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Chapter 6

Health Risk Factors and the Present Situation

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Introduction

This chapter focuses on the current health situation of the Ainu.

The results of the 2006 Hokkaido Ainu Living Conditions Survey revealed that many Ainu people were concerned about their health as well as that of their family members (Department of Environment and Lifestyle, Hokkaido government 2007). This Hokkaido University survey focused on risk factors, rather than exploring the current state of Ainu health indicators. Specifically, the risk factors of smoking, drinking, and gambling not only damage physical and emotional health; this dependence also creates problems in society. In this regard, the present situation of Ainu people's physical and emotional health is discussed below in relation to these four key indicators of smoking, drinking, gambling, and medical checkups.

In addition, the situation is examined in relation to differences in age group, region, and employment condition, and is also analyzed from the perspectives of gender and social class—viewpoints that are essential in exploring social inequality.

Smoking

It is well-established that smoking is closely related to the onset of lung cancer and various other diseases, and the related health risks pose problems not only to smokers themselves but also to those around them, due to the effects of second-hand smoke. The World Health Organization (WHO) considers smoking the world's greatest single preventable cause of illness, and the Hokkaido government has also implemented antismoking initiatives (Department of Health and Welfare, Hokkaido government 2008).

The results of the 2007 National Health and Nutrition Survey showed that 24.1% of Japanese people habitually smoked; by gender, 39.4% of men and 11.0% of women were smokers (Ministry of Health, Labour, and Welfare 2007). In this Hokkaido University survey, those who replied that they smoked daily and occasionally (i.e., habitual smokers) accounted for 46.1%, which was higher than the national average (Table 6-1). By gender, more men than women indicated that they smoked, with male smokers accounting for 56.9% and female smokers 35.7%. By employment condition, the percentage of habitual smokers was low among those without employment and students, but there were no very significant differences. What about differences by social class? This chapter views social strata from economic perspectives and classifies annual household incomes into four groups: under 3 million yen, 3 million to under 6 million yen, 6 million to under 9 million yen, and 9 million yen and over. The results showed that there were no differences by class, with habitual smokers making up roughly 40% in each income group (Table 6-2).

Table 6-1 Smoking breakdown by gender

Units: No. of people, %

		Smoke daily	Smoke occasionally	No longer smoke	Do not smoke	Total
Men	Actual number	1,400	84	358	767	2,609
	Percentage distribution	53.7	3.2	13.7	29.4	100.0
Women	Actual number	863	102	191	1,547	2,703
	Percentage distribution	31.9	3.8	7.1	57.2	100.0
Total	Actual number	2,263	186	549	2,314	5,312
	Percentage distribution	42.6	3.5	10.3	43.6	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-2 Smoking breakdown by annual household income

Units: No. of people, %

		Smoke daily	Smoke occasionally	No longer smoke	Do not smoke	Total
Under 3 million yen	Actual number	859	86	245	888	2,078
	Percentage distribution	41.3	4.1	11.8	42.7	100.0
3 million – under 6 million yen	Actual number	802	52	193	773	1,820
	Percentage distribution	44.1	2.9	10.6	42.5	100.0
6 million – under 9 million yen	Actual number	209	20	50	257	536
	Percentage distribution	39.0	3.7	9.3	47.9	100.0
9 million yen or over	Actual number	188	12	29	178	407
	Percentage distribution	46.2	2.9	7.1	43.7	100.0

Note: Excluding those whose answers were unknown and those indicating no response

A national survey indicated that the percentage of habitual smokers was high among both men and women in their 20s to 40s (Kyodo News 2009). The results of this Hokkaido University survey revealed that habitual smokers accounted for less than 50% (43.2%) of those aged under 30 but 62% of those aged 30-39 and 57.0% of those aged 40-49. The results also showed the same tendency for lower percentages of smokers among those in higher age groups (i.e., those in their 60s and 70s) as in the national survey, but the percentages were higher than the national average for all age groups (Table 6-3).

