## **Basic Survey (Radiation Dose Estimates) reported on 20 August 2013**

1. Response Rates and Radiation Dose Estimates

1.1 Response Rates of Residents

The overall effective response rate to the Basic Survey (radiation dose estimates), which targeted the entire population of Fukushima Prefecture, was 23.5% (483,088/2,056,994) as of 31 July 2013. Although the response rate was higher (58.3%) in the preceding survey of high-priority areas (Yamakiya of Kawamata, Namie and Iitate), the response rate of the full-scale survey was 23.0%. Regional variations in the response rates were also observed, ranging from 13%–15% in Aizu and Minami-aizu to 42% in Soso area (Table 1).

#### 1.2 Radiation Dose Estimates

Recorded movements of respondents are converted to digital data, and effective external cumulative doses are calculated using the dose calculation system developed by the National Institute of Radiological Sciences. Doses have been estimated for 445,015/483,088 respondents (92.1%) as of 31 July 2013 (Table 1), and the results have been returned to 420,392 respondents.

| Table 1             |   | Resp              | onse rates | to the Basi       | c Survey                        |            | As of 31 July | / 2013     |
|---------------------|---|-------------------|------------|-------------------|---------------------------------|------------|---------------|------------|
|                     |   | Target population | Response   | Response<br>rates | Completed<br>dose<br>estimation | Proportion | Returned      | Proportion |
|                     |   | а                 | b          | c=b/a             | d                               | e=d/b      | f             | g=f/b      |
| Preceding<br>Survey | Yamakiya of<br>Kawamata,<br>Namie and<br>litate | 29,044            | 16,936     | 58.3%             | 16,339                          | 96.5%      | 16,166        | 95.5%      |
|                     | Kempoku   | 504,291           | 132,998    | 26.4%             | 126,502                         | 95.1%      | 120,489       | 90.6%      |
|                     | Kenchu  | 560,116           | 116,444    | 20.8%             | 107,760                         | 92.5%      | 101,697       | 87.3%      |
|                     | Kennan  | 152,776           | 26,910     | 17.6%             | 24,588                          | 91.4%      | 23,484        | 87.3%      |
| Full-scale          | Aizu  | 267,696           | 40,411     | 15.1%             | 36,127                          | 89.4%      | 34,449        | 85.2%      |
| Survey              | Minami-aizu                                     | 30,831            | 4,140      | 13.4%             | 3,645                           | 88.0%      | 3,587         | 86.6%      |
|                     | Soso  | 168,409           | 70,928     | 42.1%             | 63,164                          | 89.1%      | 58,421        | 82.4%      |
|                     | lwaki   | 343,831           | 74,321     | 21.6%             | 66,890                          | 90.0%      | 62,099        | 83.6%      |
|                     | Subtotal  | 2,027,950         | 466,152    | 23.0%             | 428,676                         | 92.0%      | 404,226       | 86.7%      |
| 1                   | otal  | 2,056,994         | 483,088    | 23.5%             | 445,015                         | 92.1%      | 420,392       | 87.0%      |

#### 1.3 Response Rates (Visitors)

The survey questionnaire was distributed upon request to non-residents who were visiting or staying in Fukushima Prefecture at the time of the accident. Of 2,064 responses, doses have been estimated for 1,593 respondents (77.2%), and the results shall be returned accordingly (Table 2).

| Table 2           |          | Respor            | nse rates to                    | the Basic  | Survey           |            |
|-------------------|----------|-------------------|---------------------------------|------------|------------------|------------|
|                   |          | (\                | /isitors)                       |            | As of 31         | July 2013  |
| Number of request | Response | Response<br>rates | Completed<br>dose<br>estimation | Proportion | Returned results | Proportion |
| а                 | b        | c=b/a             | d                               | e=d/b      | f                | g=f/b      |
| 3,789             | 2,064    | 54.5%             | 1,701                           | 82.4%      | 1,593            | 77.2%      |

2. Results of Radiation Dose Estimates

Radiation doses for a total of 445,015 residents have been estimated to date. The results for 435,788 respondents (excluding radiation workers) suggested that the doses for more than 90% of the respondents were <2 mSv in Kempoku and Kenchu areas. The doses for approximately 91% of the respondents in Kennan area and more than 99% of those in Aizu and Minami-aizu were <1 mSv. Doses for 78% of respondents in Soso area and more than 99% of respondents in Iwaki were also <1 mSv (Table 3).

| Table 3        |                               | E       | Estimat   | ed exte   | rnal rad | diation de | oses i | n the firs | t four | months | (prec   | eding an    | d full- | scale su    | rvey)   |             |        | As of July   | / 2013 |
|----------------|-------------------------------|---------|-----------|-----------|----------|------------|--------|------------|--------|--------|---------|-------------|---------|-------------|---------|-------------|--------|--------------|--------|
| Effective      |                               |         |           |           |          |            |        |            |        | By re  | egion ( | excluding r | adiatio | n workers)  |         |             |        |              |        |
| Dose<br>(mSv)  | Total                         | Excludi | ing radia | tion work | ers      | Kempol     | ku *   | Kench      | iu     | Kenna  | in      | Aizu        |         | Minami-     | aizu    | Soso        | **     | lwak         | i      |
| <1             | 292,998                       | 287,103 | 65.9%     | 94.8%     |          | 39,955     | 31.8%  | 62,993     | 59.1%  | 22,076 | 90.8%   | 35,531      | 99.4%   | 3,591       | 99.4%   | 57,898      | 78.0%  | 65,059       | 99.2%  |
| 1-2            | 128,471                       | 126,184 | 29.0%     | 54.0%     |          | 73,390     | 58.4%  | 37,510     | 35.2%  | 2,238  | 9.2%    | 198         | 0.6%    | 23          | 0.6%    | 12,325      | 16.6%  | 500          | 0.8%   |
| 2-3            | 19,898                        | 19,541  | 4.5%      | 4.8%      | 99.8%    | 11,861     | 9.4%   | 5,784      | 5.4%   | 12     | 0.0%    | 8           | 0.0%    | 0           | -       | 1,857       | 2.5%   | 19           | 0.0%   |
| 3-4            | 1,444                         | 1,374   | 0.3%      | 4.070     |          | 418        | 0.3%   | 278        | 0.3%   | 0      | -       | 1           | 0.0%    | 0           | -       | 674         | 0.9%   | 3            | 0.0%   |
| 4-5            | 599                           | 561     | 0.1%      | 0.2%      |          | 41         | 0.0%   | 5          | 0.0%   | 0      | -       | 0           | -       | 0           | —       | 514         | 0.7%   | 1            | 0.0%   |
| 5-6            | 465                           | 413     | 0.1%      | 0.276     |          | 22         | 0.0%   | 2          | 0.0%   | 0      | -       | 0           | -       | 0           | -       | 389         | 0.5%   | 0            | -      |
| 6-7            | 272                           | 241     | 0.1%      | 0.1%      |          | 8          | 0.0%   | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 233         | 0.3%   | 0            | —      |
| 7-8            | 158                           | 123     | 0.0%      | U.176     | 0.2%     | 1          | 0.0%   | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 122         | 0.2%   | 0            | —      |
| 8-9            | 122                           | 82      | 0.0%      | 0.0%      |          | 0          | -      | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 82          | 0.1%   | 0            | -      |
| 9-10           | 73                            | 43      | 0.0%      | 0.0%      |          | 0          | -      | 0          | —      | 0      | -       | 0           | —       | 0           | -       | 43          | 0.1%   | 0            | —      |
| 10-11          | 74                            | 45      | 0.0%      | 0.0%      |          | 0          | -      | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 45          | 0.1%   | 0            | —      |
| 11-12          | 50                            | 31      | 0.0%      | 0.0%      |          | 1          | 0.0%   | 0          | -      | 0      | -       | 0           | —       | 0           | -       | 30          | 0.0%   | 0            | —      |
| 12-13          | 37                            | 14      | 0.0%      | 0.0%      | 0.0%     | 0          | -      | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 14          | 0.0%   | 0            | —      |
| 13-14          | 33                            | 11      | 0.0%      | 0.0%      |          | 0          | -      | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 11          | 0.0%   | 0            | —      |
| 14-15          | 32                            | 11      | 0.0%      | 0.0%      |          | 0          | -      | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 11          | 0.0%   | 0            | —      |
| 15 <u>&lt;</u> | 289                           | 11      | 0.0%      | 0.0%      | 0.0%     | 0          | -      | 0          | -      | 0      | -       | 0           | -       | 0           | -       | 11          | 0.0%   | 0            | -      |
| Total          | 445,015                       | 435,788 | 100.0%    | 100.0%    | 100.0%   | 125,697    | 100%   | 106,572    | 100%   | 24,326 | 100%    | 35,738      | 100%    | 3,614       | 100%    | 74,259      | 100%   | 65,582       | 100%   |
| Max            | 66mSv                         | 25mSv   |           |           |          | 11mSv      |        | 5.9mSv     |        | 2.6mSv |         | 3.6mSv      |         | 1.6mSv      |         | 25mSv       |        | 4.8mSv       |        |
|                | * Including Y<br>** Including |         |           | ata.      |          |            |        |            |        |        |         |             | Pe      | rcentages h | ave bee | n rounded a | nd may | not total to | 100%.  |

### 3. Evaluation of the results

The latest effective radiation dose estimates showed similar trends to those observed so far. Since previous epidemiological studies indicate no significant health effects at doses <100 mSv, we concluded that radiation doses estimated so far are unlikely to cause adverse effects on health, although this conclusion is based on effective doses estimated only for the first four months following the accident.

#### References

1) Sources and effects of ionizing radiation, United Nations Scientific Committee on the Effects of Atomic Radiation, UNSCEAR 2008 Report to the General Assembly, with scientific annexes.

| App         | pendix 1                  |                    |                          |                       |   |                       |                          |                |
|-------------|---------------------------|--------------------|--------------------------|-----------------------|---|-----------------------|--------------------------|----------------|
|             |                           | Respo              | nse rates                | to the Bas            | ic Survey                               | by district           |                          |                |
|             | Preceding and             | l full-scale s     | surveys                  |                       |   | -                     | As of 3                  | 1 July 2013    |
| Area        | District                  | Target population  | Response                 | Response<br>rates     | Completed<br>dose<br>estimation         | Proportion            | Returned results         | Proportion     |
|             |                           | а                  | b                        | c=b/a                 | d                                       | e=d/b                 | f                        | g=f/b          |
|             | Fukushima                 | 296,421            | 83,073                   | 28.0%                 | 79,759                                  | 96.0%                 | 76,425                   | 92.0%          |
|             | Nihonmatsu                | 60,967             | 14,535                   | 23.8%                 | 13,660                                  | 94.0%                 | 12,854                   | 88.4%          |
|             | Date                      | 67,854<br>31,874   | 15,864<br>7,493          | 23.4%<br>23.5%        | <u>14,773</u><br>7,040                  | 93.1%<br>94.0%        | 13,828<br>6,528          | 87.2%<br>87.1% |
| Kempoku     | Motomiya<br>Kori          | 13,293             | 3,560                    | 25.5%                 | 3,348                                   | 94.0%                 | 0,528<br>3.252           | 91.3%          |
| . tompond   | Kunimi                    | 10,230             | 2,692                    | 26.0%                 | 2,505                                   | 93.1%                 | 2,435                    | 90.5%          |
|             | Kawamata                  | 15,916             |                          | 31.2%                 | 4,661                                   | 93.9%                 | 4,481                    | 90.2%          |
|             | Otama                     | 8,872              | 1,606                    | 18.1%                 | 1,494                                   | 93.0%                 | 1,411                    | 87.9%          |
|             | Subtotal<br>Koriyama      | 505,539<br>341,841 | <u>133,789</u><br>74,411 | <u>26.5%</u><br>21.8% | 127,240<br>69,267                       | <u>95.1%</u><br>93.1% | <u>121,214</u><br>65,413 | 90.6%<br>87.9% |
|             | Sukagawa                  | 80,425             | 13,444                   | 16.7%                 | 12,574                                  | 93.5%                 | 11,763                   | 87.5%          |
|             | Tamura                    | 41,805             | 10,116                   | 24.2%                 | 8,839                                   | 87.4%                 | 8,396                    | 83.0%          |
|             | Kagamiishi                | 13,172             | 2,430                    | 18.4%                 | 2,216                                   | 91.2%                 | 2,088                    | 85.9%          |
|             | Tenei                     | 6,481              | 944                      | 14.6%                 | 798                                     | 84.5%                 | 739                      | 78.3%          |
| Kenchu      | Ishikawa<br>Tamakawa      | 17,518<br>7,385    | 3,661<br>1,277           | 20.9%<br>17.3%        | 3,375<br>1,163                          | 92.2%<br>91.1%        | 2,993<br>1,109           | 81.8%<br>86.8% |
| . conoriu   | Hirata                    | 7,088              |                          | 19.7%                 | 1,103                                   | 91.1%                 | 1,109                    | 88.5%          |
|             | Asakawa                   | 7,200              | 1,232                    | 17.1%                 | 1,143                                   | 92.8%                 | 1,100                    | 89.3%          |
|             | Furudono                  | 6,349              |                          | 17.2%                 | 1,008                                   | 92.3%                 | 970                      | 88.8%          |
|             | Miharu                    | 19,086             | 4,289                    | 22.5%<br>18.3%        | 4,041                                   | 94.2%<br>95.9%        | 3,880                    | 90.5%<br>93.4% |
|             | Ono<br>Subtotal           | 11,766<br>560,116  | 2,154<br>116,444         | 20.8%                 | 2,065<br>107,760                        | 95.9%                 | 2,012<br>101,697         | 93.4%<br>87.3% |
|             | Shirakawa                 | 65,542             | 11,711                   | 17.9%                 | 10,679                                  | 91.2%                 | 10,003                   | 85.4%          |
|             | Nishigo                   | 20,137             | 4,117                    | 20.4%                 | 3,797                                   | 92.2%                 | 3,660                    | 88.9%          |
|             | Izumizaki                 | 7,025              | 1,140                    | 16.2%                 | 1,009                                   | 88.5%                 | 970                      | 85.1%          |
|             | Nakajima                  | 5,316              |                          | <u>13.7%</u><br>18.1% | 664                                     | 91.5%<br>91.2%        | 641                      | 88.3%<br>87.9% |
| Kennan      | Yabuki<br>Tanagura        | 18,509<br>15,416   | 3,346<br>2,306           | 15.0%                 | 3,050<br>2,112                          | 91.2%                 | 2,941<br>2,084           | 90.4%          |
|             | Yamatsuri                 | 6,494              | 1,171                    | 18.0%                 | 1,072                                   | 91.5%                 | 1,058                    | 90.4%          |
|             | Hanawa                    | 10,125             | 1,728                    | 17.1%                 | 1,607                                   | 93.0%                 | 1,547                    | 89.5%          |
|             | Samekawa                  | 4,212              | 665                      | 15.8%                 | 598                                     | 89.9%                 | 580                      | 87.2%          |
|             | Subtotal<br>Aizuwakamatsu | 152,776            | 26,910                   | 17.6%                 | 24,588                                  | 91.4%<br>90.8%        | 23,484                   | 87.3%<br>87.2% |
|             | Kitakata                  | 128,052<br>53,270  | 21,091<br>6,680          | 16.5%<br>12.5%        | 19,148<br>6,025                         | 90.8%                 | <u>18,389</u><br>5,751   | 86.1%          |
|             | Kitashiobara              | 3,283              | 415                      | 12.6%                 | 368                                     | 88.7%                 | 346                      | 83.4%          |
|             | Nishiaizu                 | 7,732              | 1,161                    | 15.0%                 | 1,014                                   | 87.3%                 | 952                      | 82.0%          |
|             | Bandai                    | 3,897              |                          |                       | *************************************** | 89.4%                 | ~~~~~                    | 83.3%          |
|             | Inawashiro<br>Aizubange   | 16,328<br>17,914   |                          | 17.1%<br>12.6%        | 2,518<br>1,826                          | 90.1%<br>80.6%        | 2,338                    |                |
| Aizu        | Yukawa                    | 3,524              |                          |                       | 370                                     | 86.9%                 | 346                      |                |
|             | Yanaizu                   | 4,081              | 528                      | 12.9%                 | 466                                     | 88.3%                 | 419                      | 79.4%          |
|             | Mishima                   | 2,048              |                          | 15.4%                 | 264                                     | 83.8%                 | 235                      | 74.6%          |
|             | Kaneyama                  | 2,549              |                          | 20.8%                 | 456                                     | 86.0%                 | 445                      | 84.0%          |
|             | Showa<br>Aizumisato       | 1,570<br>23,448    |                          | <u>20.1%</u><br>14.2% | 243<br>2,932                            | 76.9%<br>88.0%        | 237<br>2,802             | 75.0%<br>84.1% |
|             | Subtotal                  | 267,696            |                          | 15.1%                 | 36,127                                  | 89.4%                 | 34,449                   | 85.2%          |
|             | Shimogo                   | 6,656              | 896                      | 13.5%                 | 802                                     | 89.5%                 | 793                      | 88.5%          |
|             | Hinoemata                 | 618                |                          | 15.7%                 | 84                                      | 86.6%                 | 83                       | 85.6%          |
| Minami-aizu | Tadami<br>Minami aizu     | 5,038              |                          | 15.7%<br>12.7%        | 686                                     | 86.6%<br>88.0%        | 676                      | 85.4%<br>86.4% |
|             | Minami-aizu<br>Subtotal   | 18,519<br>30,831   |                          | 12.7%                 | 2,073<br>3,645                          | 88.0%<br>88.0%        | 2,035<br>3,587           |                |
|             | Soma                      | 37,511             | 1                        | 32.7%                 | 10,925                                  | 89.0%                 | 10,405                   |                |
|             | Minami-soma               | 70,326             | 29,413                   | 41.8%                 | 26,323                                  | 89.5%                 | 24,163                   | 82.2%          |
|             | Hirono                    | 5,141              |                          |                       | 1,795                                   | 82.8%                 | 1,482                    | 68.4%          |
|             | Naraha<br>Tomioka         | 8,052<br>15,794    |                          | 50.6%<br>53.7%        | 3,414<br>7,849                          | 83.7%<br>92.6%        | 3,037<br>7,448           | 74.5%<br>87.9% |
|             | Kawauchi                  | 3,039              |                          | 49.4%                 | 1,336                                   | 92.0%<br>89.0%        | 1,255                    | 83.6%          |
| Soso        | Okuma                     | 11,500             |                          | 51.2%                 | 5,094                                   | 86.5%                 | 4,664                    | 79.2%          |
|             | Futaba                    | 7,140              | 3,882                    | 54.4%                 | 3,607                                   | 92.9%                 | 3,403                    |                |
|             | Namie                     | 21,249             |                          | 60.1%                 | 12,367                                  | 96.9%                 | 12,258                   | 96.0%          |
|             | Katsurao<br>Shinchi       | 1,545<br>8,361     | ******                   | 52.2%<br>29.2%        | 645<br>2,176                            | 80.0%<br>89.3%        | 530<br>2,034             | 65.8%<br>83.4% |
|             | litate                    | 6,547              | 3,380                    | <u> </u>              | 3,234                                   | 95.7%                 | 3,183                    | 94.2%          |
|             | Subtotal                  | 196,205            |                          | 44.4%                 | 78,765                                  | 90.5%                 | 73,862                   | 84.8%          |
| Iwaki       | Iwaki                     | 343,831            |                          |                       |   | 90.0%                 |                          |                |
|             | Total                     | 2,056,994          | 483,088                  | 23.5%                 | 445,015                                 | 92.1%                 | 420,392                  | 87.0%          |

