38 Glossary for insurance terms for limit amount of total payable insurance claims and the indemnity limit.

Indemnity limit

JER	452.01 billion yen
Non-life insurance companies	425.8 billion yen
The government	4 trillion 122.19 billion yen
Total (limit amount of payable insurance claims)	5 trillion yen

The balance of JER's and non-life insurance companies' risk reserves and the government liability reserves at the end of fiscal 2005

JER and the non-life insurance companies save the risk premium of the policyholder paid insurance premium as earthquake insurance risk reserves for possible payment of earthquake insurance claim while the government saves governmental reserves in the earthquake insurance special account according to law. In the event that an earthquake occurs causing losses or damages, each of JER, non-life insurance companies and the government pays insurance claim according to each liability as stipulated in the reinsurance scheme by withdrawing from the reserves.

JER	378.7 billion yen
Non-life insurance companies	427.4 billion yen
The government	1,012.3 billion yen
Total	1 trillion 818.5 billion yen

Note 1: The risk reserves by the non-life insurance companies such an amount as equivalent to deferred tax assets due to tax effect accounting.

Note 2: The governmental liability reserves are established when the settlement for fiscal 2005 is approved at the Diet.

Examples of insurance claims to be paid by JER, non-life insurance companies and the government.

Suppose that insurance claims amounting to 2 trillion yen for losses or damages due to a single earthquake are to be paid, and JER, non-life insurance companies and the government will pay each in the following amount:

(Unit: 100 million yen)

claims paid A person of burden	Portion up to 75 billion yen	Portion up to 1 trillion 311.8 billion yen from more than 75 billion yen	Portion up to 2 trillion yen from more than 1 trillion 311.8 billion yen	Total
	JER	750	2,848	—
Non-life insurance companies	—	3,336	344.1	3,680.1
The government	—	6,184	6,537.9	12,721.9
Total	750	12,368	6,882.0	20,000.0

Reinsurance claims paid in fiscal 2005

The reinsurance claims paid in fiscal 2005 reached 24 billion 662 million yen in amount including earthquake reinsurance claims paid to cover Fukuoka-ken seiho earthquake and 34,188 cases in number (on the basis of insurance policies). See below for major claims paid per earthquake.

Earthquake	Date of occurrence	Magnitude	No. of policies	Reinsurance claims paid (million yen)
1. Fukuoka ken Seiho-oki earthquake	March 20, 2005	7.0	21,081	16,286
2. Fukuoka ken Seiho-oki earthquake	April 20, 2005	5.8	8,350	5,214
3. Miyagi ken oki earthquake	August 16, 2005	7.2	2,549	1,387
Other earthquakes	—	—	2,208	1,775
Total	—	—	34,188	24,662

Top 10 earthquakes as to reinsurance claims paid

See the table below for the top 10 earthquakes as to reinsurance claims paid since the earthquake insurance scheme started.

(As of March 31, 2006)

Earthquake	Date of occurrence	Magnitude	No. of policies	Reinsurance claims paid (million yen)
1. Hyogoken-Nanbu earthquake	January 17, 1995	7.3	65,427	78,346
2. Geiyo earthquake	March 24, 2001	6.7	24,438	16,934
3. Fukuoka ken Seiho-oki earthquake	March 20, 2005	7.0	21,081	16,286
4. Niigataken-tyuetsu earthquake	October 23, 2004	6.8	12,472	14,618
5. Tokachi-oki earthquake	September 26, 2003	8.0	10,516	5,954
6. Fukuoka ken Seiho-oki earthquake	April 20, 2005	5.8	8,350	5,214
7. Tottoriken-Seibu earthquake	October 6, 2000	7.3	4,078	2,868
8. Miyagiken-Hokubu earthquake	July 26, 2003	6.4	2,540	2,171
9. Miyagiken-oki earthquake	May 26, 2003	7.1	2,959	1,915
10. Miyagiken-oki earthquake	August 16, 2005	7.2	2,549	1,387

Note: Insurance claims in the amount of 78 billion 346 million yen were paid to cover the Hyogoken-Nanbu earthquake. Of the claims, the government paid 6 billion 173 million yen, JER 40 billion yen and the non-life insurance companies 32 billion 173 million yen according to the reinsurance scheme in force at the time.

The rate of earthquake insurance buying households in such an area as might be attacked by a great earthquake

(As of March 31, 2006)

Earthquake	No. of households (A) (1,000 households)	No. of contracts (B) (1,000 contracts)	Amount of insurance money (million yen)	Rate of insurance buying households (B/A)(%)
Great Kanto earthquake	22,585	5,505	43,016,007	24.38
Metropolitan earthquake directly above its epicenter	15,900	4,013	31,100,851	25.24
Tokai earthquake	21,469	5,434	42,473,741	25.31
Tonankai earthquake	20,441	4,610	35,988,724	22.55
Nankai earthquake	27,972	5,956	46,712,285	21.29

Great Kanto earthquake (1 metropolis, 10 prefectures): Tokyo, Saitama, Chiba, Kanagawa, Yamanashi, Shizuoka, Ibaraki, Tochigi, Gunma, Nagano, Aichi
Metropolitan earthquake directly above its epicenter (1 metropolis, 4 prefectures): Tokyo, Saitama, Chiba, Kanagawa, Ibaraki

Tokai earthquake (1 metropolis, 9 prefectures): Tokyo, Kanagawa, Yamanashi, Shizuoka, Aichi, Gifu, Mie, Saitama, Chiba, Nagano

Tonankai earthquake (13 prefectures): Shizuoka, Aichi, Mie, Osaka, Nara, Wakayama, Gifu, Shiga, Kyoto, Hyogo, Chiba, Kanagawa, Tokushima

Nankai earthquake (23 prefectures): Mie, Osaka, Hyogo, Nara, Wakayama, Okayama, Tokushima, Kagawa, Ehime, Kochi, Kyoto, Hiroshima, Yamaguchi, Oita, Miyazaki, Chiba, Kanagawa, Shizuoka, Aichi, Shimane, Fukuoka, Kumamoto, Kagoshima

Note: Prepared by JER, targeting main prefectures which might be damaged with reference to the assumed losses or damaged due to potential immediate earthquakes by the Non-life Insurance Rating Organization of Japan.