Table 6-3 Smoking breakdown by age group

Units: No. of people, %

		Smoke daily	Smoke occasionally	No longer smoke	Do not smoke	Total
Under 30	Actual number	333	38	27	460	858
	Percentage distribution	38.8	4.4	3.1	53.6	100.0
30 - 39	Actual number	376	36	48	204	664
	Percentage distribution	56.6	5.4	7.2	30.7	100.0
40 - 49	Actual number	563	36	99	353	1,051
	Percentage distribution	53.6	3.4	9.4	33.6	100.0
50 - 59	Actual number	599	35	164	482	1,280
	Percentage distribution	46.8	2.7	12.8	37.7	100.0
60 - 69	Actual number	278	28	120	473	899
	Percentage distribution	30.9	3.1	13.3	52.6	100.0
70 or over	Actual number	86	13	87	322	508
	Percentage distribution	16.9	2.6	17.1	63.4	100.0
Unknown age	Actual number	31	0	5	22	58
	Percentage distribution	53.4	0.0	8.6	37.9	100.0
Total	Actual number	2,266	186	550	2,316	5,318
	Percentage distribution	42.6	3.5	10.3	43.6	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Based on these results, however, we cannot conclude that the high percentage of smokers is a characteristic of Ainu people because, as is already known, the percentage of smokers in Hokkaido is higher than the figure for the whole of Japan. A 2009 survey also revealed that the percentage of smokers across Japan fell by 0.8 percentage points from the previous year to 24.9%, hitting a record low for 14 consecutive years, but that the same percentage in Hokkaido greatly exceeded the national average with 45.7% among men and 20.0% among women. The high percentage of smokers among the Ainu must be examined in relation to the high percentage of smokers in Hokkaido.

In this context, we compared the aforementioned survey results covering the whole of Hokkaido with the results of this Hokkaido University survey, and found that the percentage of smokers was more than 10 percentage points higher in this survey for both men and women (Table 6-4). In particular, the number of female smokers was more than 15 percentage points higher than the figure for the whole of Hokkaido and nearly 25 percentage points higher than that for the whole of Japan. It can thus be concluded that smoking habits have spread and become deeply rooted among the Ainu even in Hokkaido with its high percentage of smokers. This tendency was more marked among women.

Table 6-4 Comparison of smoker percentages

	Whole of Japan	Whole of Hokkaido	Hokkaido University survey
Men	38.9%	45.7%	56.9%
Women	11.9%	20.0%	35.7%

Note: Percentages of habitual smokers

Are there regional differences in Hokkaido? The figures for smokers by region (seven regions/branches in Hokkaido) showed that the highest percentage of respondents smoked daily and occasionally in the Kamikawa/Soya/Abashiri region at 53.5%, followed by Tokachi at 51.7% and Oshima at 50.7%; more than half of respondents were habitual smokers (Table 6-5).

On the other hand, the percentages of smokers were low in the Kushiro/Nemuro region at 43.5% and in the Hidaka region at 44.2%, with differences of approximately 8 percentage points compared to those in the regions with many habitual smokers. In the Kushiro/Nemuro region in particular, those who replied that they no longer smoked accounted for 14.0%—the highest percentage of those who succeeded in giving up smoking. As for the percentage of those who replied that they had never smoked, the highest percentage was in Ishikari at 46.2%, and the lowest was in Tokachi at 38.2%. In this way, not only the percentage of habitual smokers but also the responses of those who had succeeded in giving up smoking and who had never smoked showed regional variations. As in Kushiro/Nemuro and Hidaka, there were also regions with figures lower than the prefectural average seen in general smoking surveys.

Table 6-5 Smoking breakdown by region

Units: No. of people, %

		Smoke daily	Smoke occasionally	No longer smoke	Do not smoke	Total
Ishikari Subprefecture	Actual number	274	25	61	309	669
	Percentage distribution	41.0	3.7	9.1	46.2	100.0
Oshima Subprefecture	Actual number	171	15	23	158	367
	Percentage distribution	46.6	4.1	6.3	43.1	100.0
Kamikawa, Soya, and Abashiri Subprefectures	Actual number	44	2	5	35	86
	Percentage distribution	51.2	2.3	5.8	40.7	100.0
Tokachi Subprefecture	Actual number	166	14	35	133	348
	Percentage distribution	47.7	4.0	10.1	38.2	100.0
Iburi Subprefecture	Actual number	806	55	190	801	1,852
	Percentage distribution	43.5	3.0	10.3	43.3	100.0
Hidaka Subprefecture	Actual number	607	55	167	670	1,499
	Percentage distribution	40.5	3.7	11.1	44.7	100.0
Kushiro and Nemuro Subprefectures	Actual number	177	19	63	191	450
	Percentage distribution	39.3	4.2	14.0	42.4	100.0
Areas where the Hokkaido Utari Association has no branches	Actual number	21	1	6	21	49
	Percentage distribution	42.9	2.0	12.2	42.9	100.0
Total	Actual number	2,266	186	550	2,318	5,320
	Percentage distribution	42.6	3.5	10.3	43.6	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Next, we look at the extent of smoking habits (Table 6-6). The table shows the number of cigarettes smoked per day; it can be seen that the highest percentage of respondents (45.4%) smoked 16-20 per day, followed by 6-10 (19.7%). This suggests that many Ainu people smoke a whole pack (20 cigarettes) or half a pack a day. Those who replied that they smoked at least a pack a day constituted roughly 20% (20.8%) of respondents, suggesting that they smoked a cigarette almost every hour or more. Some smoked more than 50 cigarettes per day—a worrisome number with possible health implications.