\*Including Yamakiya of Kawamata, Namie and litate

Basic Survey, Fukushima Health Management Survey

Estimated external radiation doses

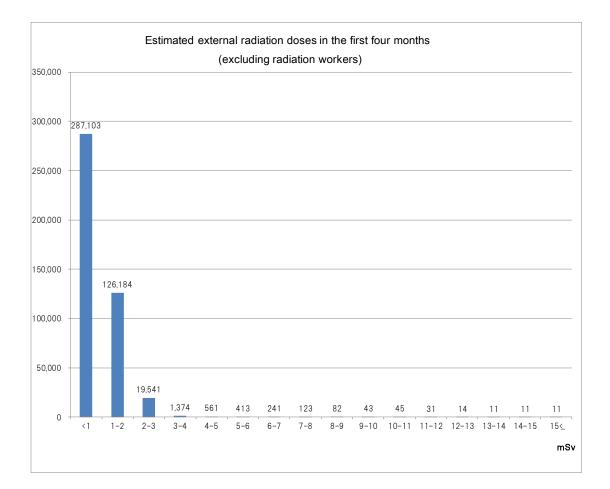
Preceding Survey and full-scale survey

As of 31 July 2013

#### Estimated external radiation doses by region in the first four months

| Effective     | Trees   | Excluding            |         |         | В      | y region |             |        |        | Proport | ion (%) ex  | cluding |
|---------------|---------|----------------------|---------|---------|--------|----------|-------------|--------|--------|---------|---|---------|
| Dose<br>(mSv) | Total   | radiation<br>workers | Kempoku | Kenchu  | Kennan | Aizu     | Minami-aizu | Soso   | lwaki  | radi    | ion (%) ex<br>iation work<br>94.8<br>4.8<br>0.2<br>0.1<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0 | ers     |
| <1            | 292,998 | 287,103              | 39,955  | 62,993  | 22,076 | 35,531   | 3,591       | 57,898 | 65,059 | 65.9    | 04.0  |         |
| 1-2           | 128,471 | 126,184              | 73,390  | 37,510  | 2,238  | 198      | 23          | 12,325 | 500    | 29.0    | 94.8  |         |
| 2-3           | 19,898  | 19,541               | 11,861  | 5,784   | 12     | 8        | 0           | 1,857  | 19     | 4.5     | 4.0   | 99.8    |
| 3-4           | 1,444   | 1,374                | 418     | 278     | 0      | 1        | 0           | 674    | 3      | 0.3     | 4.0   |         |
| 4-5           | 599     | 561                  | 41      | 5       | 0      | 0        | 0           | 514    | 1      | 0.1     | 0.0   |         |
| 5-6           | 465     | 413                  | 22      | 2       | 0      | 0        | 0           | 389    | 0      | 0.1     | 0.2   |         |
| 6-7           | 272     | 241                  | 8       | 0       | 0      | 0        | 0           | 233    | 0      | 0.1     | 0.1   |         |
| 7-8           | 158     | 123                  | 1       | 0       | 0      | 0        | 0           | 122    | 0      | 0.0     | 0.1   | 0.2     |
| 8-9           | 122     | 82                   | 0       | 0       | 0      | 0        | 0           | 82     | 0      | 0.0     | 0.0   |         |
| 9-10          | 73      | 43                   | 0       | 0       | 0      | 0        | 0           | 43     | 0      | 0.0     | 0.0   |         |
| 10-11         | 74      | 45                   | 0       | 0       | 0      | 0        | 0           | 45     | 0      | 0.0     | 0.0   |         |
| 11-12         | 50      | 31                   | 1       | 0       | 0      | 0        | 0           | 30     | 0      | 0.0     | 0.0   |         |
| 12-13         | 37      | 14                   | 0       | 0       | 0      | 0        | 0           | 14     | 0      | 0.0     | 0.0   | 0.0     |
| 13-14         | 33      | 11                   | 0       | 0       | 0      | 0        | 0           | 11     | 0      | 0.0     | 0.0   |         |
| 14-15         | 32      | 11                   | 0       | 0       | 0      | 0        | 0           | 11     | 0      | 0.0     | 0.0   |         |
| 15 <u>≺</u>   | 289     | 11                   | 0       | 0       | 0      | 0        | 0           | 11     | 0      | 0.0     | 0.0   | 0.0     |
| Total         | 445,015 | 435,788              | 125,697 | 106,572 | 24,326 | 35,738   | 3,614       | 74,259 | 65,582 | 100.0   | 100.0   | 100.0   |
| Max           | 66      | 25                   | 11      | 5.9     | 2.6    | 3.6      | 1.6         | 25     | 4.8    |         |   |         |

Percentages have been rounded and may not total to 100%.



| Effective      |        |         |         | Age at the | e time of the | e disaster |         |         |        | <b>T</b> - 4 - 1 |
|----------------|--------|---------|---------|------------|---------------|------------|---------|---------|--------|------------------|
| Dose<br>(mSv)  | 0 - 9  | 10 - 19 | 20 - 29 | 30 - 39    | 40 - 49       | 50 - 59    | 60 - 69 | 70 - 79 | 80 -   | Total            |
| <1             | 32,209 | 26,955  | 21,183  | 33,129     | 28,150        | 35,554     | 47,034  | 37,440  | 25,449 | 287,103          |
| 1-2            | 14,763 | 13,010  | 9,171   | 16,660     | 15,538        | 17,776     | 19,544  | 12,567  | 7,155  | 126,184          |
| 2-3            | 3,620  | 2,049   | 1,004   | 2,100      | 2,026         | 2,758      | 3,218   | 1,919   | 847    | 19,541           |
| 3-4            | 162    | 113     | 83      | 147        | 149           | 245        | 233     | 164     | 78     | 1,374            |
| 4-5            | 22     | 53      | 40      | 43         | 81            | 106        | 92      | 76      | 48     | 561              |
| 5-6            | 17     | 19      | 25      | 33         | 47            | 97         | 82      | 65      | 28     | 413              |
| 6-7            | 4      | 7       | 12      | 19         | 30            | 45         | 58      | 43      | 23     | 241              |
| 7-8            | 2      | 7       | 8       | 7          | 14            | 33         | 23      | 19      | 10     | 123              |
| 8-9            | 1      | 6       | 3       | 8          | 8             | 18         | 16      | 10      | 12     | 82               |
| 9-10           | 0      | 0       | 1       | 2          | 4             | 12         | 12      | 8       | 4      | 43               |
| 10-11          | 1      | 1       | 1       | 2          | 9             | 14         | 6       | 8       | 3      | 45               |
| 11-12          | 0      | 0       | 0       | 2          | 0             | 7          | 10      | 10      | 2      | 31               |
| 12-13          | 0      | 0       | 0       | 0          | 1             | 6          | 4       | 2       | 1      | 14               |
| 13-14          | 0      | 0       | 1       | 1          | 1             | 5          | 3       | 0       | 0      | 11               |
| 14-15          | 0      | 0       | 0       | 0          | 0             | 6          | 4       | 1       | 0      | 11               |
| 15 <u>&lt;</u> | 0      | 1       | 0       | 0          | 2             | 2          | 5       | 0       | 1      | 11               |
| Total          | 50,801 | 42,221  | 31,532  | 52,153     | 46,060        | 56,684     | 70,344  | 52,332  | 33,661 | 435,788          |

#### Estiamted external radiation dose by age group in the first four months (excluding radiation workers)

#### Estimated external radiation doses by sex in the first four months (excluding radiation workers)

| Effective Dose |         | By sex         |         |                | Total   | Proportion (%) |
|----------------|---------|----------------|---------|----------------|---------|----------------|
| ( mSv )        | Male    | Proportion (%) | Female  | Proportion (%) |         |                |
| <1             | 125,739 | 64.2           | 161,364 | 67.3           | 287,103 | 65.9           |
| 1-2            | 57,783  | 29.5           | 68,401  | 28.5           | 126,184 | 29.0           |
| 2-3            | 10,606  | 5.4            | 8,935   | 3.7            | 19,541  | 4.5            |
| 3-4            | 858     | 0.4            | 516     | 0.2            | 1,374   | 0.3            |
| 4-5            | 304     | 0.2            | 257     | 0.1            | 561     | 0.1            |
| 5-6            | 215     | 0.1            | 198     | 0.1            | 413     | 0.1            |
| 6-7            | 136     | 0.1            | 105     | 0.0            | 241     | 0.1            |
| 7-8            | 70      | 0.0            | 53      | 0.0            | 123     | 0.0            |
| 8-9            | 46      | 0.0            | 36      | 0.0            | 82      | 0.0            |
| 9-10           | 27      | 0.0            | 16      | 0.0            | 43      | 0.0            |
| 10-11          | 31      | 0.0            | 14      | 0.0            | 45      | 0.0            |
| 11-12          | 17      | 0.0            | 14      | 0.0            | 31      | 0.0            |
| 12-13          | 6       | 0.0            | 8       | 0.0            | 14      | 0.0            |
| 13-14          | 8       | 0.0            | 3       | 0.0            | 11      | 0.0            |
| 14-15          | 7       | 0.0            | 4       | 0.0            | 11      | 0.0            |
| 15 <u>&lt;</u> | 9       | 0.0            | 2       | 0.0            | 11      | 0.0            |
| Total          | 195,862 | 100.0          | 239,926 | 100.0          | 435,788 | 100.0          |

Percentages have been rounded and may not total to 100%.

#### Basic Survey, Fukushima Health Management Survey

Estimated external radiation doses (preceding and full-scale surveys)

Appendix 4

#### As of 31 July 2013

|             | a/region            | <1              | 1-2           | 2-3          | 3-4        | 4-5        | 5-6        | Effective<br>6-7 | 7-8       | 8-9      | 9-10     | 10-11    | 11-12    | 12-13  | 13-14 | 14-15 | 15 <u>&lt;</u> |              |
|-------------|---------------------|-----------------|---------------|--------------|------------|------------|------------|------------------|-----------|----------|----------|----------|----------|--------|-------|-------|----------------|--------------|
|             | Fukushima           | 24,755          | 46,666        | 7,114        | 126        | 9          | 5          | 2                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 78,67        |
|             | Nihonmatsu          | 3,257           | 7,627         | 2,564        | 69         | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 13,5         |
|             | Date                | 6,081           | 7,457         | 960          | 129        | 7          | 2          | 1                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 14,6         |
| Kempoku     | Motomiya            | 1,665           | 4,457         | 830          | 20         | 1          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 6,9          |
|             | Kori                | 797             | 2,470         | 59           | 1          | 0          | 1          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3,3          |
|             | Kunimi              | 1,303           | 1,174         | 12           | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2,4          |
|             | Kawamata            | 1,554<br>543    | 2,700         | 229<br>93    | 72         | 24<br>0    | 14         | 5                | 1         | 0        | 0        | 0        | 1        | 0      | 0     | 0     | 0              | 4,6          |
| S           | Otama<br>ubtotal    | 39,955          | 839<br>73,390 | 11,861       | 1<br>418   | 41         | 0<br>22    | 8                | 1         | 0        | 0        | 0        | 1        | 0      | 0     | 0     | 0              | 1,4<br>125,6 |
| 0.          | Koriyama            | 29,333          | 33,367        | 5,495        | 268        | 5          | 2          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 68,4         |
|             | Sukagawa            | 9,908           | 2,340         | 212          | 4          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 12,4         |
|             | Tamura              | 8,100           | 571           | 21           | 3          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 8,6          |
|             | Kagamiishi          | 2,145           | 49            | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2,1          |
|             | Tenei               | 370             | 390           | 33           | 1          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 7            |
| Kenchu      | Ishikawa            | 3,318           | 31            | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3,3          |
| lionona     | Tamakawa            | 1,136           | 15            | 1            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,1          |
|             | Hirata              | 1,232           | 29            | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,2          |
|             | Asakawa             | 1,126<br>988    | 12            | 1            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,1          |
|             | Furudono<br>Miharu  | 3,345           | 642           | 1<br>19      | 2          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 9<br>4.0     |
|             | Ono                 | 1,992           | 54            | 19           | 2          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2,0          |
| S           | ubtotal             | 62,993          | 37,510        | 5,784        | 278        | 5          | 2          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 106,5        |
|             | Shirakawa           | 9,759           | 770           | 5            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 10,5         |
|             | Nishigo             | 2,425           | 1,337         | 3            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3,7          |
|             | Izumizaki           | 986             | 17            | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,0          |
|             | Nakajima            | 654             | 6             | 1            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 6            |
| Kennan      | Yabuki              | 2,964           | 55            | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3,0          |
|             | Tanagura            | 2,063           | 25            | 3            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2,0          |
|             | Yamatsuri           | 1,060           | 6             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,0          |
|             | Hanawa<br>Samekawa  | 1,578<br>587    | 17<br>5       | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,5<br>5     |
| S           | ubtotal             | 22,076          | 2,238         | 12           | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 24,3         |
|             | Aizuwakamatsu       | 18,813          | 105           | 3            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 18,9         |
|             | Kitakata            | 5,913           | 37            | 0            | 1          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 5,9          |
|             | Kitashiobara        | 363             | 2             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3            |
|             | Nishiaizu           | 1,007           | 1             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,0          |
|             | Bandai              | 483             | 9             | 1            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 4            |
|             | Inawashiro          | 2,477           | 20            | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2,4          |
| Aizu        | Aizubange           | 1,805           | 6             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,8          |
|             | Yukawa              | 365             | 3             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3            |
|             | Yanaizu<br>Mishima  | 462<br>262      | 0             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2            |
|             | Kaneyama            | 450             | 1             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 4            |
|             | Showa               | 241             | 0             | 1            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 24           |
|             | Aizumisato          | 2,890           | 12            | 2            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2,9          |
| S           | ubtotal             | 35,531          | 198           | 8            | 1          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 35,73        |
|             | Shimogo             | 797             | 2             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 7            |
| linami-aizu | Hinoemata           | 83              | 0             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1            |
|             | Tadami              | 679             | 3             | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 6            |
| ~           | Minami-aizu         | 2,032           | 18            | 0            | 0          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 2,0          |
| Si          | ubtotal             | 3,591<br>10,311 | 23<br>373     | 0<br>75      | 0<br>12    | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3,6<br>10,7  |
|             | Soma<br>Minami-soma | 19,291          | 5,664         | 443          | 84         | 33         | 3          | 5                | 4         | 1        | 0        | 0        | 1        | 0      | 0     | 0     | 0              | 25,5         |
|             | Hirono              | 1,646           | 41            | 0            | 04         | 0          | 0          | 1                | 4         | 1        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,6          |
|             | Naraha              | 3,023           | 124           | 13           | 2          | 0          | 1          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 3,1          |
|             | Tomioka             | 5,783           | 1,057         | 95           | 15         | 3          | 1          | 0                | 2         | 2        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 6,9          |
| S           | Kawauchi            | 936             | 311           | 16           | 0          | 0          | 0          | 0                | 1         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,2          |
| Soso        | Okuma               | 3,152           | 1,162         | 92           | 14         | 9          | 4          | 4                | 3         | 0        | 2        | 2        | 0        | 0      | 2     | 0     | 0              | 4,4          |
|             | Futaba              | 2,660           | 442           | 72           | 19         | 5          | 3          | 2                | 6         | 2        | 1        | 0        | 1        | 0      | 0     | 0     | 0              | 3,2          |
|             | Namie               | 8,123           | 2,385         | 481          | 101        | 48         | 27         | 27               | 17        | 12       | 6        | 16       | 9        | 5      | 4     | 4     | 8              | 11,2         |
|             | Katsurao            | 474             | 136           | 17           | 4          | 0          | 0          | 0                | 0         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 6            |
|             | Shinchi             | 2,129           | 612           | 1            | 0          | 0          | 250        | 0                | 0         | 0        | 0        | 0        | 0        | 0<br>9 | 0     | 0     | 0              | 2,1          |
| S           | litate<br>ubtotal   | 370<br>57,898   | 613<br>12,325 | 552<br>1,857 | 423<br>674 | 412<br>514 | 350<br>389 | 194<br>233       | 89<br>122 | 64<br>82 | 33<br>43 | 27<br>45 | 19<br>30 | 9      | 5     | 11    | 3<br>11        | 3,1<br>74,2  |
| lwaki       | lwaki               | 65,059          | 500           | 1,657        | 3          | 1          | 0          | 233              | 0         | 02       | 43       | 40       | 0        | 0      | 0     | 0     | 0              | 65,5         |
|             | ubtotal             | 287,103         | 126,184       | 19,541       | 1,374      | 561        | 413        | 241              | 123       | 82       | 43       | 45       | 31       | 14     | 11    | 11    | 11             | 435,7        |
|             |                     | 65.9            | 29.0          | 4.5          | 0.3        | 0.1        | 0.1        | 0.1              | 0.0       | 0.0      | 0.0      | 0.0      | 0.0      | 0.0    | 0.0   | 0.0   | 0.0            | 100          |
| Prop        | ortion (%)          | 94              |               | 4.8          |            | 0.         | 2          | 0.               | 1         | 0.       | 0        | 0.       | 0        | 0.     | 0     | 0.0   | )              | 100          |
|             |                     |                 |               | 99.8         |            |            |            |                  | 0.2       |          |          |          |          | 0.0    |       |       | 0.0            | 100          |
| v           | isitors             | 1,416           | 247           | 17           | 2          | 1          | 0          | 0                | 1         | 0        | 0        | 0        | 0        | 0      | 0     | 0     | 0              | 1,6          |
|             | I+Visitors          | 288,519         | 126,431       | 19,558       | 1,376      | 562        | 413        | 241              | 124       | 82       | 43       | 45       | 31       | 14     | 11    | 11    | 11             | 437,4        |

Percentages have been rounded and may not total to 100%.