Despite the clear decrease in the percentage of smokers among older age groups described above, the extent of smoking habits did not vary significantly among smokers aged 30 or over. Specifically, the percentage of those who smoked 20 cigarettes or more was in the upper half of the 60%-70% range among those aged 30 or over for all age groups (Table 6-7). This suggests that the number of those who succeeded in giving up smoking increased in older age groups, but that the number of cigarettes smoked did not decrease even in these groups. By gender, the highest percentage of male respondents said they smoked 20 cigarettes per day (46.8%), and the figure for those smoking 20 or more reached 75%. As with men, the highest percentage of women also smoked 20 cigarettes per day (41.8%) with more than half of female respondents (50.7%) saying they smoked 20 or more per day (although the figure was lower than that for men) (Table 6-8). By annual household income, the percentages of those smoking 20 cigarettes or more per day varied from 61.5% to 74.7%, but exceeded 60% in all income brackets (Table 6-9). The figure was higher among those with annual incomes of 9 million yen or over, probably because this income bracket included many self-employed and family employees who could smoke more freely than those working for companies.

Table 6-6 Number of cigarettes smoked per day (all)

Units: No. of people, %

	5 or fewer	6 - 10	11 - 15	16 - 20	21 - 30	31 - 49	50 or more	Total
Actual number	58	441	256	1,014	279	153	34	2,235
Percentage distribution	2.6	19.7	11.5	45.4	12.5	6.8	1.5	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-7 Number of cigarettes smoked per day by age group

Units: No. of people, %

		Under 30 years	30 - 39	40 - 49	50 - 59	60 - 69	70 or over	Total
Under 20	Actual number	147	114	181	185	90	38	755
	Percentage distribution	44. 5	30. 9	32. 6	31. 2	32. 8	45. 2	34. 2
20 or more	Actual number	183	255	375	408	184	46	1, 451
	Percentage distribution	55. 5	69. 1	67. 4	68. 8	67. 2	54. 8	65. 8
Total	Actual number	330	369	556	593	274	84	2, 206
	Percentage distribution	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-8 Number of cigarettes smoked per day by gender

Units: No. of people, %

		1 - 19	20 or more	Total
Men	Actual number	347	1, 039	1, 386
	Percentage distribution	25. 0	75. 0	100. 0
Women	Actual number	417	429	846
	Percentage distribution	49. 3	50. 7	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-9 Number of cigarettes smoked per day by annual household income

Units: No. of people, %

		1 - 19	20 or more	Total
Under 3 million yen	Actual number	325	520	845
	Percentage distribution	38. 5	61. 5	100. 0
3 million – under 6 million yen	Actual number	263	530	793
	Percentage distribution	33. 2	66. 8	100. 0
6 million – under 9 million yen	Actual number	74	135	209
	Percentage distribution	35. 4	64. 6	100. 0
9 million yen or over	Actual number	47	139	186
	Percentage distribution	25. 3	74. 7	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-10 indicates regional differences in the number of cigarettes smoked per day. The largest percentage of respondents replied that they smoked 16-20 daily, with the figures from areas where the Hokkaido Utari Association had no branches and the Kushiro/Nemuro region standing out at 57.1% and 51.7%, respectively. In the latter region, over 20% of respondents smoked a pack or more a day (24.2%), meaning that upward of 70% smoke a pack or more a day. It is also noteworthy that 23.5% of smokers in the Oshima region smoked 21-30 per day, 16.4% more than 31 and 3.5% more than 50.

Conversely, the percentage of those who smoked 16-20 cigarettes was the lowest in the Kamikawa/Soya/Abashiri region at 38.6%. Many smokers (30.0%) in the region smoked 10 or fewer per day, and only 15.9% smoked a pack or more. In short, smokers in this region smoked fewer cigarettes than those in other regions.

As explained above, the figures related to smoking were higher among the Ainu than those found from general national and prefectural surveys, thereby clarifying that the percentage of smokers is high among Ainu people. However, a closer look at the percentages of smokers and related factors indicated different tendencies by region.

Table 6-10 Number of cigarettes smoked per day by region

Units: No. of people, %

		5 or fewer	6 - 10	11 - 15	16 - 20	21 - 30	31 - 49	50 or more	Total
Ishikari Subprefecture	Actual number	10	55	41	132	21	10	2	271
	Percentage distribution	3.7	20.3	15.1	48.7	7.7	3.7	0.7	100.0
Oshima Subprefecture	Actual number	3	18	11	70	40	22	6	170
	Percentage distribution	1.8	10.6	6.5	41.2	23.5	12.9	3.5	100.0
Kamikawa, Soya, and Abashiri Subprefectures	Actual number	3	11	6	17	2	5	0	44
	Percentage distribution	6.8	25.0	13.6	38.6	4.5	11.4	0.0	100.0
Tokachi Subprefecture	Actual number	8	29	18	65	21	16	4	161
	Percentage distribution	5.0	18.0	11.2	40.4	13.0	9.9	2.5	100.0
Iburi Subprefecture	Actual number	16	175	101	369	90	40	7	798
	Percentage distribution	2.0	21.9	12.7	46.2	11.3	5.0	0.9	100.0
Hidaka Subprefecture	Actual number	15	121	66	259	79	43	13	596
	Percentage distribution	2.5	20.3	11.1	43.5	13.3	7.2	2.2	100.0
Kushiro and Nemuro Subprefectures	Actual number	2	29	11	90	25	16	1	174
	Percentage distribution	1.1	16.7	6.3	51.7	14.4	9.2	0.6	100.0
Areas where the Hokkaido Utari Association has no branches	Actual number	1	3	2	12	1	1	1	21
	Percentage distribution	4.8	14.3	9.5	57.1	4.8	4.8	4.8	100.0
Total	Actual number	58	441	256	1,014	279	153	34	2,235
	Percentage distribution	2.6	19.7	11.5	45.4	12.5	6.8	1.5	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Drinking

Here we look at alcohol—an important consideration in health maintenance. Generally speaking, people drink alcoholic beverages in various situations in their daily lives, but limiting this intake of alcohol is necessary for health care and maintenance. WHO has taken a variety of measures relating to this issue (Ministry of Health, Labour and Welfare 2009b).

A 2005 survey conducted by the Ministry of Health, Labour, and Welfare revealed that the number of habitual drinkers—respondents who drank at least 1 *go* (180 ml) of Japanese sake or its equivalent daily three days or more per week—accounted for nearly 20% (20.8%), indicating an ongoing downward trend since 2001 (27.0%). By gender, the percentage of habitual drinkers was much higher among men (36.7%) than among women (7.3%) (Ministry of Health, Labour, and Welfare 2009a).

This Hokkaido University survey indicated that the percentage of those who drank was 49.1%—nearly half of all respondents. Those who used to drink but no longer did accounted for 7.3%, and 43.6% of respondents replied that they did not drink. Looking at drinkers by gender, it was shown that more men (63.3%) than women (35.3%) drank (Table 6-11). Of these drinkers, 72.7% of men and 51.3% of women said they drank every day. The habit of drinking without teetotal days has permeated the male population more deeply than it has that of women. The percentage of those who did not drink daily but drank several times per week was 18.3% for men and 33.8% for women. A total of 8.9% of men and 14.9% of women said they drank several times per month (Table 6-12). Figures for the frequency of drinking indicated no significant differences between men and women: 40.2% of men drank once or twice per week, 41.1% drank three or four times and 18.6% drank five times or more; 47.3% of women drank once or twice per week, 40.5% drank three or four times and 12.2% drank five times or more.

The average amount of alcohol consumed by those who answered that they drank was relatively large at a Japanese sake equivalent of 2.86 *go* (514.8 ml). Since it is said that a daily intake of over 20 g of pure alcohol equivalent will result in increased risk of mortality, the central government also aims to reduce the number of heavy drinkers—those who consume an average of over 60 g of pure alcohol equivalent per day.

Table 6-11 Drinking breakdown by gender

Units: No. of people, %

		Drink	No longer drink	Do not drink (Can not drink)	Total
Men	Actual number	1, 651	192	764	2, 607
	Percentage distribution	63. 3	7. 4	29. 3	100. 0
Women	Actual number	950	193	1, 546	2, 689
	Percentage distribution	35. 3	7. 2	57. 5	100. 0
Total	Actual number	2, 601	385	2, 310	5, 296
	Percentage distribution	49. 1	7. 3	43. 6	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-12 Amounts of alcohol consumed by gender

Units: No. of people, %

		Drink daily	Drink several times per week	Drink several times per month	Total
Men	Actual number	789	199	97	1, 085
	Percentage distribution	72. 7	18. 3	8. 9	100. 0
Women	Actual number	238	157	69	464
	Percentage distribution	51. 3	33. 8	14. 9	100. 0
Total	Actual number	1, 027	356	166	1, 549
	Percentage distribution	66. 3	23. 0	10. 7	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

However, a 1996 survey revealed that 4.1% of men and 0.3% of women drank more than 60 g of pure alcohol equivalent per day three times or more per week. A 2006 Hokkaido survey indicated that 7.4% of men and 0.9% of women were heavy drinkers, suggesting that the amount of alcohol consumed in Hokkaido was greater than the national average, as was the case with smoking (Department of Health and Welfare, Hokkaido government 2008).