<20.0mm 9,757

58.7

44.7

187

44.0

44.7

60,374

13,382

35.1

1,187

44.8

158

49.5

35.8

44.0

14,727

84,858

60,187

### **Results of primary examination**

| Results of p                        | гшагу           | examina       | uon                            |         |          |          |     |                   |                   |                    |                  |
|-------------------------------------|-----------------|---------------|--------------------------------|---------|----------|----------|-----|-------------------|-------------------|--------------------|------------------|
| The confirmed test re-              | sults by 7 June | e 2013        |                                |         |          |          |     |                   |                   |                    |                  |
|                                     |                 | Number of     | Number of                      |         | Number   | by class |     |                   | Number by n       | odules and cysts   |                  |
|                                     |                 | participants  | confirmed test<br>results b 1) |         | Proporti | ion (%)  |     | Nod               | lules             | C                  | ysts             |
|                                     |                 | as of 31 July | Rates                          | A       | 1        | D        | 0   | Proport           | tion (%)          | Propor             | rtion (%)        |
|                                     |                 | а             | b/a (%)                        | A1      | A2       | В        | C   | <u>&gt;</u> 5.1mm | <u>&lt;</u> 5.0mm | <u>&gt;</u> 20.1mm | <u>&lt;</u> 20.0 |
| Municipalities targ                 | eted for FY     | 39,927        | 16,633                         | 6,799   | 9,721    | 113      | 0   | 112               | 77                | 1                  |                  |
| 2013 examin                         | ation           | 39,927        | 41.7                           | 40.9    | 58.4     | 0.7      | 0.0 | 0.7               | 0.5               | 0.0                | ~~~~~~           |
|                                     | Carried out in  | 124 749       | 134,748                        | 73,730  | 60,073   | 944      | 1   | 931               | 680               | 8                  |                  |
|                                     | FY 2012         | 134,748       | 100.0                          | 54.7    | 44.6     | 0.7      | 0.0 | 0.7               | 0.5               | 0.0                |                  |
| Municipalities                      | Carried out in  | 838           | 425                            | 231     | 186      | 8        | 0   | 8                 | 4                 | 0                  |                  |
| targeted for FY 2012<br>examination | FY 2013         | 626           | 50.7                           | 54.4    | 43.8     | 1.9      | 0.0 | 1.9               | 0.9               | 0.0                |                  |
| examination                         | Subtotal        | 135,586       | 135,173                        | 73,961  | 60,259   | 952      | 1   | 939               | 684               | 8                  |                  |
|                                     | Subiolai        | 155,580       | 99.7                           | 54.7    | 44.6     | 0.7      | 0.0 | 0.7               | 0.5               | 0.0                |                  |
|                                     | Carried out in  | 20.114        | 38,114                         | 24,469  | 13,459   | 186      | 0   | 184               | 201               | 1                  |                  |
|                                     | FY 2011         | 38,114        | 100.0                          | 64.2    | 35.3     | 0.5      | 0.0 | 0.5               | 0.5               | 0.0                |                  |
|                                     | Carried out in  | 2 (47         | 2,647                          | 1,437   | 1,187    | 23       | 0   | 23                | 23                | 0                  |                  |
| Municipalities                      | FY 2012         | 2,647         | 100.0                          | 54.3    | 44.8     | 0.9      | 0.0 | 0.9               | 0.9               | 0.0                |                  |
| targeted for FY 2011<br>examination | Carried out in  | 535           | 319                            | 157     | 157      | 5        | 0   | 5                 | 2                 | 0                  |                  |
| examination                         | FY 2013         | 355           | 59.6                           | 49.2    | 49.2     | 1.6      | 0.0 | 1.6               | 0.6               | 0.0                |                  |
|                                     | Subtotal        | 41,296        | 41,080                         | 26,063  | 14,803   | 214      | 0   | 212               | 226               | 1                  |                  |
|                                     | Subiotal        | 41,290        | 99.5                           | 63.4    | 36.0     | 0.5      | 0.0 | 0.5               | 0.6               | 0.0                |                  |
| T ( 1                               |                 | 21 < 800      | 192,886                        | 106,823 | 84,783   | 1,279    | 1   | 1,263             | 987               | 10                 |                  |
| Total                               |                 | 216,809       | 89.0                           | 55.4    | 44.0     | 0.7      | 0.0 | 0.7               | 0.5               | 0.0                |                  |

1) Number of participants with confirmed test results who underwent the examination inside and outside Fukushima.

#### Status of the results

- A1: No nodules/cysts
- A2: Nodules  $\leq 5.0 \text{ mm}$  or cysts  $\leq 20.0 \text{ mm}$
- B : Nodules  $\geq 5.1$  mm or cysts  $\geq 20.1$  mm
- C : Immediate need for secondary examination

Outline of the results

- Those with A1 and A2 screening test results need a follow-up till next screening from April 2014.
- Those with B and C screening test results will undergo a secondary examination.
- Some A2 test results may be classified as B results when clinically indicated.
- Percentages have been rounded and may not total to 100%. ۲
- FY 2011 is from 1 April 2011 through 31 March 2012. •
- FY 2012 is from 1 April 2012 through 31 March 2013.
- FY 2013 is from 1 April 2013 through 31 March 2014.

## Results of the secondary examination

|   | itebuite of t        | ine see      | Jiiuui y     | chainin | auon         |            |            |         |               |              |              |             |              |                |
|---|----------------------|--------------|--------------|---------|--------------|------------|------------|---------|---------------|--------------|--------------|-------------|--------------|----------------|
|   | Municipalities targe | ted for FY 2 | 013 examinat | ion     |              |            |            |         |               |              |              |             | As of        | f 31 July 2013 |
|   |                      | Number of    | Number who   | Partic  | ipants in se | econdary e | xamination | 1       | Number of peo | ple whose se | econdary exa | mination wa | as completed |                |
|   |                      | participants | required     |         |              |            |            |         |               |              |              | Advis       | ed to be     |                |
|   |                      | in primary   | secondary    |         |              |            |            |         |               | Requirin     | a further    | monitored   | With         | Total number   |
|   |                      | examination  | examination  | Total   |              |            |            |         |               | exami        | 0            |             | aspiration   | of             |
|   |                      |              |              | Total   | Age          | Age        | Age        | Age     | Total         | exam         | nation       |             | biopsy       | participants   |
|   |                      | - 1)         |              |         | 0-5          | 6-10       | 11-15      | 16-18   |               |              |              |             | cytology     | in secondary   |
|   |                      | a 1)         | b            | с       | d            | e          | f          | g       | h 2)          | A1 i 3)      | A2 j 3)      | k 4)        | 1            | examination    |
|   |                      |              |              |         |              |            |            |         |               |              |              |             |              |                |
|   |                      |              | b/a (%)      | c/b (%) | d/c (%)      | e/c (%)    | f/c (%)    | g/c (%) | h/b (%)       | i/h (%)      | j/h (%)      | k/h (%)     | l/k (%)      |                |
| ľ |                      |              | 113          | 3       | 0            | 1          | 2          | 0       | 0             | 0            | 0            | 0           | 0            |                |
|   | Subtotal             | 39,927       | 0.3          | 27      | 0.0          | 33.3       | 66.7       | 0.0     | 0.0           | 0.0          | 0.0          | 0.0         | 0.0          | 3              |

#### Municipalities targeted for FY 2012 examination

| Municipalities targe |              |             | IOII    |              |           |            |         |               |                   |               |             |  |              |
|----------------------|--------------|-------------|---------|--------------|-----------|------------|---------|---------------|-------------------|---------------|-------------|--|--------------|
|                      |              | Number who  | Partici | ipants in se | condary e | xamination | ı       | Number of peo | ple whose se      | condary exa   | mination wa | as completed   | J            |
|                      | participants | required    |         |              |           |            |         |               |                   |               | Advis       | ed to be   |              |
|                      | in primary   | secondary   |         |              |           |            |         |               | Dinin             | - Countly and | monitored   | sed to be<br>With<br>aspiration<br>biopsy<br>cytology<br>1<br>1/k (%)<br>677<br>39.2<br>18<br>54.2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2  | Total number |
|                      | examination  | examination | Total   |              |           |            |         |               | Requirin<br>exami |               |             | aspiration<br>biopsy<br>cytology           1           0           1           1           67           3           4           3           3           4           20           50.00           4           1           0           20.0           50.0           4           16           0           29.6           7           3           8           42.9           0 </td <td>of</td> | of           |
|                      |              |             |         | Age          | Age       | Age        | Age     | Total         | exami             | nation        |             | biopsy   | participants |
|                      |              |             |         | 0-5          | 6-10      | 11-15      | 16-18   | rotar         |                   |               |             | cytology   | in secondary |
|                      | a 1)         | b           | с       | d            | e 0-10    | f          | g       | h 2)          | A1 i 3)           | A2 j 3)       | k 4)        | 1  | examination  |
|                      |              | -           | -       | <u>u</u>     |           | •          | 5       | 11 2)         |                   |               |             | -  | examination  |
|                      |              | b/a (%)     | c/b (%) | d/c (%)      | e/c (%)   | f/c (%)    | g/c (%) | h/b (%)       | i/h (%)           | j/h (%)       | k/h (%)     | l/k (%)  |              |
| Fukushima            | 46,805       | 273         | 242     | 4            | 27        | 96         | 115     | 233           | 2                 | 60            | 171         |  | 581          |
| Fukusiiiiiia         | 40,803       | 0.6         | 88.6    | 1.7          | 11.2      | 39.7       | 47.5    | 85.3          | 0.9               | 25.8          | 73.4        | 39.2   | 581          |
| Nihonmatsu           | 8,675        | 53          | 40      | 0            | 4         | 22         | 14      | 38            | 0                 | 5             | 33          | 18   | 97           |
| whommatsu            | 8,075        | 0.6         | 75.5    | 0.0          | 10.0      | 55.0       | 35.0    | 71.7          | 0.0               | 13.2          | 86.8        | 54.5   | 21           |
| Motomiya             | 5,154        | 28          | 22      | 1            | 2         | 13         | 6       | 16            | 0                 | 3             | 13          |  | 46           |
| Wotonnya             | 5,154        | 0.5         | 78.6    | 4.5          | 9.1       | 59.1       | 27.3    | 57.1          | 0.0               | 18.8          | 81.3        | 30.8   | 40           |
| Otama                | 1,357        | 7           | 7       | 0            | 0         | 4          | 3       | 5             | 0                 | 1             | 4           | 2  | 15           |
| Otania               | 1,557        | 0.5         | 100.0   | 0.0          | 0.0       | 57.1       | 42.9    | 71.4          | 0.0               | 20.0          | 80.0        |  | 15           |
| Koriyama             | 50.997       | 443         | 182     | 3            | 56        | 86         | 37      | 90            | 0                 | 36            | 54          |  | 289          |
| Horryunu             | 50,777       | 0.9         | 41.1    | 1.6          | 30.8      | 47.3       | 20.3    | 20.3          | 0.0               | 40.0          | 60.0        |  | 20)          |
| Kori                 | 1,803        | 12          | 9       | 1            | 2         | 3          | 3       | 9             | 0                 | 2             |             | 2  | 20           |
|                      | 1,005        | 0.7         | 75.0    | 11.1         | 22.2      | 33.3       | 33.3    | 75.0          | 0.0               | 22.2          | 77.8        |  | 20           |
| Kunimi               | 1,369        | 15          | 12      | 2            | 2         | 2          | 6       | 9             | 1                 | 1             |             |  | 26           |
| Rumm                 | 1,507        | 1.1         | 80.0    | 16.7         | 16.7      | 16.7       | 50.0    | 60.0          | 11.1              | 11.1          | 77.8        |  | 20           |
| Tenei                | 860          | 6           | 5       | 0            | 2         | 1          | 2       | 4             | 1                 | 1             | 2           | 0  | 12           |
| rener                | 000          | 0.7         | 83.3    | 0.0          | 40.0      | 20.0       | 40.0    | 66.7          | 25.0              | 25.0          | 50.0        |  | 12           |
| Shirakawa            | 11,012       | 63          | 46      | 2            | 10        | 25         | 9       | 38            | 1                 | 8             | 29          | · · · ·  | 125          |
| Simakawa             | 11,012       | 0.6         | 73.0    | 4.3          | 21.7      | 54.3       | 19.6    | 60.3          | 2.6               | 21.1          | 76.3        | 24.1   | 125          |
| Nishigo              | 3,619        | 30          | 23      | 1            | 5         | 9          | 8       | 18            | 0                 | 6             | 12          | 1  | 44           |
| Tubingo              | 5,017        | 0.8         | 76.7    | 4.3          | 21.7      | 39.1       | 34.8    | 60.0          | 0.0               | 33.3          | 66.7        |  |              |
| Izumizaki            | 1,148        | 5           | 4       | 0            | 2         | 0          | 2       | 2             | 0                 | 2             |             | 0  | 7            |
| izuilizaki           | 1,140        | 0.4         | 80.0    | 0.0          | 50.0      | 0.0        | 50.0    | 40.0          | 0.0               | 100.0         | 0.0         | 0.0  | ,            |
| Miharu               | 2,446        | 15          | 0       | 0            | 0         | 0          | 0       | 0             | 0                 | 0             | 0           | 0  | 0            |
| iviiilai u           | 2,440        | 0.6         | 0.0     | 0.0          | 0.0       | 0.0        | 0.0     | 0.0           | 0.0               | 0.0           | 0.0         | 0.0  | 0            |
| Iwaki                | 341          | 3           | 2       | 0            | 0         | 2          | 0       | 0             | 0                 | 0             | 0           | 0  | 2            |
| IWaKI                | 541          | 0.9         | 66.7    | 0.0          | 0.0       | 100.0      | 0.0     | 0.0           | 0.0               | 0.0           | 0.0         | 0.0  | 2            |
| Subtotal             | 135,586      | 953         | 594     | 14           | 112       | 263        | 205     | 462           | 5                 | 125           | 332         | 120  | 1,264        |
| Subtotal             | 133,380      | 0.7         | 62.3    | 2.4          | 18.9      | 44.3       | 34.5    | 48.5          | 1.1               | 27.1          | 71.9        | 36.1   | 1,204        |

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| Municipalities targ |                           |                          |            |              |           |            |            |               |              |              |            |                    |                    |
|---------------------|---------------------------|--------------------------|------------|--------------|-----------|------------|------------|---------------|--------------|--------------|------------|--------------------|--------------------|
|                     | Number of                 | Number who               | Partic     | ipants in se | condary e | xaminatio  | 1          | Number of peo | ple whose se | econdary exa |            |                    | ]                  |
|                     | participants              | required                 |            |              |           |            |            |               |              |              |            | ed to be           |                    |
|                     | in primary<br>examination | secondary<br>examination | Total      |              |           |            |            |               | Requirin     |              | monitored  | With<br>aspiration | Total numbe        |
|                     |                           |                          | Total      | Age          | Age       | Age        | Age        | Total         | exami        | nation       |            | biopsy<br>cytology | of<br>participants |
|                     | a 1)                      | 1-                       | -          | 0-5          | 6-10      | 11-15      | 16-18      |               | A1: 2)       | 42:2)        | k 4)       |                    | in secondar        |
|                     |                           | b                        | с          | d            | e         | f          | g          | h 2)          | A1 i 3)      | A2 j 3)      | K 4)       | 1                  | examinatio         |
|                     |                           | b/a (%)                  | c/b (%)    | d/c (%)      | e/c (%)   | f/c (%)    | g/c (%)    | h/b (%)       | i/h (%)      | j/h (%)      | k/h (%)    | l/k (%)            |                    |
| Kawamata            | 2,231                     | 8                        | 8          | 0            | 1         | 3          | 4          | 8             | 1            | 0            | 7          | 6                  | 24                 |
| Kawamata            | 2,231                     | 0.4                      | 100.0      | 0.0          | 12.5      | 37.5       | 50.0       | 100.0         | 12.5         | 0.0          | 87.5       | 85.7               | 24                 |
| Namie               | 3,207                     | 25<br>0.8                | 20 80.0    | 5.0          | 3         | 6<br>30.0  | 10<br>50.0 | 20 80.0       | 1 5.0        | 3            | 16<br>80.0 | <u>10</u><br>62.5  | 51                 |
|                     |                           | 6                        | 80.0       | 5.0          | 15.0      | 30.0       | 30.0       | 5             | 5.0          | 15.0         | 2          | 2                  |                    |
| Iitate              | 940                       | 0.6                      | 100.0      | 0.0          | 33.3      | 16.7       | 50.0       | 83.3          | 20.0         | 40.0         | 40.0       | 100.0              | 13                 |
| Minami-soma         | 10,581                    | 52                       | 45         | 6            | 3         | 15         | 21         | 44            | 4            | 4            | 36         | 21                 | 105                |
| Minami-soma         | 10,581                    | 0.5                      | 86.5       | 13.3         | 6.7       | 33.3       | 46.7       | 84.6          | 9.1          | 9.1          | 81.8       | 58.3               | 105                |
| Date                | 10,621                    | 50                       | 44         | 0            | 3         | 16         | 25         | 42            | 4            | 8            | 30         | 23                 | 117                |
|                     |                           | 0.5                      | 88.0<br>24 | 0.0          | 6.8       | 36.4<br>13 | 56.8       | 84.0          | 9.5          | 19.0         | 71.4       | 76.7               |                    |
| Tamura              | 6,363                     | 0.5                      | 72.7       | 4.2          | 3<br>12.5 | 54.2       | 29.2       | 63.6          | 0.0          | 2<br>9.5     | 90.5       | 9 47.4             | 59                 |
|                     | 70.4                      | 4                        | 2          | 0            | 12.0      | 0          | 1          | 1             | 0.0          | 0            | 1          | 1                  |                    |
| Hirono              | 796                       | 0.5                      | 50.0       | 0.0          | 50.0      | 0.0        | 50.0       | 25.0          | 0.0          | 0.0          | 100.0      | 100.0              | 3                  |
| Naraha              | 1,088                     | 5                        | 4          | 1            | 0         | 0          | 3          | 3             | 0            | 1            | 2          | 1                  |                    |
| Itarana             | 1,000                     | 0.5                      | 80.0       | 25.0         | 0.0       | 0.0        | 75.0       | 60.0          | 0.0          | 33.3         | 66.7       | 50.0               | -                  |
| Tomioka             | 2,179                     | 11<br>0.5                | 63.6       | 0.0          | 14.3      | 28.6       | 4<br>57.1  | 63.6          | 0.0          | 0.0          | 7 100.0    | 5                  | 18                 |
|                     |                           | 4                        | 63.6       | 0.0          | 14.3      | 28.6       | 57.1       | 63.6          | 0.0          | 0.0          | 100.0      | /1.4               |                    |
| Kawauchi            | 267                       | 1.5                      | 100.0      | 0.0          | 25.0      | 0.0        | 75.0       | 100.0         | 0.0          | 25.0         | 75.0       | 33.3               | 11                 |
| 01                  | 1.00.6                    | 1.5                      | 7          | 0.0          | 25.0      | 4          | 3          | 6             | 0.0          | 1            | 5          | 3                  |                    |
| Okuma               | 1,906                     | 0.6                      | 58.3       | 0.0          | 0.0       | 57.1       | 42.9       | 50.0          | 0.0          | 16.7         | 83.3       | 60.0               | 15                 |
| Futaba              | 903                       | 3                        | 2          | 0            | 0         | 1          | 1          | 1             | 0            | 0            | 1          | 1                  | 3                  |
| Tutaba              | 903                       | 0.3                      | 66.7       | 0.0          | 0.0       | 50.0       | 50.0       | 33.3          | 0.0          | 0.0          | 100.0      | 100.0              | -                  |
| Katsurao            | 180                       | 1                        | 1          | 0            | 1         | 0          | 0          | 1             | 0            | 1            | -          | -                  | 2                  |
|                     |                           | 0.6                      | 100.0      | 0.0          | 100.0     | 0.0        | 0.0        | 100.0         | 0.0          | 100.0        | 0.0        | 0.0                |                    |
| Other               | 34                        | -                        | -          | -            | -         |            |            | -             | -            |              | -          |                    | 1                  |
|                     |                           | 214                      | 174        | - 9          | - 19      | 61         | 85         | 163           | 11           | 23           | 129        | 83                 |                    |
| Subtotal            | 41,296                    | 0.5                      | 81.3       | 5.2          | 10.9      | 35.1       | 48.9       | 76.2          | 6.7          | 14.1         | 79.1       | 64.3               | 430                |
|                     |                           |                          |            |              |           |            |            |               |              |              |            |                    |                    |
| Total               | 216,809                   | 1,280                    | 771        | 23           | 132       | 326        | 290        | 625           | 16           | 148          | 461        | 203                | 1,69               |
| rotal               | 210,009                   | 0.6                      | 60.2       | 3.0          | 17.1      | 42.3       | 37.6       | 48.8          | 2.6          | 23.7         | 73.8       | 44.0               | 1,09               |

- 1) Number of participants who underwent the examination within and outside Fukushima prefecture as of 31 July 2013.
- 2) Excluding the participants who has not been informed of the results of the blood test, the urine test, and cytodiagnosis.
- 3) Targets for further examination from April 2014.
- 4) Those requiring re-examination after six-month to one year.
- Since secondary examination has just begun, the number of participants is still low for comparison of municipalities.
- $\bullet$  Percentages have been rounded and may not total to 100%.