In this regard, we also looked into habitual heavy drinking in this Hokkaido University survey, and found that nearly 30% (27.4%) of respondents were habitual heavy drinkers—nearly four times the corresponding figure in the survey covering the whole of Hokkaido. It is said that people should limit their daily alcoholic consumption to a Japanese sake equivalent of 1 or 2 *go* (180 to 360 ml) to stay healthy, but 70.3% of men and 50.8% of women consumed more than 2 *go* (360 ml) (Table 6-13). Although these surveys were conducted at different times, this Hokkaido University survey (the most recent one) indicated that Ainu people consumed large amounts of alcohol—a worrisome condition considering the overall tendency of annual reduction in the number of habitual drinkers.

Table 6-13 Amounts of alcohol consumed per day by gender

Units: No. of people, %

		Less than 1 <i>go</i> (180 ml)	1 <i>go</i> (180 ml) – less than 2 <i>go</i> (360 ml)	2 <i>go</i> (360 ml) or more	Total
Men	Actual number	21	250	640	911
	Percentage distribution	2. 3	27. 4	70. 3	100. 0
Women	Actual number	32	163	201	396
	Percentage distribution	8. 1	41. 2	50. 8	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

It is inferred that differences in drinking conditions were related to gender as well as to employment condition, age, and annual household income. Comparison by employment condition (Table 6-14) indicated that the percentage of those who said they drank was low among respondents without employment and students and high among those involved in business management. More specifically, classification of those who said they drank by employment condition showed that proprietors and executives of establishments accounted for the highest percentage at 69.2%, followed by self-employed workers at 62.8%. Although engaged in the same self-employed businesses, family employees made up only 39.4%. Regular employees represented roughly 60% (60.2%), but part-time and temporary workers occupied approximately 50% (51.3%)—nearly 10 percentage points lower. This suggests that alcohol is not simply a luxury item consumed for taste rather than nourishment; rather, it is connected to social exchanges as acknowledged by the general public. That is, self-employed workers and proprietors/executives of establishments have more opportunities for social drinking than ordinary workers. Comparison by age (Fig. 6-1) also indicated that those aged 40-49 and 50-59 (generally considered to be in the prime of their working lives) made up the highest percentages with 56.5% and 56.1%, respectively, and that the percentages of those in the preceding and following age groups were low. However, no particular differences were found in drinking habits by annual household income (Table 6-15).

Table 6-14 Drinking breakdown by employment condition Units: No. of people, %

		Drink	No longer drink	Do not drink (Can not drink)	Total
Proprietors and executives of establishments	Actual number	110	8	41	159
	Percentage distribution	69.2	5.0	25.8	100.0
Regular employees	Actual number	717	71	404	1,192
	Percentage distribution	60.2	6.0	33.9	100.0
Part-time and temporary workers	Actual number	558	71	459	1,088
	Percentage distribution	51.3	6.5	42.2	100.0
Self-employed workers	Actual number	388	38	192	618
	Percentage distribution	62.8	6.1	31.1	100.0
Family employees	Actual number	183	27	254	464
	Percentage distribution	39.4	5.8	54.7	100.0
Other	Actual number	25	2	23	50
	Percentage distribution	50.0	4.0	46.0	100.0
Unemployed	Actual number	305	118	461	884
	Percentage distribution	34.5	13.3	52.1	100.0
Students	Actual number	15	0	63	78
	Percentage distribution	19.2	0.0	80.8	100.0
Total	Actual number	2,301	335	1,897	4,533
	Percentage distribution	50.8	7.4	41.8	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Are there regional differences in drinking habits (Table 6-16)? In this survey, many respondents in the Kamikawa/Soya/Abashiri region said they drank (54.0%), followed by the Tokachi region with 53.0% and the Ishikari region with 52.4%. Although the percentages of habitual drinkers were under 50% in the remaining regions, most of them hovered around 40% and therefore showed no significant differences. However, the percentages of those who used to drink but had quit varied by region: the percentage was low in Oshima (4.1%), but high in Kushiro/Nemuro (10.6%) and Hidaka (8.1%).

Fig. 6-1 Percentage of drinkers by age group

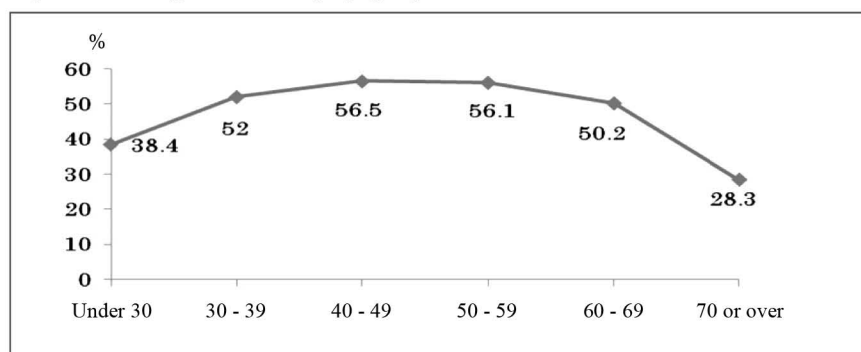


Table 6-15 Drinking breakdown by annual household income

Units: No. of people, %

		Drink	No longer drink	Do not drink (Can not drink)	Total
0 – under 3 million yen	Actual number	980	197	886	2,063
	Percentage distribution	47.5	9.5	42.9	100.0
3 million – under 6 million yen	Actual number	918	109	796	1,823
	Percentage distribution	50.4	6.0	43.7	100.0
6 million – under 9 million yen	Actual number	280	29	227	536
	Percentage distribution	52.2	5.4	42.4	100.0
9 million yen or over	Actual number	201	25	186	412
	Percentage distribution	48.8	6.1	45.1	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-16 Drinking breakdown by region

Units: No. of people, %

		Drink	No longer drink	Do not drink (Can not drink)	Total
Ishikari Subprefecture	Actual number	354	40	282	676
	Percentage distribution	52.4	5.9	41.7	100.0
Oshima Subprefecture	Actual number	179	15	174	368
	Percentage distribution	48.6	4.1	47.3	100.0
Kamikawa, Soya, and Abashiri Subprefectures	Actual number	47	5	35	87
	Percentage distribution	54.0	5.7	40.2	100.0
Tokachi Subprefecture	Actual number	183	27	135	345
	Percentage distribution	53.0	7.8	39.1	100.0
Iburi Subprefecture	Actual number	888	127	825	1,840
	Percentage distribution	48.3	6.9	44.8	100.0
Hidaka Subprefecture	Actual number	709	121	658	1,488
	Percentage distribution	47.6	8.1	44.2	100.0
Kushiro and Nemuro Subprefectures	Actual number	223	48	181	452
	Percentage distribution	49.3	10.6	40.0	100.0
Areas where the Hokkaido Utari Association has no branches	Actual number	23	3	23	49
	Percentage distribution	46.9	6.1	46.9	100.0
Total	Actual number	2,606	386	2,313	5,305
	Percentage distribution	49.1	7.3	43.6	100.0

Note: Excluding those whose answers were unknown and those indicating no response

Gambling

Gambling is considered a form of entertainment, but also has qualities that may destabilize people's daily lives because of the related debts that may be incurred and addictions that may develop.

In this survey, we asked respondents to choose the types of gambling they had engaged in over the last year, offering options including pachinko (Japanese pinball)/pachislot (slot machines in pachinko parlors), horse races, bicycle races, public lotteries, and soccer lotteries (Table 6-17). Those who replied that they had never gambled accounted for roughly 30%, and most respondents had gambled. Those who used to gamble but had quit represented 16.6%.

The largest percentage (30%) of respondents said they gambled on pachinko/pachislot, followed by public lotteries (28.4%). While the number of respondents who had bet on soccer lotteries and bicycle races was low, those who had gambled on horse racing made up 7.4%; while this figure is relatively low, it can be said that horse racing is popular in its own way.

Looking at national trends, the results of a survey conducted by Jiji Press Ltd. in 2006 revealed that 37.2% of respondents said they had gambled in the last year, 21.0% replied that they used to gamble but had not done so in the last year, and 41.6% said they had never gambled. When those who had gambled were asked what types of gambling they had engaged in, the largest percentage cited public lotteries (75.1%) followed by pachinko/pachislot (39.7%) (Jiji Press Ltd. 2009). As in the national survey, we compared the results of our survey by focusing on those who had gambled. It was found that the percentage of Ainu people who had gambled on public lotteries was lower than the corresponding figure in the national survey, but that the percentage of those who had done so with pachinko/pachislot was higher in our survey. Pachinko is a form of gambling, but has also taken hold as a general leisure activity to the extent that it is now included under hobbies and amusements in the Survey on Time Use and Leisure Activities conducted by the Ministry of Internal Affairs and Communications (Statistics Bureau, Ministry of Internal Affairs and Communications 2006). Probably for this reason, comparison of those who had played pachinko by age group (Table 6-18) indicated that certain percentages of respondents in all age groups had played, rather than those in older age groups standing out.