#### **Results of aspiration biopsy cytology**

As of 31 July 2013

|         | Malignant or Suspicious<br>for malignancy                            | Male: Female | Average age (Years ± SD, range) |                       | Average size               |
|---------|--|--------------|---------------------------------|-----------------------|----------------------------|
|         | 14 cases   |              | At diagnosis                    | $17.2 \pm 2.0, 13-20$ |                            |
| FY 2011 | (10 surgical: 1 benign<br>thyroid nodule, 9<br>papillary carcinomas) | 5:9          | On 11 March 2011                | 15.6 ± 2.0, 11-18     | 14.7 ± 6.7mm<br>6.0-33.0mm |
|         | 30 cases   |              | At diagnosis                    | $16.3 \pm 3.0, 8-21$  |                            |
| FY 2012 | (9 surgical: all papillary carcinomas)                               | 13:17        | On 11 March 2011                | 14.3 ± 2.9, 6-18      | 15.7 ± 8.2mm<br>5.2-34.1mm |
|         | 44 cases   |              | At diagnosis                    | 16.6 ± 2.7, 8-21      |                            |
| Total   | (10 surgical: 1 hanian   |              | On 11 March 2011                | 14.7 ± 2.7, 6-18      | 15.4 ± 7.6mm<br>5.2-34.1mm |

SD: Standard Deviation

#### Results of the secondary examination by municipalities as of 31 July 2013

|            | Number of<br>participants in<br>primary<br>examination<br>a 1) | Number who<br>required<br>secondary<br>examination<br>b | Number of<br>participants in<br>secondary<br>examination | Participation<br>rates<br>b/a (%) | Number of<br>malignant or<br>suspicious for<br>malignancy<br>C | Proportion<br>c/a (%) |
|------------|--|---|--|-----------------------------------|--|-----------------------|
| Fukushima  | 46,805   | 273   | 242  | 0.6                               | 11   | 0.02                  |
| Nihonmatsu | 8,675  | 53  | 40   | 0.6                               | 4  | 0.05                  |
| Motomiya   | 5,154  | 28  | 22   | 0.5                               | 3  | 0.06                  |
| Otama      | 1,357  | 7   | 7  | 0.5                               | 1  | 0.07                  |
| Koriyama   | 50,997   | 443   | 182  | 0.9                               | 8  | 0.02                  |
| Kori       | 1,803  | 12  | 9  | 0.7                               | 0  | 0.00                  |
| Kunimi     | 1,369  | 15  | 12   | 1.1                               | 0  | 0.00                  |
| Tenei      | 860  | 6   | 5  | 0.7                               | 0  | 0.00                  |
| Shirakawa  | 11,012   | 63  | 46   | 0.6                               | 2  | 0.02                  |
| Nishigo    | 3,619  | 30  | 23   | 0.8                               | 1  | 0.03                  |
| Izumizaki  | 1,148  | 5   | 4  | 0.4                               | 0  | 0.00                  |
| Miharu     | 2,446  | 15  | 0  | 0.6                               | 0  | 0.00                  |
| Iwaki      | 341  | 3   | 2  | 0.9                               | 0  | 0.00                  |
| Total      | 135,586  | 953   | 594  | 0.7                               | 30   | 0.02                  |

#### Municipalities targeted for FY 2012 examination

1) Total number of participants within and outside Fukushima.

• Priority for secondary examination is given to those in urgent clinical need.

|             | Number of<br>participants in<br>primary<br>examination<br>a 1) | Number who<br>required<br>secondary<br>examination<br>b | Number of<br>participants in<br>secondary<br>examination | Participation<br>rates<br>b/a (%) | Number of<br>malignant or<br>suspicious for<br>malignancy<br>C 2) | Proportion<br>c/a (%) |
|-------------|--|---|--|-----------------------------------|---|-----------------------|
| Kawamata    | 2,231  | 8   | 8  | 0.4                               | 2   | 0.09                  |
| Namie       | 3,207  | 25  | 20   | 0.8                               | 1   | 0.03                  |
| Iitate      | 940  | 6   | 6  | 0.6                               | 0   | 0.00                  |
| Minami-soma | 10,581   | 52  | 45   | 0.5                               | 2   | 0.02                  |
| Date        | 10,621   | 50  | 44   | 0.5                               | 2   | 0.02                  |
| Tamura      | 6,363  | 33  | 24   | 0.5                               | 3   | 0.05                  |
| Hirono      | 796  | 4   | 2  | 0.5                               | 0   | 0.00                  |
| Naraha      | 1,088  | 5   | 4  | 0.5                               | 0   | 0.00                  |
| Tomioka     | 2,179  | 11  | 7  | 0.5                               | 1   | 0.05                  |
| Kawauchi    | 267  | 4   | 4  | 1.5                               | 1   | 0.37                  |
| Okuma       | 1,906  | 12  | 7  | 0.6                               | 1   | 0.05                  |
| Futaba      | 903  | 3   | 2  | 0.3                               | 0   | 0.00                  |
| Katsurao    | 180  | 1   | 1  | 0.6                               | 0   | 0.00                  |
| Other 3)    | 34   | 0   | -  | -                                 | -   | -                     |
| Total       | 41,296   | 214   | 174  | 0.5                               | 13  | 0.03                  |

#### Municipalities targeted for FY 2011 examination

1) Total number of participants within and outside Fukushima.

2) Excluding the case of suspected malignancy found benign by aspiration biopsy cytology.

3) Number of those who underwent thyroid examination at schools outside of the nationally designated evacuation zones.

## Mental Health and Lifestyle Survey

Reported on 20 August 2013

## Response rates and support after the survey (FY 2012)

### 1. Response rates

| Number of re | of 31 July 2013 |           |           |  |
|--------------|-----------------|-----------|-----------|--|
|              | Target          | Number of | Response  |  |
|              | population      | response  | rates (%) |  |
| Children     | 27,108          | 11,124    | 41.0      |  |
| Adults       | 184,507         | 54,890    | 29.7      |  |
| Total        | 211,615         | 66,014    | 31.2      |  |

## 2. Support after the survey

### 2.1 Telephone counseling

Respondents who required support were identified on the basis of the survey response. Members of the FMU Mental Health Support Team (clinical psychologists and public health nurses et al.) attempted to contact the respondents via telephone, and provided advice and information about mental health issues.

As of 31 July 2013

| Buppont for th | lose who requ | 115 01 .          | 51 July 2015      |            |                   |            |
|----------------|---------------|-------------------|-------------------|------------|-------------------|------------|
|                | Respondents   | Proportion        | Support given for | Proportion | Number of         | Proportion |
|                | who required  | (%) <sup>1)</sup> | those who         | (%)        | respondents whose | (%)        |
|                | support       |                   | required support  |            | support was       |            |
|                |               |                   |                   |            | completed         |            |
| Children       | 556           | 5.0               | 556               | 100.0      | 495               | 88.9       |
| Adults         | 4,120         | 7.5               | 4,117             | 99.9       | 3,511             | 85.2       |
| Total          | 4,677         | 7.1               | 4,673             | 99.9       | 4,006             | 85.6       |

1) Percentages of respondents out of 11,103 children and 54,872 adults whose data were entered into the database.

2) Including respondents who could not be reached for telephone support due to absence or other reasons or who did

not provide their phone numbers.

3) Including support with written materials.

#### **Respondents who required support (A)**

Children with SDQ (Strength and Difficulties Questionnaire) score of  $\geq 20$  and adults with K6 (Kessler, 2003) score of  $\geq 17$  or PCL (PTSD Checklist Stressor-Specific Version) score of  $\geq 61$ .

| Support for | Support for those who required support (B)As of 31 July 2013 |                   |                  |           |                          |      |  |
|-------------|--|-------------------|------------------|-----------|--------------------------|------|--|
|             | Respondents  | Proportion        | Proportion       | Number of | Proportion               |      |  |
|             | who required   | (%) <sup>1)</sup> | those who        | (%)       | respondents whose        | (%)  |  |
|             | support  |                   | required support |           | support was<br>completed |      |  |
| Children    | 112  | 1.0               | 88               |           | 1                        | 58.0 |  |
| Adults      | 1,694  | 3.1               | 713              | 42.1      | 541                      | 31.9 |  |
| Total       | 1,806  | 2.7               | 801              | 44.4      | 606                      | 33.6 |  |

1) Percentages of respondents out of 11,103 children and 54,872 adults whose data were entered into the database.

2) Including respondents who could not be reached for telephone support due to absence or other reasons or who did

not provide their phone numbers.

3) Including support with written materials.

#### **Respondents who required support (B)**

Those identified on the basis of the content of free-answer questions.

Adults with a previous history of hypertension or diabetes who haven't received medical care with a BMI  $\geq$  30, and a weight gain of  $\geq$  3 kg after the disaster.

#### 2.2 Written materials

Respondents who could not be reached for telephone support due to absence or other reasons were sent written materials providing the telephone number of the Mental Health and Lifestyle Survey helpline for consultation. In order to provide them telephone counselling, the written materials include a response card for them to write down the changes of physical condition since they filled out the survey form.

#### 2.3 Support with municipal governments

The information of the respondents who were determined to require continuous support is shared with municipal governments which work with the Fukushima Centre for Disaster Mental Health as needed. 40 respondents were identified as candidates.

### **2.4 Other support services**

We provide over-the-phone support to those who directly make calls to the Mental Health and Lifestyle Survey helpline. 12 people received phone support.

FY 2012 is from 1 April 2012 through 31 March 2013.

### Interim report of Mental Health and Lifestyle Survey (FY 2012)

#### Purpose

On the basis of the results of Mental Health and Lifestyle survey (FY 2011), we conducted the survey using questionnaires in order to continue sending a strong message of support to the victim. In addition, this survey aims to provide better care by understanding the changes in lives of the victim and their cause.

#### Subjects

Target population of the survey in FY 2012 was 211,615 including officially registered residents of the nationally designated evacuation zones – Hirono, Naraha, Tomioka, Kawauchi, Okuma, Futaba, Namie, Katsurao, Iitate, Minami-soma, Tamura, Kawamata, and part of Date (the area with a specific spot recommended for evacuation) – and those born before 1 April 2012.

Group 1: 4,625 children born between 2 April 2009 and 1 April 2012 (0-3 year olds)

Group 2: 5,047 children born between 2 April 2006 and 1 April 2009 (4-6 year olds)

Group 3: 11,413 children born between 2 April 2000 and 1 April 2006 (primary school age)

Group 4: 6,023 children born between 2 April 1997 and 1 April 2000 (middle school age)

Group 5: 184,507 adults born before 1 April 1997

### Methods

Questionnaires (to be filled out by self or parent/guardian) were mailed to the target population.

### **Data collection**

52,116 responses gathered from 7 February through 28 February 2013 have been entered into the database by 19 July 2013.

#### Results

The numbers of valid response were: 1,804 (39.0%) in Group 1, 1,905 (37.7%) in Group 2, 3,974 (34.8%) in Group 3, 1,796 (29.8%) in Group 4 and 39,495 (21.4%) in Group 5.

## Conclusions

## Children

The prevalence of above the cut-off point of  $\geq 16$  on SDQ was higher among younger children. The survey showed a higher percentage of male children with above the cut-off point than female children: 18.8% in 4-6 years, 18.3% in primary school age and 13.4% in middle school age among male children, 14.5% in 4-6 years, 13.2% in primary school age and 12.2% in middle school age among female children.

### Adults

The higher the age, higher the proportion of above the cut-off points ( $\geq$ 13 for K6 and  $\geq$ 44 for PCL): 7.9% on K6 and 6.5 % on PCL in 10-19 years, 14.1% on K6 and 27.7% on PCL in 70-79 years.

The prevalence of above the cut-off point on K6 was 13.5% among females compared with 10.0% among males and above the cut-off point on PCL was 19.6% among females compared with 16.6% among males.

FY 2011 is from 1 April 2011 through 31 March 2012.

### 1. Interim report of Pregnancy and Birth Survey (FY2012)

The pregnancy and Birth Survey targeted (1) women who received Maternal and Child Health Handbooks from municipal offices in Fukushima Prefecture between 1August 2011 and 31 July 2012, and (2) those who had handbooks issued in other prefectures but received prenatal care or delivered babies in Fukushima during the period.

A total of 14,516 questionnaires were distributed after the middle of December 2012.

### 1.1 Number of responses

The number of responses as of 30 June was 6,913 (47.6%). The number of responses identified in each area is as follows: 1,780 (53.2%) in Kempoku, 2,002 (47.2%) in Kenchu, 540 (46.4%)in Kennan, 492 (43.0%) in Soso, 1,150 (45.7%) in Iwaki, 777 (42.0%) in Aizu, 77 (49.0%) in Minami-aizu, 95 (99.0%) in outside Fukushima.

### 1.2 Pregnancy outcome

- The proportion of miscarriage in Fukushima Prefecture was 0.79% and that of induced abortion was 0.09%, no different from the previous fiscal year. The proportion of premature delivery was 5.86% which was higher than the previous fiscal year (4.75%).
- The proportion of congenital malformations or child anomalies in singleton pregnancy was 2.32% in Fukushima Prefecture, which was more or less the same as that in general research (3-5%) like the previous fiscal year (2.74%). Cardiovascular malformations were the leading disease (0.80%).

### 1.3 Maternal mental health

•

The survey showed 25.6% of respondents with depression in Fukushima Prefecture, which was lower than 27.1% in the previous fiscal year. The proportion was highest in Soso area (32.1%) as was the case the previous fiscal year. The area with lowest rate of depression was Minami-aizu (18.2%). According to the Maternal and Child Health 21, using Edinburgh Postnatal Depression Scale, the proportion of post natal depression was 10.3% in 2009.

### 1.4 Housing environment and child rearing

The proportion of evacuees living in temporary housing or other housing was high in Soso area (61.5%).

- Asked how they fed the baby, 35.3% respondents were breastfeeding only, 54.2% used a mixture of breast milk and infant formula, 9.9% fed infant formula only. The proportion of those who chose only to breastfeed increased compared to the previous fiscal year (30.4%). The anxiety associated with the effects of radiation on breast milk was the reason for using formula (6.2%). The proportion was lower than the previous fiscal year (19.8%).
- The proportion of those who said they felt confident about child rearing was 46.0%. According to the Infant Health Survey 2010 by the Japanese Society of Child Health, the proportion was 40.5% when the child was one year old.

### 1.5 The Quality of medical care

- The proportion of those who thought they received adequate care was 81.3% (including 'Yes-very much so' and 'Yes').
- The proportion of those who could not attend the same facility that they originally intended to visit for obstetric exams or delivery was 14.2% in Fukushima Prefecture, lower than the previous fiscal year (24.6%). The proportion was highest for the Soso area in the previous fiscal year (72.8%) and for the outside Fukushima in the current fiscal year (28.4%). Those who changed to a different facility outside Fukushima of their own accord were 25.1%, the proportion was lower than the previous fiscal year (54.7%).
- The proportion of those who could not undergo obstetric exams as scheduled was 2.3% in Fukushima Prefecture, which was lower than the previous fiscal year (18.8%). Those who thought they were affected by the change were 26.5% in Fukushima Prefecture.

### 1.6 Next pregnancy

- The proportion of those who are planning to have another baby in the future was 52.7%. According to the Fourteenth Japanese National Fertility Survey in 2010, of couples married for less than 10 year, the proportion of those who want to have a baby was 58% (the proportion was 51% when the couples already had one).
- Services requested by those who wish to have a baby in the future were the information and services regarding child care and pediatric healthcare (70.3%), followed by the adequate nursery school, childcare offering extended hours, and daycare places where sick children can stay (65.7%).
- The reasons for not planning to have a baby in the future are as follows: 46.5% just did not want one, 35.6% said they were busy raising their children, and 14.9% were worried about the effects of radiation.

### 1.7 Telephone Counseling Conversations

The number of telephone counseling conversations was 1,059. Those identified as in need of

support were 726 (68.6%) respondents with sign of depression. Additionally, 333 (31.4%) respondents were identified as in need of support based on the free-answer question.

- The most frequently mentioned issue was the mental and physical health issues of mothers (33.1%) followed by child rearing (26.7%). The anxiety about radiation, the most frequently mentioned issue in the previous fiscal year, declined from 29.2% to 23.4%.
- 1.8 Free-answer question
  - 1,430 (20.7%) respondents answered. The number was lower than 3,722 (40.0%) respondents in the previous fiscal year.
  - The frequently written issue was the effects of radiation on fetus and child (26.1%), as the previous fiscal year (29.6%).

FY2012 is from 1 April 2012 through 31 March 2013.

## 2. Pregnancy and Birth Survey comparisons to the previous surveys (FY 2011 and FY2012)

The percentages have been rounded and may not total to100%.

#### 2.1 Response rate

| (FY 2012) From 17 December 2012 through 30 June 2013 |                       |                         |  |  |  |  |
|--|-----------------------|-------------------------|--|--|--|--|
| Area   | Target population (%) | Number of responses (%) |  |  |  |  |
| Kempoku  | 3,347 (23.1)          | 1,780 (53.2)            |  |  |  |  |
| Kenchu   | 4,243 ( 29.2)         | 2,002 (47.2)            |  |  |  |  |
| Kennan   | 1,164 ( 8.0)          | 540 (46.4)              |  |  |  |  |
| Soso   | 1,145 ( 7.9)          | 492 (43.0)              |  |  |  |  |
| Iwaki  | 2,516 (17.3)          | 1,150 (45.7)            |  |  |  |  |
| Aizu   | 1,848 ( 12.7)         | 777 (42.0)              |  |  |  |  |
| Minami-aizu  | 157 ( 1.1)            | 77 (49.0)               |  |  |  |  |
| Outside  | 96 ( 0.7)             | 05 (00 0)               |  |  |  |  |
| Fukushima  | 90 ( 0.7)             | 95 (99.0)               |  |  |  |  |
| Total  | 14,516 (100.0)        | 6,913 (47.6)            |  |  |  |  |

(FY 2011) From 20 January 2012 through 31 March 2013

| (1 2011) Hom 20 Sundary 2012 through 51 Water 2015 |                       |                         |  |  |  |  |
|--|-----------------------|-------------------------|--|--|--|--|
| Area   | Target population (%) | Number of responses (%) |  |  |  |  |
| Kempoku  | 3,647 ( 22.8)         | 2,288 (62.7)            |  |  |  |  |
| Kenchu   | 4,819 ( 30.1)         | 2,857 (59.3)            |  |  |  |  |
| Kennan   | 1,256 ( 7.8)          | 631 (50.2)              |  |  |  |  |
| Soso   | 1,468 ( 9.2)          | 962 (65.5)              |  |  |  |  |
| Iwaki  | 2,711 ( 16.9)         | 1,513 (55.8)            |  |  |  |  |
| Aizu   | 1,919 ( 12.0)         | 957 (49.9)              |  |  |  |  |
| Minami-aizu  | 152 ( 0.9)            | 85 (55.9)               |  |  |  |  |
| Outside  | 20 ( 0.2)             | 22 (70.2)               |  |  |  |  |
| Fukushima  | 29 ( 0.2)             | 23 (79.3)               |  |  |  |  |
| Total  | 16,001 (100.0)        | 9,316 (58.2)            |  |  |  |  |

The data of 6,876 respondents were collected excluding 37 invalid responses (3 no answer, 33 based on the date of the issue of Maternal and Child Health Handbooks, 1 based on the date of delivery).

The data of 8,812 respondents were collected excluding 504 invalid responses (3 no answer, 1 death of participant, 1 refused to answer, 19 multiple responses, 25 inconsistent answers, 455 delivery before the disaster on 11 March 2011).

#### 2.2 Pregnancy outcome

| (FY2012) *Due to the different outcomes in twin pregnancy, total number does not match the sum of respond | lents. $n(\%)$ |
|---|----------------|
|---|----------------|

| Area                 | Pregnant  | Childbirth     | Miscarriage | Induced abortion | Stillbirth | Total  |
|----------------------|-----------|----------------|-------------|------------------|------------|--------|
| Kempoku              | 13 (0.73) | 1,737 ( 98.02) | 16 (0.90)   | 0 (0.00)         | 6 (0.34)   | 1,772  |
| Kenchu               | 9 (0.45)  | 1,966 ( 98.65) | 10 (0.50)   | 2 (0.10)         | 6 (0.30)   | 1,993  |
| Kennan               | 3 (0.56)  | 532 ( 98.52)   | 5 (0.93)    | 0 (0.00)         | 0 (0.00)   | 540    |
| Soso                 | 4 (0.83)  | 467 ( 96.69)   | 7 (1.45)    | 3 (0.62)         | 2 (0.41)   | 483    |
| Iwaki                | 8 (0.70)  | 1,122 ( 98.16) | 11 (0.96)   | 0 (0.00)         | 2 (0.17)   | 1,143  |
| Aizu                 | 2 (0.26)  | 762 ( 98.45)   | 5 (0.65)    | 1 (0.13)         | 4 (0.52)   | 774    |
| Minami-aizu          | 0 (0.00)  | 77 (100.00)    | 0 (0.00)    | 0 (0.00)         | 0 (0.00)   | 77     |
| Outside<br>Fukushima | 0 (0.00)  | 95 (100.00)    | 0 (0.00)    | 0 (0.00)         | 0 (0.00)   | 95     |
| Total                | 39 (0.57) | 6,758 ( 98.27) | 54 (0.79)   | 6 (0.09)         | 20 (0.29)  | 6,877* |

| (FY2011)    |           |               |             |          |            | n(%)  |
|-------------|-----------|---------------|-------------|----------|------------|-------|
| Area        | Pregnant  | Childbirth    | Miscarriage | Induced  | Stillbirth | Total |
|             |           |               |             | abortion |            |       |
| Kempoku     | 20(0.92)  | 2,124( 98.11) | 16(0.74)    | 1(0.05)  | 4(0.18)    | 2,165 |
| Kenchu      | 45(1.67)  | 2,616(96.92)  | 28(1.04)    | 2(0.07)  | 8(0.30)    | 2,699 |
| Kennan      | 7(1.17)   | 588( 98.00)   | 4(0.67)     | 0(0.00)  | 1(0.17)    | 600   |
| Soso        | 4(0.44)   | 897(98.25)    | 7(0.77)     | 1(0.11)  | 4(0.44)    | 913   |
| Iwaki       | 20(1.41)  | 1,384( 97.33) | 12(0.84)    | 1(0.07)  | 5(0.35)    | 1,422 |
| Aizu        | 18(1.98)  | 888(97.91)    | 1(0.11)     | 0(0.00)  | 0(0.00)    | 907   |
| Minami-aizu | 2(2.38)   | 82(97.62)     | 0(0.00)     | 0(0.00)  | 0(0.00)    | 84    |
| Outside     | 0(0.00)   | 22(100.00)    | 0(0.00)     | 0(0.00)  | 0(0.00)    | 22    |
| Fukushima   | 0(0.00)   | 22(100.00)    | 0(0.00)     | 0(0.00)  | 0(0.00)    | 22    |
| Total       | 116(1.32) | 8,601(97.61)  | 68(0.77)    | 5(0.06)  | 22(0.25)   | 8,812 |

## Preterm birth rate (the birth of the baby of 22 to 36weeks)

| (FY2012)                 | ) Singleton o  | r twin pregn   | ancy           |                |                |               |                     |       | -                                | n(%)           |
|--------------------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------------|-------|----------------------------------|----------------|
|                          |                |                |                |                |                |               |                     |       |                                  |                |
|                          |                |                | Pretern        | n birth        |                | _             |                     | Total | Number of<br>preterm 1<br>births | Proportion (%) |
| Area                     | 12-21<br>weeks | 22-23<br>weeks | 24-27<br>weeks | 28-31<br>weeks | 32-36<br>weeks | 37-41 weeks   | 42 weeks<br>or more |       | (22-36<br>weeks)                 |                |
| Kempo<br>ku              | 6(0.34)        | 0(0.00)        | 3(0.17)        | 7(0.40)        | 72( 4.10)      | 1,662( 94.65) | 6(0.34)             | 1,756 | 82                               | (4.69)         |
| Kenchu                   | 6(0.30)        | 3(0.15)        | 5(0.25)        | 10(0.50)       | 113( 5.68)     | 1,845( 92.81) | 6(0.30)             | 1,988 | 131                              | (6.61)         |
| Kennan                   | 4(0.74)        | 0(0.00)        | 1(0.18)        | 2(0.37)        | 19( 3.51)      | 511( 94.45)   | 4(0.74)             | 541   | 22                               | (4.10)         |
| Soso                     | 8(1.66)        | 1(0.21)        | 3(0.62)        | 6(1.24)        | 23( 4.77)      | 439( 91.08)   | 2(0.41)             | 482   | 33                               | (6.96)         |
| Iwaki                    | 6(0.53)        | 0(0.00)        | 3(0.26)        | 5(0.44)        | 56( 4.91)      | 1,069( 93.77) | 1(0.09)             | 1,140 | 64                               | (5.64)         |
| Aizu                     | 4(0.51)        | 1(0.13)        | 2(0.26)        | 3(0.39)        | 54( 6.95)      | 713( 91.76)   | 0(0.00)             | 777   | 60                               | (7.76)         |
| Minam<br>i-aizu          | 0(0.00)        | 0(0.00)        | 0(0.00)        | 0(0.00)        | 8(10.26)       | 70( 89.74)    | 0(0.00)             | 78    | 8                                | (10.26)        |
| Outside<br>Fukush<br>ima | 0(00.0)        | 0(0.00)        | 0(0.00)        | 0(0.00)        | 0( 0.00)       | 95(100.00)    | 0(0.00)             | 95    | 0                                | (0.00)         |
| Total                    | 34(0.50)       | 5(0.07)        | 17(0.25)       | 33(0.48)       | 345( 5.03)     | 6,404( 93.39) | 19(0.28)            | 6,857 | 400                              | (5.86)         |

| (FY2011)                     | ) Singletor    | n or twin preg | gnancy         |                |                |               |                     |       |                                | n(%)           |
|------------------------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------------|-------|--------------------------------|----------------|
|                              |                |                | V              | Veek of deli   | very           |               |                     |       |                                |                |
|                              |                |                | Preterr        | n birth        |                |               |                     | Total | Number of<br>preterm<br>births | Proportion (%) |
| Area                         | 12-21<br>weeks | 22-23<br>weeks | 24-27<br>weeks | 28-31<br>weeks | 32-36<br>weeks | 37-41 weeks   | 42 weeks<br>or more |       | (22-36<br>weeks)               |                |
| Kempo<br>ku                  | 10(0.47)       | 1(0.05)        | 3(0.14)        | 5(0.23)        | 84(3.92)       | 2,032( 94.91) | 6(0.28)             | 2,141 | 93                             | (4.36)         |
| Kench<br>u                   | 14(0.53)       | 2(0.08)        | 2(0.08)        | 15(0.56)       | 103(3.87)      | 2,509(94.32)  | 15(0.56)            | 2,660 | 122                            | (4.61)         |
| Kenna<br>n                   | 2(0.34)        | 2(0.34)        | 0(0.00)        | 4(0.67)        | 23(3.87)       | 559(94.11)    | 4(0.67)             | 594   | 29                             | (4.90)         |
| Soso                         | 2(0.22)        | 2(0.22)        | 4(0.45)        | 4(0.45)        | 30(3.35)       | 849( 94.86)   | 4(0.45)             | 895   | 40                             | (4.48)         |
| Iwaki                        | 5(0.36)        | 2(0.14)        | 3(0.21)        | 6(0.43)        | 64(4.55)       | 1,317( 93.60) | 10(0.71)            | 1,407 | 75                             | (5.35)         |
| Aizu                         | 0(0.00)        | 1(0.11)        | 0(0.00)        | 2(0.22)        | 47(5.24)       | 845( 94.20)   | 2(0.22)             | 897   | 50                             | (5.57)         |
| Minam<br>i-aizu              | 0(0.00)        | 0(0.00)        | 0(0.00)        | 0(0.00)        | 3(3.57)        | 81( 96.43)    | 0(0.00)             | 84    | 3                              | (3.57)         |
| Outsid<br>e<br>Fukush<br>ima | 0(0.00)        | 0(0.00)        | 0(0.00)        | 0(0.00)        | 0(0.00)        | 22(100.00)    | 0(0.00)             | 22    | 0                              | (0.00)         |
| Total                        | 33(0.38)       | 10(0.11)       | 12(0.14)       | 36(0.41)       | 354(4.07)      | 8,214( 94.41) | 41(0.47)            | 8,700 | 412                            | (4.75)         |

# Congenital anomaly in singleton pregnancy (delivery after 12 weeks); Yes/No

| (FY2012)             |            |               |                  | n(%)  |
|----------------------|------------|---------------|------------------|-------|
| Area                 | Yes        | No            | Invalid response | Total |
| Kempoku              | 39 (2.25)  | 1,663 (96.02) | 30 (1.73)        | 1,732 |
| Kenchu               | 46 (2.36)  | 1,867 (95.74) | 37 (1.90)        | 1,950 |
| Kennan               | 12 (2.27)  | 501 (94.71)   | 16 (3.02)        | 529   |
| Soso                 | 15 (3.18)  | 434 (91.95)   | 23 (4.87)        | 472   |
| Iwaki                | 24 (2.16)  | 1,064 (95.68) | 24 (2.16)        | 1,112 |
| Aizu                 | 17 (2.23)  | 721 (94.74)   | 23 (3.02)        | 761   |
| Minami-aizu          | 1 (1.32)   | 75 (98.68)    | 0 (0.00)         | 76    |
| Outside<br>Fukushima | 2 (2.11)   | 92 (96.84)    | 1 (1.05)         | 95    |
| Total                | 156 (2.32) | 6,417 (95.39) | 154 (2.29)       | 6,727 |

| (FY2011)             |            | 1             | 1 1              | n(%)  |
|----------------------|------------|---------------|------------------|-------|
| Area                 | Yes        | No            | Invalid response | Total |
| Kempoku              | 55 (2.60)  | 1,989 (93.95) | 73 (3.45)        | 2,117 |
| Kenchu               | 76 (2.92)  | 2,418 (92.86) | 110 (4.22)       | 2,604 |
| Kennan               | 22 (3.77)  | 539 (92.29)   | 23 (3.94)        | 584   |
| Soso                 | 19 (2.13)  | 837 (93.94)   | 35 (3.93)        | 891   |
| Iwaki                | 38 (2.78)  | 1,271 (92.98) | 58 (4.24)        | 1,367 |
| Aizu                 | 23 (2.63)  | 825 (94.50)   | 25 (2.86)        | 873   |
| Minami-aizu          | 0 (0.00)   | 77 (96.25)    | 3 (3.75)         | 80    |
| Outside<br>Fukushima | 1 (4.55)   | 20 (90.91)    | 1 (4.55)         | 22    |
| Total                | 234 (2.74) | 7,976 (93.42) | 328 (3.84)       | 8,538 |

## Breakdown of congenital anomaly in singleton pregnancy

#### (FY2012)

| (FY2012)                 |          |                |               |              | -            |               |               |                 |             |                |          | n(%)      |
|--------------------------|----------|----------------|---------------|--------------|--------------|---------------|---------------|-----------------|-------------|----------------|----------|-----------|
|                          | Cataract | Cardiovascular | Anomalies of  | Rachischisis | Microcephaly | Hydrocephalus | Cleft lip and | Gastrointestina | Imperforate | Polydactyly    | Other    | Total     |
| Area                     |          | malformation   | kidney and    |              |              |               | plate         | l atresia       | anus        | and syndactyly |          |           |
|                          |          |                | urinary tract |              |              |               |               |                 |             |                |          |           |
| Kempo<br>ku              | 0        | 8              | 6             | 0            | 0            | 0             | 2             | 2               | 0           | 4              | 19       | 41        |
| Kenchu                   | 0        | 20             | 4             | 0            | 1            | 0             | 4             | 2               | 0           | 3              | 20       | 54        |
| Kennan                   | 1        | 5              | 1             | 0            | 0            | 2             | 0             | 0               | 0           | 1              | 3        | 13        |
| Soso                     | 1        | 6              | 0             | 1            | 0            | 0             | 2             | 1               | 0           | 1              | 5        | 17        |
| Iwaki                    | 0        | 9              | 2             | 0            | 0            | 0             | 3             | 1               | 1           | 4              | 6        | 26        |
| Aizu                     | 0        | 6              | 0             | 0            | 0            | 0             | 1             | 0               | 1           | 2              | 7        | 17        |
| Minami<br>-aizu          | 0        | 0              | 0             | 0            | 0            | 0             | 0             | 1               | 0           | 0              | 0        | 1         |
| Outside<br>Fukushi<br>ma | 0        | 0              | 0             | 0            | 0            | 0             | 1             | 0               | 0           | 0              | 1        | 2         |
| Total                    | 2(0.03)  | 54(0.80)       | 13(0.19)      | 1(0.01)      | 1(0.01)      | 2(0.03)       | 13 (0.19)     | 7 (0.10)        | 2(0.03)     | 15(0.22)       | 61(0.91) | 171(2.54) |

#### Breakdown of 'Other'

(Multiple answers allowed)

| Accessory<br>auricles   | 8 | Microtia   | 1 | Ovarian cystoma                | 1 | Leukopathia                        | 1 |
|-------------------------|---|--|---|--------------------------------|---|------------------------------------|---|
| Down syndrome           | 7 | Congenital aural fistula                                 | 1 | Urachal remnant                | 1 | Congenital cytomegalovirus         | 1 |
| Diaphragmatic<br>hernia | 2 | Auricular anomalies                                      | 1 | Adrenal hyperplasia            | 1 | Inguinal hernia                    | 1 |
| Cavernous<br>angoima    | 2 | Atresia of the external auditory canal                   | 1 | Chromosomal aberration         | 1 | Congenital dislocation of the knee | 1 |
| Arachnoid cyst          | 2 | Lower auricular<br>malformation                          | 1 | Trisomy 18                     | 1 | Dislocation                        | 1 |
| Hearing<br>impairment   | 2 | Malformation of the auricle                              | 1 | Simple hemangioma              | 1 | Displasia in the upper extremity   | 1 |
| Fetal Hydrops           | 2 | Congenital cystic<br>adenomatoid malformation<br>of lung | 1 | Hemangioma of the liver        | 1 | Congenital talipes calcaneovalgus  | 1 |
| Malrotation             | 2 | Congenital pleural effusion                              | 1 | Nevus                          | 1 | Osteogenesis imperfecta            | 1 |
| Cephalocele             | 1 | Localized gastrointestinal perfpration                   | 1 | Congenital melanocytic nevi    | 1 | Clubfoot                           | 1 |
| Craniotabes             | 1 | Hypothyroidism   | 1 | Erythema toxicum<br>neonatorum | 1 |                                    |   |
| Microphthalmos          | 1 | Congenital spherocytosis                                 | 1 | Hemangioma                     | 1 |                                    |   |