Table 6-17 Gambling breakdown (multiple answers)

Units: No. of people, %

	Pachinko/ pachislot	Horse races	Bicycle races	Public lotteries	Soccer lotteries	No longer gamble	Have never gambled
Actual number	1, 526	379	12	1, 443	88	846	1, 695
Experience rate	30. 0	7. 4	0. 2	28. 4	1. 7	16. 6	33. 3
Whole of Japan*	39. 7	15. 7	3. 1	75. 1	2. 1	—	—
Hokkaido University survey*	44. 3	11. 1	0. 3	41. 9	2. 6	—	—

Notes:

1. Experience rates were calculated with the total number of respondents as the denominator (hereinafter the same).

2. Figures in two rows with asterisk(*) were calculated with the total number of those who had gambled as the denominator.

Table 6-18 Age structure of those who had gambled

Units: No. of people, %

		Under 30	30 - 39	40 - 49	50 - 59	60 - 69	70 or over	Unknown	Total
Pachinko/ pachislot	Actual number	263	215	360	402	206	58	22	1, 526
	Percentage distribution	17. 2	14. 1	23. 6	26. 3	13. 5	3. 8	1. 4	100. 0
Horse races	Actual number	37	72	85	111	57	12	5	379
	Percentage distribution	9. 8	19. 0	22. 4	29. 3	15. 0	3. 2	1. 3	100. 0
Bicycle races	Actual number	1	4	1	3	2	0	1	12
	Percentage distribution	8. 3	33. 3	8. 3	25. 0	16. 7	0. 0	8. 3	100. 0
Public lotteries	Actual number	124	203	348	458	236	59	15	1, 443
	Percentage distribution	8. 6	14. 1	24. 1	31. 7	16. 4	4. 1	1. 0	100. 0
Soccer lotteries	Actual number	10	19	32	17	8	2	0	88
	Percentage distribution	11. 4	21. 6	36. 4	19. 3	9. 1	2. 3	0. 0	100. 0

On the other hand, among those who had gambled on public lotteries, those aged 50-59 accounted for the highest percentage at 31.7%, followed by those aged 40-49 at 24.1%. The corresponding numbers were lower in the remaining age groups.

By gender, an overwhelmingly large number of men gambled compared with women (Table 6-19). While male respondents who had never gambled made up 21.6%, more than twice this percentage of women (44.5%) had no experience of gambling. As can be inferred from the large percentage of those who had played pachinko/pachislot, the percentage of those who had done so was particularly high among all those who had engaged in gambling in any form. With 39.9% of men and 20.5% of women having played pachinko/pachislot, there was a difference of roughly 20 percentage points between them. On the other hand, public lotteries were enjoyed equally by both men and women; 31.0% of men and 25.8% of women had engaged in this type of gambling within the last year.

By annual household income, a quarter of those with annual incomes of under 1 million yen replied that they used to gamble but no longer did, suggesting that people engage in these types of amusements only when they have certain levels of economic stability that enable such activities. Other than this, however, no particular differences in gambling experience by household income were observed. Generally, social-class differences are related to lifestyle differences, and it is therefore believed that they also give rise to differences in how people choose their leisure activities. However, as long as social classes are viewed based on the household-income indicator, no correlation was seen between household income and lifestyle (Table 6-20).

Table 6-19 Gambling breakdown by gender (multiple answers)

Units: No. of people, %

		Pachinko/ pachislot	Horse races	Bicycle races	Public lotteries	Soccer lotteries	No longer gamble	Have never gambled	Valid cases
Men	Actual number	996	320	10	775	61	451	540	2, 498
	Experience rate	39. 9	12. 8	0. 4	31. 0	2. 4	18. 1	21. 6	100. 0
Women	Actual number	530	60	2	668	27	395	1, 152	2, 587
	Experience rate	20. 5	2. 3	0. 1	25. 8	1. 0	15. 3	44. 5	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

Table 6-20 Gambling breakdown by annual household income (multiple answers)

Units: No. of people, %

		Pachinko/ pachislot	Horse races	Bicycle races	Public lotteries	Soccer lotteries	No longer gamble	Have never gambled	Valid cases
0 – under 3 million yen	Actual number	571	150	6	497	26	369	683	1, 979
	Experience rate	28. 9	7. 6	0. 3	25. 1	1. 3	18. 6	34. 5	100. 0
3 million – under 6 million yen	Actual number	524	143	3	555	32	292	524	1, 747
	Experience rate	30. 0	8. 2	0. 2	31. 8	1. 8	16. 7	30. 0	100. 0
6 million – under 9 million yen	Actual number	162	37	1	143	11	79	187	524
	Experience rate	30. 9	7. 1	0. 2	27. 3	2. 1	15. 1	35. 7	100. 0
9 million yen or over	Actual number	127	21	0	126	7	54	137	399
	Experience rate	31. 8	5. 3	0. 0	31. 6	1. 8	13. 5	34. 3	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