#### (FY2011)

| 1 1 2011)                |          |                |               |              |              |               |               |                 |             |                |           | 11(70)    |
|--------------------------|----------|----------------|---------------|--------------|--------------|---------------|---------------|-----------------|-------------|----------------|-----------|-----------|
|                          | Cataract | Cardiovascular | Anomalies of  | Rachischisis | Microcephaly | Hydrocephalus | Cleft lip and | Gastrointestina | Imperforate | Polydactyly    | Other     | Total     |
| Area                     |          | malformation   | kidney and    |              |              |               | plate         | l atresia       | anus        | and syndactyly |           |           |
|                          |          |                | urinary tract |              |              |               |               |                 |             |                |           |           |
| Kempo<br>ku              | 0        | 20             | 6             | 1            | 0            | 0             | 6             | 1               | 2           | 2              | 23        | 61        |
| Kenchu                   | 1        | 22             | 9             | 3            | 1            | 1             | 6             | 2               | 1           | 7              | 33        | 86        |
| Kennan                   | 0        | 5              | 2             | 0            | 0            | 0             | 0             | 1               | 0           | 2              | 12        | 22        |
| Soso                     | 0        | 5              | 0             | 1            | 0            | 0             | 1             | 1               | 0           | 3              | 9         | 20        |
| Iwaki                    | 0        | 14             | 5             | 1            | 0            | 0             | 0             | 1               | 1           | 5              | 16        | 43        |
| Aizu                     | 0        | 7              | 0             | 0            | 0            | 0             | 2             | 0               | 1           | 3              | 10        | 23        |
| Minami<br>-aizu          | 0        | 0              | 0             | 0            | 0            | 0             | 0             | 0               | 0           | 0              | 0         | 0         |
| Outside<br>Fukushi<br>ma | 0        | 0              | 0             | 0            | 0            | 0             | 0             | 0               | 0           | 0              | 1         | 1         |
| Total                    | 1 (0.01) | 73 (0.86)      | 22 (0.26)     | 6 (0.07)     | 1 (0.01)     | 1 (0.01)      | 15 (0.18)     | 6 (0.07)        | 5 (0.06)    | 22 (0.26)      | 104(1.22) | 256(3.00) |

#### Breakdown of 'Other'

(Multiple answers allowed)

| Nevus                  | 9 | Congenital dislocated hip | 2 | Congenital talipes calcaneovalgus                                | 1 | Congenital cystic adenomatoid malformation | 1 |
|------------------------|---|---------------------------|---|--|---|--|---|
| Accessory<br>auricles  | 8 | Holoprosencephaly         | 2 | Ptosis   | 1 | Congenital cutis laxa                      | 1 |
| Down syndrome          | 6 | Cryptorchidism            | 2 | The depressor anguli oris  | 1 | Chromosomal aberration                     | 1 |
| Hemangioma             | 5 | Chylothorax               | 2 | Hypoplasia of triangularis                                       | 1 | Fetal Hydrops                              | 1 |
| Inguinal hernia        | 4 | Abdominal fissure         | 2 | Laryngomalacia   | 1 | Thanatophoric dysplasia                    | 1 |
| Clubfoot               | 4 | Split hand syndrome       | 2 | Thyroid abnormalities  | 1 | Malrotation                                | 1 |
| Hearing loss           | 4 | Trisomy 13                | 1 | Hypothyroidism   | 1 | Craniotabes                                | 1 |
| Strawberry mark        | 3 | Trisomy 18                | 1 | Lipoma   | 1 | Persistent pupillary membrane              | 1 |
| Microtia               | 3 | Klinefelter syndrome      | 1 | Auricular anomalies<br>Atresia of the external<br>auditory canal | 1 | Achondroplasia                             | 1 |
| Dermal sinus           | 3 | Rickets                   | 1 | Microphthalmos   | 1 | Periventricular leukomalacia               | 1 |
| Cretinism              | 2 | Cytomegalovirus           | 1 | Anchylosis of the lip  | 1 | Skin tumor                                 | 1 |
| Hydrocele testicle     | 2 | Prader-Willi syndrome     | 1 | Vanishing testis   | 1 | Nasolacrimal duct obstruction              | 1 |
| Torticollis            | 2 | Diaphragmatic hernia      | 1 | Sacral teratoma  | 1 | Adrenal hyperplasia                        | 1 |
| Incontinentia pigmenti | 2 | Adrenogenital syndrome    | 1 | Congenital Aural Fistula   | 1 | Umbilical hernia                           | 1 |
|                        |   |                           |   |  |   | Cervical lymphangioma                      | 1 |

n(%)

| (FY2012)             |          |              |                  | n(%)  |
|----------------------|----------|--------------|------------------|-------|
| Area                 | Yes      | No           | Invalid response | Total |
| Kempoku              | 1 (4.17) | 22 ( 91.67)  | 1 ( 4.17)        | 24    |
| Kenchu               | 1 (2.63) | 37 ( 97.37)  | 0 ( 0.00)        | 38    |
| Kennan               | 0 (0.00) | 12 (100.00)  | 0 ( 0.00)        | 12    |
| Soso                 | 0 (0.00) | 9 ( 90.0)    | 1 (10.00)        | 10    |
| Iwaki                | 1 (3.57) | 23 ( 82.14)  | 4 (14.29)        | 28    |
| Aizu                 | 1 (6.25) | 15 ( 93.75)  | 0 ( 0.00)        | 16    |
| Minami-aizu          | 0 (0.00) | 2 (100.00)   | 0 ( 0.00)        | 2     |
| Outside<br>Fukushima | 0 (0.00) | 0 ( 0.00)    | 0 ( 0.00)        | 0     |
| Total                | 4 (3.08) | 120 ( 92.31) | 6 ( 4.62)        | 130   |

# Congenital anomaly in twin pregnancy (delivery after 12 weeks); Yes/No

| (FY2011)    |           |              |                  | n(%)  |
|-------------|-----------|--------------|------------------|-------|
| Area        | Yes       | No           | Invalid response | Total |
| Kempoku     | 2 ( 8.33) | 19 ( 79.17)  | 3 (12.50)        | 24    |
| Kenchu      | 3 ( 5.36) | 50 ( 89.29)  | 3 ( 5.36)        | 56    |
| Kennan      | 1 (10.00) | 9 ( 90.00)   | 0 ( 0.00)        | 10    |
| Soso        | 0 ( 0.00) | 4 (100.00)   | 0 ( 0.00)        | 4     |
| Iwaki       | 0 ( 0.00) | 36 ( 90.00)  | 4 (10.00)        | 40    |
| Aizu        | 2 ( 8.33) | 20 ( 83.33)  | 2 ( 8.33)        | 24    |
| Minami-aizu | 0 ( 0.00) | 3 ( 75.00)   | 1 (25.00)        | 4     |
| Outside     | 0 ( 0 00) | 0 ( 0.00)    | 0 ( 0 00)        | 0     |
| Fukushima   | 0 ( 0.00) | 0 ( 0.00)    | 0 ( 0.00)        | 0     |
| Total       | 8 ( 4.94) | 141 ( 87.04) | 13 ( 8.02)       | 162   |

## Breakdown of congenital anomaly in twin pregnancy

(FY2012)

| (FY2012)                     |          |                                |                         |              |              |               |                     |                             |                     | ·                             |       | n(%)  |
|------------------------------|----------|--------------------------------|-------------------------|--------------|--------------|---------------|---------------------|-----------------------------|---------------------|-------------------------------|-------|-------|
| Area                         | Cataract | Cardiovascular<br>malformation | Anomalies of kidney and | Rachischisis | Microcephaly | Hydrocephalus | Cleft lip and plate | Gastrointestinal<br>atresia | Imperforate<br>anus | Polydactyly<br>and syndactyly | Other | Total |
|                              |          |                                | urinary tract           |              |              |               |                     |                             |                     |                               |       |       |
| Kempo<br>ku                  | 0        | 0                              | 0                       | 1            | 0            | 0             | 0                   | 0                           | 0                   | 0                             | 1     | 2     |
| Kench<br>u                   | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                             | 1     | 1     |
| Kenna<br>n                   | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                             | 0     | 0     |
| Soso                         | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                             | 0     | 0     |
| Iwaki                        | 0        | 0                              | 0                       | 0            | 0            | 0             | 1                   | 0                           | 0                   | 0                             | 0     | 1     |
| Aizu                         | 0        | 0                              | 0                       | 1            | 0            | 1             | 0                   | 0                           | 0                   | 0                             | 0     | 2     |
| Minam<br>i-aizu              | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                             | 0     | 0     |
| Outsid<br>e<br>Fukush<br>ima | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                             | 0     | 0     |
| Total                        | 0        | 0                              | 0                       | 2            | 0            | 1             | 1                   | 0                           | 0                   | 0                             | 2     | 6     |

n(%)

Breakdown of 'Other'

| Hypothyroidism | 1 |
|----------------|---|
| Hernia         | 1 |

## Breakdown of congenital anomaly in twin pregnancy

### (FY2011)

| (FY2011)                     |          |                                |                         |              |              |               |                     |                             |                     |                            |       | n(%)  |
|------------------------------|----------|--------------------------------|-------------------------|--------------|--------------|---------------|---------------------|-----------------------------|---------------------|----------------------------|-------|-------|
| Area                         | Cataract | Cardiovascular<br>malformation | Anomalies of kidney and | Rachischisis | Microcephaly | Hydrocephalus | Cleft lip and plate | Gastrointestinal<br>atresia | Imperforate<br>anus | Polydactyly and syndactyly | Other | Total |
|                              |          |                                | urinary tract           |              |              |               |                     |                             |                     |                            |       |       |
| Kempo<br>ku                  | 0        | 0                              | 0                       | 0            | 0            | 0             | 1                   | 0                           | 0                   | 0                          | 1     | 2     |
| Kench<br>u                   | 0        | 0                              | 0                       | 1            | 0            | 0             | 0                   | 0                           | 0                   | 0                          | 2     | 3     |
| Kenna<br>n                   | 0        | 1                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                          | 0     | 1     |
| Soso                         | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                          | 0     | 0     |
| Iwaki                        | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                          | 0     | 0     |
| Aizu                         | 0        | 2                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                          | 0     | 2     |
| Minam<br>i-aizu              | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                          | 0     | 0     |
| Outsid<br>e<br>Fukush<br>ima | 0        | 0                              | 0                       | 0            | 0            | 0             | 0                   | 0                           | 0                   | 0                          | 0     | 0     |
| Total                        | 0        | 3                              | 0                       | 1            | 0            | 0             | 1                   | 0                           | 0                   | 0                          | 3     | 8     |

Breakdown of 'Other'

Congenital cystic adenomatoid malformation 1 Fetal hydrops 1

#### 2.3 Maternal Mental Health

### Have you often felt sad or depressed over the past month?

| (FY2012)             |                       |                                |                      |                  | n(%)  |
|----------------------|-----------------------|--------------------------------|----------------------|------------------|-------|
| Area                 | Yes to both questions | Yes to either of the questions | No to both questions | Invalid response | Total |
| Kempoku              | 181 (10.2)            | 284 (16.0)                     | 1,304 (73.6)         | 2 (0.1)          | 1,771 |
| Kenchu               | 218 (10.9)            | 303 (15.2)                     | 1,468 (73.7)         | 4 (0.2)          | 1,993 |
| Kennan               | 44 (8.1)              | 84 (15.6)                      | 409 (75.7)           | 3 (0.6)          | 540   |
| Soso                 | 69 (14.3)             | 86 (17.8)                      | 328 (67.9)           | 0 (0.0)          | 483   |
| Iwaki                | 107 (9.4)             | 152 (13.3)                     | 882 (77.2)           | 2 (0.2)          | 1,143 |
| Aizu                 | 90 (11.6)             | 108 (14.0)                     | 574 (74.2)           | 2 (0.3)          | 774   |
| Minami-aizu          | 6 (7.8)               | 8 (10.4)                       | 63 (81.8)            | 0 (0.0)          | 77    |
| Outside<br>Fukushima | 5 (5.3)               | 17 (17.9)                      | 73 (76.8)            | 0 (0.0)          | 95    |
| Total                | 720 (10.5)            | 1,042 (15.2)                   | 5,101 (74.2)         | 13 (0.2)         | 6,876 |

Have you often felt disinterested in things or not able to enjoy yourself over the past month?

25.6% showed sign of depression.

(720 respondents said 'Yes' to both questions and 1,042 said 'Yes' to either of the questions out of 6,876 respondents.)

| (FY2011)                 |                       |                                |                      |                  | n(%)  |
|--------------------------|-----------------------|--------------------------------|----------------------|------------------|-------|
| Area                     | Yes to both questions | Yes to either of the questions | No to both questions | Invalid response | Total |
| Kempo<br>ku              | 290(13.4)             | 350(16.2)                      | 1,482(68.5)          | 43(2.0)          | 2,165 |
| Kenchu                   | 344(12.7)             | 379(14.0)                      | 1,922(71.2)          | 54(2.0)          | 2,699 |
| Kennan                   | 77(12.8)              | 83(13.8)                       | 426(71.0)            | 14(2.3)          | 600   |
| Soso                     | 166(18.2)             | 134(14.7)                      | 584(64.0)            | 29(3.2)          | 913   |
| Iwaki                    | 175(12.3)             | 176(12.4)                      | 1,046(73.6)          | 25(1.8)          | 1,422 |
| Aizu                     | 83( 9.2)              | 121(13.3)                      | 686(75.6)            | 17(1.9)          | 907   |
| Minami<br>-aizu          | 1( 1.2)               | 4( 4.8)                        | 76(90.5)             | 3(3.6)           | 84    |
| Outside<br>Fukush<br>ima | 5(22.7)               | 4(18.2)                        | 12(54.5)             | 1(4.5)           | 22    |
| Total                    | 1,141(12.9)           | 1,251(14.2)                    | 6,234(70.7)          | 186(2.1)         | 8,812 |

27.1% showed sign of depression.

(1,141 respondents said 'Yes' to both questions and 1,251 said 'Yes' to either of the questions out of 8,812 respondents)

## 2.4 Housing environment and child rearing

Describe your housing environment.

(FY2012)

| (FY2012)             |                 |                             |                     |               |                  | n(%)  |
|----------------------|-----------------|-----------------------------|---------------------|---------------|------------------|-------|
| Area                 | Living in a     | Evacuated but not           | Living in their own | Not evacuated | Invalid response | Total |
|                      | temporary house | living in a temporary house | houses              |               |                  |       |
| Kempoku              | 3 (0.2)         | 85 ( 4.8)                   | 613 (34.6)          | 1,057 (59.7)  | 13 (0.7)         | 1,771 |
| Kenchu               | 4 (0.2)         | 81 ( 4.1)                   | 927 (46.5)          | 967 (48.5)    | 14 (0.7)         | 1,993 |
| Kennan               | 1 (0.2)         | 11 ( 2.0)                   | 103 (19.1)          | 421 (78.0)    | 4 (0.7)          | 540   |
| Soso                 | 47 (9.7)        | 250 (51.8)                  | 139 (28.8)          | 40 (8.3)      | 7 (1.4)          | 483   |
| Iwaki                | 5 (0.4)         | 39 ( 3.4)                   | 828 (72.4)          | 262 (22.9)    | 9 (0.8)          | 1,143 |
| Aizu                 | 0 (0.0)         | 13 ( 1.7)                   | 39 ( 5.0)           | 720 (93.0)    | 2 (0.3)          | 774   |
| Minami-aizu          | 0 (0.0)         | 1 ( 1.3)                    | 3 ( 3.9)            | 72 (93.5)     | 1 (1.3)          | 77    |
| Outside<br>Fukushima | 0 (0.0)         | 6 ( 6.3)                    | 9 ( 9.5)            | 79 (83.2)     | 1 (1.1)          | 95    |
| Total                | 60 (0.9)        | 486 ( 7.1)                  | 2,661 (38.7)        | 3,618 (52.6)  | 51 (0.7)         | 6,876 |

## How have you fed your baby before starting solids?

| (FY2012)             |                  |   |                     |                  | n(%)  |
|----------------------|------------------|---|---------------------|------------------|-------|
| Area                 | Breast milk only | Mixture of breast<br>milk and infant<br>formula | Infant formula only | Invalid response | Total |
| Kempoku              | 644 (37.1)       | 950 (54.7)                                      | 133 ( 7.7)          | 10 (0.6)         | 1,737 |
| Kenchu               | 655 (33.3)       | 1,095 (55.7)                                    | 205 (10.4)          | 11 (0.6)         | 1,966 |
| Kennan               | 153 (28.8)       | 311 (58.5)                                      | 67 (12.6)           | 1 (0.2)          | 532   |
| Soso                 | 146 (31.3)       | 254 (54.4)                                      | 63 (13.5)           | 4 (0.9)          | 467   |
| Iwaki                | 443 (39.5)       | 574 (51.2)                                      | 97 ( 8.6)           | 8 (0.7)          | 1,122 |
| Aizu                 | 261 (34.3)       | 406 (53.3)                                      | 92 (12.1)           | 3 (0.4)          | 762   |
| Minami-aizu          | 32 (41.6)        | 34 (44.2)                                       | 11 (14.3)           | 0 (0.0)          | 77    |
| Outside<br>Fukushima | 53 (55.8)        | 40 (42.1)                                       | 1 ( 1.1)            | 1 (1.1)          | 95    |
| Total                | 2,387 (35.3)     | 3,664 (54.2)                                    | 669 ( 9.9)          | 38 (0.6)         | 6,758 |

**1**0

| (FY2011)    |                  |                        |                     |                  | n(%)  |
|-------------|------------------|------------------------|---------------------|------------------|-------|
| Area        | Breast milk only | Mixture of breast milk | Infant formula only | Invalid response | Total |
|             |                  | and infant formula     |                     |                  |       |
| Kempoku     | 689(32.4)        | 1,318(62.1)            | 112( 5.3)           | 5(0.2)           | 2,124 |
| Kenchu      | 759(29.0)        | 1,655(63.3)            | 193 (7.4)           | 9(0.3)           | 2,616 |
| Kennan      | 168(28.6)        | 360(61.2)              | 59(10.0)            | 1(0.2)           | 588   |
| Soso        | 241(26.9)        | 549(61.2)              | 100(11.1)           | 7(0.8)           | 897   |
| Iwaki       | 484(35.0)        | 822(59.4)              | 74( 5.3)            | 4(0.3)           | 1,384 |
| Aizu        | 238(26.8)        | 594(66.9)              | 55( 6.2)            | 1(0.1)           | 888   |
| Minami-aizu | 33(40.2)         | 45(54.9)               | 4(4.9)              | 0(0.0)           | 82    |
| Outside     | 5(00.7)          | 14(62.6)               | 2(01)               | 1(4.5)           | 22    |
| Fukushima   | 5(22.7)          | 14(63.6)               | 2(9.1)              | 1(4.5)           | 22    |
| Total       | 2,617(30.4)      | 5,357(62.3)            | 599 (7.0)           | 28(0.3)          | 8,601 |

### For those who used infant formula, please state the reason why you chose it.

#### (FY2012)

| (FY2012)             |                          |  |            | n(%                                   |
|----------------------|--------------------------|--|------------|---------------------------------------|
| Area                 | Insufficient breast milk | Fear of radioactive contamination of breast milk | Other      | Total number<br>of valid<br>responses |
| Kempoku              | 847 (78.8)               | 40 (3.7)   | 228 (21.2) | 1,075                                 |
| Kenchu               | 989 (76.6)               | 109 (8.4)  | 277 (21.5) | 1,291                                 |
| Kennan               | 311 (82.9)               | 26 (6.9)   | 60 (16.0)  | 375                                   |
| Soso                 | 244 (77.7)               | 26 (8.3)   | 62 (19.7)  | 314                                   |
| Iwaki                | 487 (73.5)               | 51 (7.7)   | 157 (23.7) | 663                                   |
| Aizu                 | 385 (78.4)               | 12 (2.4)   | 120 (24.4) | 491                                   |
| Minami-aizu          | 36 (81.8)                | 2 (4.5)  | 7 (15.9)   | 44                                    |
| Outside<br>Fukushima | 31 (75.6)                | 1 (2.4)  | 9 (22.0)   | 41                                    |
| Total                | 3,330 (77.6)             | 267 (6.2)  | 920 (21.4) | 4,294                                 |

Multiple answers are allowed and the percentages do not total to 100%.

| (FY2011)    |                          |                         |             | n(%          |
|-------------|--------------------------|-------------------------|-------------|--------------|
| Area        | Insufficient breast milk | Fear of radioactive     | Other       | Total number |
|             |                          | contamination of breast |             | of valid     |
|             |                          | milk                    |             | responses    |
| Kempoku     | 1,037(73.1)              | 248(17.5)               | 295(20.8)   | 1,418        |
| Kenchu      | 1,305(71.6)              | 410(22.5)               | 318(17.4)   | 1,823        |
| Kennan      | 277(66.6)                | 113(27.2)               | 85(20.4)    | 416          |
| Soso        | 460(71.5)                | 150(23.3)               | 98(15.2)    | 643          |
| Iwaki       | 619(70.0)                | 180(20.4)               | 188(21.3)   | 884          |
| Aizu        | 512(80.1)                | 59( 9.2)                | 112(17.5)   | 639          |
| Minami-aizu | 39(79.6)                 | 6(12.2)                 | 7(14.3)     | 49           |
| Outside     | 12(75.0)                 | 1(62)                   | 4(25.0)     | 16           |
| Fukushima   | 12(75.0)                 | 1( 6.3)                 | 4(25.0)     | 16           |
| Total       | 4,261(72.4)              | 1,167(19.8)             | 1,107(18.8) | 5,888        |

Multiple answers are allowed and the percentages do not total to 100%.

### Do you sometimes doubt your confidence in your ability of parenting?

| (FY2012)    |              |              |              |                  | n(%)  |
|-------------|--------------|--------------|--------------|------------------|-------|
| Area        | Yes          | No           | Not sure     | Invalid response | Total |
| Kempoku     | 294 (16.9)   | 773 (44.5)   | 646 (37.2)   | 24 (1.4)         | 1,737 |
| Kenchu      | 316 (16.1)   | 873 (44.4)   | 757 (38.5)   | 20 (1.0)         | 1,966 |
| Kennan      | 78 (14.7)    | 253 (47.6)   | 196 (36.8)   | 5 (0.9)          | 532   |
| Soso        | 74 (15.8)    | 205 (43.9)   | 176 (37.7)   | 12 (2.6)         | 467   |
| Iwaki       | 134 (11.9)   | 582 (51.9)   | 393 (35.0)   | 13 (1.2)         | 1,122 |
| Aizu        | 129 (16.9)   | 357 (46.9)   | 270 (35.4)   | 6 (0.8)          | 762   |
| Minami-aizu | 8 (10.4)     | 37 (48.1)    | 32 (41.6)    | 0 (0.0)          | 77    |
| Outside     | 19 (20.0)    | 31 (32.6)    | 44 (46.3)    | 1 (1.1)          | 95    |
| Fukushima   | (,           |              |              |                  |       |
| Total       | 1,052 (15.6) | 3,111 (46.0) | 2,514 (37.2) | 81 (1.2)         | 6,758 |

#### 2.5 The Quality of Medical Care

| (FY2012)             |                     |              |              |           |            |                  | n(%   |
|----------------------|---------------------|--------------|--------------|-----------|------------|------------------|-------|
| Area                 | Yes-very much<br>so | Yes          | Not sure     | No        | Not at all | Invalid response | Total |
| Kempoku              | 430 (24.3)          | 1,044 (58.9) | 232 (13.1)   | 48 (2.7)  | 15 (0.8)   | 2 (0.1)          | 1,771 |
| Kenchu               | 418 (21.0)          | 1,159 (58.2) | 330 (16.6)   | 58 (2.9)  | 22 (1.1)   | 6 (0.3)          | 1,993 |
| Kennan               | 91 (16.9)           | 329 (60.9)   | 100 (18.5)   | 14 (2.6)  | 2 (0.4)    | 4 (0.7)          | 540   |
| Soso                 | 89 (18.4)           | 276 (57.1)   | 93 (19.3)    | 18 (3.7)  | 5 (1.0)    | 2 (0.4)          | 483   |
| Iwaki                | 294 (25.7)          | 664 (58.1)   | 145 (12.7)   | 30 (2.6)  | 7 (0.6)    | 3 (0.3)          | 1,143 |
| Aizu                 | 159 (20.5)          | 482 (62.3)   | 108 (14.0)   | 19 (2.5)  | 3 (0.4)    | 3 (0.4)          | 774   |
| Minami-aizu          | 20 (26.0)           | 51 (66.2)    | 4 ( 5.2)     | 2 (2.6)   | 0 (0.0)    | 0 (0.0)          | 77    |
| Outside<br>Fukushima | 43 (45.3)           | 44 (46.3)    | 6 ( 6.3)     | 2 (2.1)   | 0 (0.0)    | 0 (0.0)          | 95    |
| Total                | 1,544 (22.5)        | 4,049 (58.9) | 1,018 (14.8) | 191 (2.8) | 54 (0.8)   | 20 (0.3)         | 6,876 |

#### Do you think you received adequate care related to the pregnancy or delivery?

Did you continue attending the same facility that you originally intended to visit for obstetric exams/ delivery?

| (FY2012)             |              |            |                  | n(%   |
|----------------------|--------------|------------|------------------|-------|
| Area                 | Yes          | No         | Invalid response | Total |
| Kempoku              | 1,523 (86.0) | 237 (13.4) | 11 (0.6)         | 1,771 |
| Kenchu               | 1,686 (84.6) | 296 (14.9) | 11 (0.6)         | 1,993 |
| Kennan               | 473 (87.6)   | 65 (12.0)  | 2 (0.4)          | 540   |
| Soso                 | 390 (80.7)   | 90 (18.6)  | 3 (0.6)          | 483   |
| Iwaki                | 990 (86.6)   | 145 (12.7) | 8 (0.7)          | 1,143 |
| Aizu                 | 666 (86.0)   | 106 (13.7) | 2 (0.3)          | 774   |
| Minami-aizu          | 70 (90.9)    | 7 ( 9.1)   | 0 (0.0)          | 77    |
| Outside<br>Fukushima | 67 (70.5)    | 27 (28.4)  | 1 (1.1)          | 95    |
| Total                | 5,865 (85.3) | 973 (14.2) | 38 (0.6)         | 6,876 |

#### Breakdown of 'No' (FY2012)

| Breakdown of         | NO $(FY2012)$ |            |            |          |                  | n(%)  |
|----------------------|---------------|------------|------------|----------|------------------|-------|
| Area                 | Α             | В          | C          | D        | Invalid response | Total |
| Kempoku              | 68 (28.7)     | 58 (24.5)  | 104 (43.9) | 2 (0.8)  | 5 (2.1)          | 237   |
| Kenchu               | 70 (23.6)     | 70 (23.6)  | 147 (49.7) | 3 (1.0)  | 6 (2.0)          | 296   |
| Kennan               | 24 (36.9)     | 21 (32.3)  | 20 (30.8)  | 0 (0.0)  | 0 (0.0)          | 65    |
| Soso                 | 35 (38.9)     | 24 (26.7)  | 23 (25.6)  | 7 (7.8)  | 1 (1.1)          | 90    |
| Iwaki                | 34 (23.4)     | 31 (21.4)  | 79 (54.5)  | 0 (0.0)  | 1 (0.7)          | 145   |
| Aizu                 | 34 (32.1)     | 17 (16.0)  | 53 (50.0)  | 1 (0.9)  | 1 (0.9)          | 106   |
| Minami-aizu          | 2 (28.6)      | 1 (14.3)   | 4 (57.1)   | 0 (0.0)  | 0 (0.0)          | 7     |
| Outside<br>Fukushima | 4 (14.8)      | 22 (81.5)  | 1 ( 3.7)   | 0 (0.0)  | 0 (0.0)          | 27    |
| Total                | 271 (27.9)    | 244 (25.1) | 431 (44.3) | 13 (1.3) | 14 (1.4)         | 973   |

m(0/)

A: I changed to a different facility within Fukushima on my own accord.

B: I changed to a different facility outside Fukushima on my own accord.

C: I was instructed to transfer (or was transferred) to a different facility in Fukushima for medical reasons.

D: I was instructed to transfer (or was transferred) to a different facility outside Fukushima for medical reasons.

| (FY2011)             |             |             |                  | n(%)  |
|----------------------|-------------|-------------|------------------|-------|
| Area                 | Yes         | No          | Invalid response | Total |
| Kempoku              | 1,860(85.9) | 288(13.3)   | 17(0.8)          | 2,165 |
| Kenchu               | 2,050(76.0) | 626(23.2)   | 23(0.9)          | 2,699 |
| Kennan               | 497(82.8)   | 94(15.7)    | 9(1.5)           | 600   |
| Soso                 | 236(25.8)   | 665(72.8)   | 12(1.3)          | 913   |
| Iwaki                | 1,036(72.9) | 369(25.9)   | 17(1.2)          | 1,422 |
| Aizu                 | 798(88.0)   | 99(10.9)    | 10(1.1)          | 907   |
| Minami-aizu          | 78(92.9)    | 6(7.1)      | 0(0.0)           | 84    |
| Outside<br>Fukushima | 5(22.7)     | 17(77.3)    | 0(0.0)           | 22    |
| Total                | 6,560(74.4) | 2,164(24.6) | 88(1.0)          | 8,812 |

| Breakdow                 | n of 'No' (FY201 | 1)           |         |         |           |          | n(%)                                     |
|--------------------------|------------------|--------------|---------|---------|-----------|----------|--|
| Area                     | А                | В            | С       | D       | Е         | F        | Total<br>number of<br>valid<br>responses |
| Kempo<br>ku              | 54(19.4)         | 163( 58.4)   | 5( 1.8) | 9(3.2)  | 51(18.3)  | 2( 0.7)  | 279                                      |
| Kenchu                   | 153(26.0)        | 292(49.7)    | 7(1.2)  | 15(2.6) | 124(21.1) | 7(1.2)   | 588                                      |
| Kennan                   | 24(27.6)         | 42(48.3)     | 3( 3.4) | 1(1.1)  | 17(19.5)  | 1(1.1)   | 87                                       |
| Soso                     | 283(43.4)        | 357(54.8)    | 4(0.6)  | 10(1.5) | 29(4.4)   | 8(1.2)   | 652                                      |
| Iwaki                    | 67(18.8)         | 242(67.8)    | 4(1.1)  | 9(2.5)  | 34( 9.5)  | 12( 3.4) | 357                                      |
| Aizu                     | 31(32.6)         | 24(25.3)     | 4(4.2)  | 1(1.1)  | 36(37.9)  | 2(2.1)   | 95                                       |
| Minami<br>-aizu          | 2(33.3)          | 1(16.7)      | 1(16.7) | 0(0.0)  | 1(16.7)   | 1(16.7)  | 6  |
| Outside<br>Fukush<br>ima | 0( 0.0)          | 17(100.0)    | 0( 0.0) | 0(0.0)  | 0( 0.0)   | 0( 0.0)  | 17                                       |
| Total                    | 614(29.5)        | 1,138( 54.7) | 28(1.3) | 45(2.2) | 292(14.0) | 33(1.6)  | 2,081                                    |

Multiple answers are allowed and the percentages do not total to 100%.

A: I changed to a different facility within Fukushima on my own accord.

B: I changed to a different facility outside Fukushima on my own accord.

C: I attended a different facility in Fukushima from before the disaster after returning to my parents/in-laws home to give birth.

D: I attended a different facility outside Fukushima from before the disaster after returning to my parents/in-laws home to give birth.

E: I was instructed to transfer (or was transferred) to a different facility in Fukushima for medical reasons.

F: I was instructed to transfer (or was transferred) to a different facility outside Fukushima for medical reasons.

# Were you able to undergo obstetric exams as scheduled?

| Area                 | Yes           | No        | Invalid response | Total |
|----------------------|---------------|-----------|------------------|-------|
| Kempoku              | 1,715 ( 96.8) | 46 (2.6)  | 10 (0.6)         | 1,771 |
| Kenchu               | 1,933 ( 97.0) | 48 (2.4)  | 12 (0.6)         | 1,993 |
| Kennan               | 529 ( 98.0)   | 8 (1.5)   | 3 (0.6)          | 540   |
| Soso                 | 469 ( 97.1)   | 12 (2.5)  | 2 (0.4)          | 483   |
| Iwaki                | 1,115 ( 97.6) | 21 (1.8)  | 7 (0.6)          | 1,143 |
| Aizu                 | 754 ( 97.4)   | 18 (2.3)  | 2 (0.3)          | 774   |
| Minami-aizu          | 77 (100.0)    | 0 (0.0)   | 0 (0.0)          | 77    |
| Outside<br>Fukushima | 92 ( 96.8)    | 2 (2.1)   | 1 (1.1)          | 95    |
| Total                | 6,684 (97.2)  | 155 (2.3) | 37 (0.5)         | 6,876 |

#### Breakdown of 'No' (FY2012)

n(%)

| Area                 | Caused problems during pregnancy | Caused no problems<br>during pregnancy | No response | Total |
|----------------------|----------------------------------|--|-------------|-------|
| Kempoku              | 9 (19.6)                         | 36 ( 78.3)                             | 1 ( 2.2)    | 46    |
| Kenchu               | 13 (27.1)                        | 34 ( 70.8)                             | 1 ( 2.1)    | 48    |
| Kennan               | 3 (37.5)                         | 5 ( 62.5)                              | 0 ( 0.0)    | 8     |
| Soso                 | 5 (41.7)                         | 5 ( 41.7)                              | 2 (16.7)    | 12    |
| Iwaki                | 7 (33.3)                         | 14 ( 66.7)                             | 0 ( 0.0)    | 21    |
| Aizu                 | 4 (22.2)                         | 14 (77.8)                              | 0 ( 0.0)    | 18    |
| Minami-aizu          | 0 ( 0.0)                         | 0 ( 0.0)                               | 0 ( 0.0)    | 0     |
| Outside<br>Fukushima | 0 ( 0.0)                         | 2 (100.0)                              | 0 ( 0.0)    | 2     |
| Total                | 41 (26.5)                        | 110 (71.0)                             | 4 ( 2.6)    | 155   |

(FY2011)

n(%)

| (112011)             |             |             |                  | II(   |
|----------------------|-------------|-------------|------------------|-------|
| Area                 | Yes         | No          | Invalid response | Total |
| Kempoku              | 1,849(85.4) | 307(14.2)   | 9(0.4)           | 2,165 |
| Kenchu               | 2,221(82.3) | 453(16.8)   | 25(0.9)          | 2,699 |
| Kennan               | 504(84.0)   | 88(14.7)    | 8(1.3)           | 600   |
| Soso                 | 596(65.3)   | 306(33.5)   | 11(1.2)          | 913   |
| Iwaki                | 965(67.9)   | 437(30.7)   | 20(1.4)          | 1,422 |
| Aizu                 | 843(92.9)   | 53( 5.8)    | 11(1.2)          | 907   |
| Minami-aizu          | 79(94.0)    | 5( 6.0)     | 0(0.0)           | 84    |
| Outside<br>Fukushima | 15(68.2)    | 7(31.8)     | 0(0.0)           | 22    |
| Total                | 7,072(80.3) | 1,656(18.8) | 84(1.0)          | 8,812 |

| Breakdown of         | 'No' (FY2011)                         |  |                  | n(%)  |
|----------------------|---------------------------------------|--|------------------|-------|
| Area                 | Had to be hospitalized as<br>a result | Caused no problems<br>during pregnancy | Invalid response | Total |
| Kempoku              | 32(10.4)                              | 269(87.6)                              | 6(2.0)           | 307   |
| Kenchu               | 46(10.2)                              | 395( 87.2)                             | 12(2.6)          | 453   |
| Kennan               | 7(8.0)                                | 77(87.5)                               | 4(4.5)           | 88    |
| Soso                 | 30( 9.8)                              | 270(88.2)                              | 6(2.0)           | 306   |
| Iwaki                | 37(8.5)                               | 395( 90.4)                             | 5(1.1)           | 437   |
| Aizu                 | 19(35.8)                              | 34 (64.2)                              | 0(0.0)           | 53    |
| Minami-aizu          | 0( 0.0)                               | 5(100.0)                               | 0(0.0)           | 5     |
| Outside<br>Fukushima | 0 (0.0)                               | 7(100.0)                               | 0(0.0)           | 7     |
| Total                | 171(10.3)                             | 1,452(87.7)                            | 33(2.0)          | 1,656 |

## 2.6 Are you planning to have another baby in the future?

| FY2012)              |              |              |             | n(%)  |
|----------------------|--------------|--------------|-------------|-------|
| Area                 | Yes          | No           | No response | Total |
| Kempoku              | 944 (53.3)   | 795 (44.9)   | 32 (1.8)    | 1,771 |
| Kenchu               | 1,058 (53.1) | 902 (45.3)   | 33 (1.7)    | 1,993 |
| Kennan               | 273 (50.6)   | 260 (48.1)   | 7 (1.3)     | 540   |
| Soso                 | 243 (50.3)   | 230 (47.6)   | 10 (2.1)    | 483   |
| Iwaki                | 587 (51.4)   | 532 (46.5)   | 24 (2.1)    | 1,143 |
| Aizu                 | 420 (54.3)   | 341 (44.1)   | 13 (1.7)    | 774   |
| Minami-aizu          | 40 (51.9)    | 36 (46.8)    | 1 (1.3)     | 77    |
| Outside<br>Fukushima | 61 (64.2)    | 33 (34.7)    | 1 (1.1)     | 95    |
| Total                | 3,626 (52.7) | 3,129 (45.5) | 121 (1.8)   | 6,876 |

#### Services requested by those who wish to have a baby in the future

| Services req | uested by those wh | o wish to have a | baby in the future |                |            | n(%)      |
|--------------|--------------------|------------------|--------------------|----------------|------------|-----------|
| Area         | Maternity leave or | Adequate         | Information and    | Information on | Other      | Total     |
|              | parental leave     | childcare        | services regarding | radiation      |            | number of |
|              |                    |                  | child care and     |                |            | valid     |
|              |                    |                  | pediatric          |                |            | responses |
|              |                    |                  | healthcare         |                |            |           |
| Kempoku      | 475 (51.7)         | 607 (66.1)       | 625 (68.0)         | 552 (60.1)     | 85 ( 9.2)  | 919       |
| Kenchu       | 529 (50.7)         | 707 (67.7)       | 746 (71.5)         | 674 (64.6)     | 122 (11.7) | 1,044     |
| Kennan       | 139 (52.9)         | 170 (64.6)       | 179 (68.1)         | 161 (61.2)     | 30 (11.4)  | 263       |
| Soso         | 98 (41.4)          | 131 (55.3)       | 183 (77.2)         | 146 (61.6)     | 20 ( 8.4)  | 237       |
| Iwaki        | 291 (50.4)         | 368 (63.8)       | 428 (74.2)         | 375 (65.0)     | 59 (10.2)  | 577       |
| Aizu         | 227 (56.0)         | 289 (71.4)       | 260 (64.2)         | 195 (48.1)     | 35 ( 8.6)  | 405       |
| Minami-aizu  | 18 (46.2)          | 18 (46.2)        | 31 (79.5)          | 12 (30.8)      | 8 (20.5)   | 39        |
| Outside      | 32 (54.2)          | 39 (66.1)        | 39 (66.1)          | 26 (44.1)      | 4 ( 6.8)   | 59        |
| Total        | 1,809 (51.1)       | 2,329 (65.7)     | 2,491 (70.3)       | 2,141 (60.4)   | 363 (10.2) | 3,543     |

Multiple answers are allowed and the percentages do not total to 100%.

| Reasons IOI | not plaining to I | nave another baby |                               |                        |                              | n(%             |
|-------------|-------------------|-------------------|-------------------------------|------------------------|------------------------------|-----------------|
| Area        | Do not want one   | Financial reasons | Do not have<br>parenting help | Cannot find a day care | Busy raising the<br>children | Life as evacuee |
| Kempoku     | 349 (44.0)        | 170 (21.4)        | 68 ( 8.6)                     | 40 ( 5.0)              | 266 (33.5)                   | 6 ( 0.8)        |
| Kenchu      | 425 (47.5)        | 234 (26.2)        | 97 (10.9)                     | 80 ( 8.9)              | 335 (37.5)                   | 9 ( 1.0)        |
| Kennan      | 139 (53.5)        | 54 (20.8)         | 21 ( 8.1)                     | 14 ( 5.4)              | 72 (27.7)                    | 1 ( 0.4)        |
| Soso        | 102 (44.7)        | 57 (25.0)         | 24 (10.5)                     | 14 ( 6.1)              | 98 (43.0)                    | 56 (24.6)       |
| Iwaki       | 241 (45.7)        | 135 (25.6)        | 40 ( 7.6)                     | 35 ( 6.6)              | 180 (34.2)                   | 3 ( 0.6)        |
| Aizu        | 155 (46.0)        | 82 (24.3)         | 35 (10.4)                     | 27 ( 8.0)              | 129 (38.3)                   | 2 ( 0.6)        |
| Minami-aizu | 17 (47.2)         | 8 (22.2)          | 2 ( 5.6)                      | 1 ( 2.8)               | 15 (41.7)                    | 0 ( 0.0)        |
| Outside     | 18 (54.5)         | 6 (18.2)          | 3 ( 9.1)                      | 5 (15.2)               | 11 (33.3)                    | 1 ( 3.0)        |
| Fukushima   |                   |                   |                               |                        |                              |                 |
| Total       | 1,446 (46.5)      | 746 (24.0)        | 290 ( 9.3)                    | 216 ( 6.9)             | 1,106 (35.6)                 | 78 ( 2.5)       |

Reasons for not planning to have another baby

| Area        | Family living apart | Age or health | Anxiety about<br>radiation | Other      | Total number of valid responses |
|-------------|---------------------|---------------|----------------------------|------------|---------------------------------|
| Kempoku     | 14 (1.8)            | 270 (34.0)    | 101 (12.7)                 | 129 (16.2) | 794                             |
| Kenchu      | 18 (2.0)            | 261 (29.2)    | 191 (21.4)                 | 128 (14.3) | 894                             |
| Kennan      | 3 (1.2)             | 81 (31.2)     | 34 (13.1)                  | 38 (14.6)  | 260                             |
| Soso        | 21 (9.2)            | 58 (25.4)     | 37 (16.2)                  | 20 ( 8.8)  | 228                             |
| Iwaki       | 8 (1.5)             | 165 (31.3)    | 75 (14.2)                  | 70 (13.3)  | 527                             |
| Aizu        | 7 (2.1)             | 78 (23.1)     | 22 ( 6.5)                  | 62 (18.4)  | 337                             |
| Minami-aizu | 0 (0.0)             | 9 (25.0)      | 2 ( 5.6)                   | 10 (27.8)  | 36                              |
| Outside     | 2 (6.1)             | 3 ( 9.1)      | 1 ( 3.0)                   | 6 (18.2)   | 33                              |
| Fukushima   |                     |               |                            |            |                                 |
| Total       | 73 (2.3)            | 925 (29.8)    | 463 (14.9)                 | 463 (14.9) | 3,109                           |

Multiple answers are allowed and the percentages do not total to 100%.

### 2.7 Telephone Counseling Conversations

| (FY2012) |
|----------|
|----------|

| (FY2012)             |                    |  | n(%   |
|----------------------|--------------------|--|-------|
| Area                 | Sign of depression | Identified as in need of<br>support based on the                         | Total |
| Kempoku              | 183 (68.3)         | free-answer question 85 (31.7)   | 268   |
| -                    |                    | •  | 325   |
| Kenchu               | 219 (67.4)         | 106 (32.6)   |       |
| Kennan               | 44 (63.8)          | 25 (36.2)  | 69    |
| Soso                 | 70 (75.3)          | 23 (24.7)  | 93    |
| Iwaki                | 108 (66.3)         | 55 (33.7)  | 163   |
| Aizu                 | 91 (73.4)          | 33 (26.6)  | 124   |
| Minami-aizu          | 6 (66.7)           | 3 (33.3)   | 9     |
| Outside<br>Fukushima | 5 (62.5)           | 3 (37.5)   | 8     |
| Total                | 726 (68.6)         | 333 (31.4)   | 1,059 |
| FY2011)              |                    | · · · ·  | n(%   |
| Area                 | Sign of depression | Identified as in need of<br>support based on the<br>free-answer question | Total |
| Kempoku              | 314 (90.0)         | 35 (10.0)  | 349   |
| Kenchu               | 361 (87.8)         | 50 (12.2)  | 411   |
| Kennan               | 81 (82.7)          | 17 (17.3)  | 98    |
| Soso                 | 175 (84.5)         | 32 (15.5)  | 207   |
| Iwaki                | 192 (87.7)         | 27 (12.3)  | 219   |
| Aizu                 | 95 (87.2)          | 14 (12.8)  | 109   |
| Minami-aizu          | 1 (50.0)           | 1 (50.0)   | 2     |
|                      |                    |  |       |

Breakdown of problems mentioned

5 (83.3)

1,224 (87.4)

(FY2012)

Outside

Fukushima Total

| $(1^{-1}2012)$ |               |   |                  |  |            |            |            | II( 70 ) |
|----------------|---------------|---|------------------|--|------------|------------|------------|----------|
| Area           | Anxiety about | Mental and<br>physical health<br>issues of<br>mothers | Child<br>rearing | Mental and<br>physical health<br>issues of<br>children | Life as an | Household  | Other      | Total    |
|                | radiation     |   |                  |  | evacuee    | problems   |            |          |
| Kempoku        | 66 (24.6)     | 89 (33.2)   | 89 (33.2)        | 29 (10.8)  | 5 (1.9)    | 26 ( 9.7)  | 76 (28.4)  | 268      |
| Kenchu         | 78 (24.0)     | 102 (31.4)  | 74 (22.8)        | 43 (13.2)  | 8 (2.5)    | 42 (12.9)  | 101 (31.1) | 325      |
| Kennan         | 19 (27.5)     | 25 (36.2)   | 20 (29.0)        | 10 (14.5)  | 1 (1.4)    | 10 (14.5)  | 21 (30.4)  | 69       |
| Soso           | 15 (16.1)     | 27 (29.0)   | 21 (22.6)        | 13 (14.0)  | 6 (6.5)    | 6 ( 6.5)   | 34 (36.6)  | 93       |
| Iwaki          | 45 (27.6)     | 60 (36.8)   | 46 (28.2)        | 28 (17.2)  | 0 (0.0)    | 14 ( 8.6)  | 50 (30.7)  | 163      |
| Aizu           | 21 (16.9)     | 43 (34.7)   | 27 (21.8)        | 15 (12.1)  | 0 (0.0)    | 9 ( 7.3)   | 48 (38.7)  | 124      |
| Minami-aizu    | 1 (11.1)      | 4 (44.4)  | 4 (44.4)         | 2 (22.2)   | 0 (0.0)    | 4 (44.4)   | 2 (22.2)   | 9        |
| Outside        | 2 (25 5)      | 1 (12 5)  | 2 (25 0)         | 0 (  | 0.000      | 1 (12 5)   | 4 (50.0)   |          |
| Fukushima      | 3 (37.5)      | 1 (12.5)  | 2 (25.0)         | 0 ( 0.0)   | 0 (0.0)    | 1 (12.5)   | 4 (50.0)   | 8        |
| Total          | 248 (23.4)    | 351 (33.1)  | 283 (26.7)       | 140 (13.2)   | 20 (1.9)   | 112 (10.6) | 336 (31.7) | 1,059    |
|                |               |   |                  |  |            |            |            |          |

1 (16.7)

177 (12.6)

6

1,401

Multiple answers are allowed and the percentages do not total to 100%.

n(%)

|              |               | Mental and      |            | Mental and      |            |           |            |       |
|--------------|---------------|-----------------|------------|-----------------|------------|-----------|------------|-------|
| <b>A</b> #22 | Anxiety about | physical health | Child      | physical health | Life as an | Household | Other      | Total |
| Area         | radiation     | issues of       | rearing    | issues of       | evacuee    | problems  | Other      | Total |
|              |               | mothers         |            | children        |            |           |            |       |
| Kempoku      | 113 (32.4)    | 70 (20.1)       | 67 (19.2)  | 30 ( 8.6)       | 32 ( 9.2)  | 15 (4.3)  | 120 (34.4) | 349   |
| Kenchu       | 129 (31.4)    | 79 (19.2)       | 49 (11.9)  | 41 (10.0)       | 39 ( 9.5)  | 20 (4.9)  | 144 (35.0) | 411   |
| Kennan       | 31 (31.6)     | 12 (12.2)       | 12 (12.2)  | 12 (12.2)       | 2 ( 2.0)   | 4 (4.1)   | 41 (41.8)  | 98    |
| Soso         | 45 (21.7)     | 45 (21.7)       | 26 (12.6)  | 24 (11.6)       | 45 (21.7)  | 14 (6.8)  | 73 (35.3)  | 207   |
| Iwaki        | 62 (28.3)     | 49 (22.4)       | 33 (15.1)  | 27 (12.3)       | 11 ( 5.0)  | 10 (4.6)  | 83 (37.9)  | 219   |
| Aizu         | 28 (25.7)     | 25 (22.9)       | 9 ( 8.3)   | 12 (11.0)       | 1 ( 0.9)   | 6 (5.5)   | 45 (41.3)  | 109   |
| Minami-aizu  | 0 ( 0.0)      | 1 (50.0)        | 0 ( 0.0)   | 0 ( 0.0)        | 0 ( 0.0)   | 0 (0.0)   | 1 (50.0)   | 2     |
| Outside      | 1 (167)       | 2 (22 2)        | 0 ( 0 0)   | 1 (167)         |            | 0.(0.0)   | 2 (22 2)   | ć     |
| Fukushima    | 1 (16.7)      | 2 (33.3)        | 0 ( 0.0)   | 1 (16.7)        | 0 ( 0.0)   | 0 (0.0)   | 2 (33.3)   | 6     |
| Total        | 409 (29.2)    | 283 (20.2)      | 196 (14.0) | 147 (10.5)      | 130 ( 9.3) | 69 (4.9)  | 509 (36.3) | 1,401 |

Multiple answers are allowed and the percentages do not total to 100%.

### 2.8 Free-answer question

#### (FY2012)

Of 6,913 respondents, 1,430 (20.7%) responded to the question. Answers were classified into categories shown below.

| (FY2013) |
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Of 9,316respondents, 3,722 (40.0%) responded to the question. Answers were classified into categories shown below.

|  | n(%)       |  | n(%)         |
|--|------------|--|--------------|
| Effects of radiation on fetus and child                              | 373 (26.1) | Effects of radiation on fetus and child                              | 1,102 (29.6) |
| Requests for information on radiation and research results           | 183 (12.8) | Requests for information on radiation and research results           | 725 (19.5)   |
| Complaints about Fukushima Health<br>Management Survey               | 147 (10.3) | Effects of radiation on food/ baby food                              | 668 (17.9)   |
| Effects of radiation on food/ baby food                              | 137 ( 9.6) | Anxiety and dissatisfaction about reliability or lack of information | 542 (14.6)   |
| Anxiety about radiation exposure of children when outside            | 111 ( 7.8) | Anxiety and dissatisfaction about evacuation and family living apart | 506 (13.6)   |
| Effects of radiation on water  | 110 ( 7.7) | Effects of radiation on food/ baby food                              | 476 (12.8)   |
| Physical problem   | 78 ( 5.5)  | Effects of radiation on water  | 441 (11.8)   |
| Anxiety and dissatisfaction about evacuation and fragmented family   | 63 ( 4.4)  | Request for radiation testing of breast milk                         | 425 (11.4)   |
| Anxiety and dissatisfaction about reliability or lack of information | 58 ( 4.1)  | Regarding medical check-up and examination                           | 416 (11.2)   |
| Request for medical check-up and examination                         | 56 ( 3.9)  | Anxiety about radiation exposure of children when outside            | 382 (10.3)   |
| Request for Fukushima Health Management<br>Survey                    | 54 ( 3.8)  | Request for financial support  | 363 ( 9.8)   |

n(%)

| Effects of radiation on breast milk/ infant formula                             | 52 ( 3.6)  |
|---|------------|
| Regarding medical check-up and examination                                      | 52 ( 3.6)  |
| Parenting   | 51 ( 3.6)  |
| Request for decontamination and provision of safe playgrounds                   | 47 ( 3.3)  |
| Request for thyroid examination   | 45 ( 3.1)  |
| Request to measure internal radiation exposure<br>(by whole body counter, etc.) | 43 ( 3.0)  |
| Request for adequate child support services                                     | 42 ( 2.9)  |
| Anxiety and dissatisfaction about inadequate medical services                   | 42 ( 2.9)  |
| Regarding adequate medical service and physical care                            | 36 ( 2.5)  |
| Anxiety about effects of radiation on outcome of current pregnancy              | 36 ( 2.5)  |
| Positive comments about this survey   | 30 ( 2.1)  |
| Complaints of mental issues   | 27 ( 1.9)  |
| Request for financial support   | 23 ( 1.6)  |
| Anxiety about effects of radiation on the next pregnancy                        | 23 ( 1.6)  |
| Regarding financial anxiety and burden  | 23 ( 1.6)  |
| Request for radiation testing of breast milk                                    | 18 ( 1.3)  |
| Request for an adequate mental health care services                             | 16 ( 1.1)  |
| Regarding external radiation exposure (provision of glass badges and dosimeter) | 7 ( 0.5)   |
| Request for evacuation support  | 4 ( 0.3)   |
| Request for support for supplies and gas  | 3 ( 0.2)   |
| Request for urine test  | 3 ( 0.2)   |
| Anxiety and dissatisfaction about shortage of supplies                          | 0 ( 0.0)   |
| Other   | 213 (14.9) |

| Complaints about Fukushima Health<br>Management Survey                          | 359 ( 9.6) |
|---|------------|
| Anxiety and dissatisfaction about inadequate medical services                   | 348 ( 9.3) |
| Request to measure internal radiation exposure (by whole body counter, etc.)    | 305 ( 8.2) |
| Request for support for supplies and gas  | 275 ( 7.4) |
| Anxiety and dissatisfaction about shortage of supplies                          | 244 ( 6.6) |
| Request for decontamination and provision of safe playgrounds                   | 238 ( 6.4) |
| Regarding financial anxiety and burden  | 237 ( 6.4) |
| Request for medical check-up and examination                                    | 227 ( 6.1) |
| Request for Fukushima Health Management<br>Survey                               | 215 ( 5.8) |
| Complaints of mental issues   | 211 ( 5.7) |
| Other   | 201 ( 5.4) |
| Request for adequate medical service and physical care                          | 173 ( 4.6) |
| Anxiety about effects of radiation on outcome of current pregnancy              | 159 ( 4.3) |
| Regarding external radiation exposure (provision of glass badges and dosimeter) | 125 ( 3.4) |
| Anxiety about effects of radiation on the next pregnancy                        | 112 ( 3.0) |
| Request for thyroid examination   | 109 ( 2.9) |
| Request for an adequate mental health care services                             | 78 ( 2.1)  |
| Positive comments about this survey   | 78 ( 2.1)  |
| Request for evacuation support  | 74 ( 2.0)  |
| Request for adequate child support services                                     | 39 ( 1.0)  |
| Request for urine test  | 16 ( 0.4)  |
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FY2011is from 1 April 2011 through 31 March 2012.

FY2013 is from 1 April 2013 through 31 March 2014.