There were also regional differences in gambling (Table 6-21). The percentage of those who replied that they played pachinko/pachislot was high in Tokachi (33.4%), Hidaka (33.1%), and Kushiro/Nemuro (32.1%), and the figures in these regions were nearly 7 percentage points higher than the corresponding figure in Ishikari (24.8%). The same holds true for public lotteries – there was a difference of approximately 5 percentage points between regions with high percentages and those with low percentages. Here, horse racing deserves special mention: Although only 2.4% of respondents in Kamikawa/Soya/Abashiri said they gambled on horse races, as many as 10.8% of respondents in Hidaka—a leading horse-rearing district—said they had gambled on horse racing. These figures suggest that gambling is affected by regional characteristics.

Table 6-21 Gambling breakdown by region

Units: No. of people, %

		Pachinko/ pachislot	Horse races	Bicycle races	Public lotteries	Soccer lotteries	No longer gamble
Ishikari Subprefecture	Actual number	159	35	4	192	16	125
	Experience rate	24.8	5.5	0.6	29.9	2.5	19.5
Oshima Subprefecture	Actual number	105	17	1	127	9	54
	Experience rate	29.7	4.8	0.3	35.9	2.5	15.3
Kamikawa, Soya, and Abashiri Subprefecture	Actual number	21	2	0	33	1	16
	Experience rate	25.3	2.4	0.0	39.8	1.2	19.3
Tokachi Subprefecture	Actual number	108	16	0	94	2	52
	Experience rate	33.4	5.0	0.0	29.1	0.6	16.1
Iburi Subprefecture	Actual number	512	121	5	503	25	306
	Experience rate	28.7	6.8	0.3	28.2	1.4	17.1
Hidaka Subprefecture	Actual number	470	154	2	341	25	221
	Experience rate	33.1	10.8	0.1	24.0	1.8	15.6
Kushiro and Nemuro Subprefectures	Actual number	141	31	0	138	9	64
	Experience rate	32.2	7.1	0.0	31.5	2.1	14.6
Areas where the Hokkaido Utari Association has no branches	Actual number	11	4	0	16	1	9
	Experience rate	24.4	8.9	0.0	35.6	2.2	20.0
Total	Actual number	1,527	380	12	1,444	88	847
	Experience rate	30.0	7.5	0.2	28.4	1.7	16.6

Notes:

1. The percentage for each region was calculated by taking the number of people in the region as 100, whereas the percentage for the total was calculated with the total number of respondents as 100.
2. Excluding those whose answers were unknown and those indicating no response

It is therefore clear that the percentages of Ainu people who habitually enjoyed gambling, smoking, and drinking were higher than the corresponding figures from general survey results, posing possible health concerns among this population. In this context, the next section highlights the present situation regarding health checkups, which enable early detection of diseases.

Health Checkups

The results of the Comprehensive Survey of Living Conditions conducted by the Ministry of Health, Labour, and Welfare in 2007 indicated that more than 60% (61.5%) of those aged 20 or over had undergone health checkups or complete medical checkups in the past year, while 34.5% had not (Ministry of Health, Labour, and Welfare 2008). In this Hokkaido University survey, 61.3% of respondents had undergone checkups—a figure almost identical to that of the national survey.

A look at differences in the circumstances of health checkups by gender indicates that many men and women had undergone them at work. The percentage of male health checkup recipients (68.9%) was higher than that for females (57.3%) because many men (44.4%) had regular checkups at work (Table 6-22). Whether or not company

health programs are sufficient, it can be said that such checkups are an important part of support for men's health until retirement age (at about 60 years of age). On the other hand, 30.0% of respondents had not been subject to a health checkup in the past year. Although male respondents who had undergone health checkups provided by municipal governments accounted for 17.3%, this figure significantly varied among age groups. While only a small number of young men had undergone municipal health checkups, respondents past retirement age (i.e., those aged from 60 to 69) accounted for over 30%, and those aged 70 or over made up more than 40%. In contrast, female respondents included many more who were engaged in household chores compared to the number for their male counterparts. Even among those who were working, employment conditions were diverse. It can therefore be thought that more women than men were not in a position to use company medical checkup schemes, which is why more women than men had undergone health checkups provided by municipal governments. However, as many as 40.1% of female respondents had not undergone a health checkup in the past year (Table 6-22).

Table 6-22 Health checkup breakdown by gender

Units: No. of people, %

		Health checkups provided by municipal governments	Health checkups provided at work	Complete medical checkups	Other	No health checkup
Men	Actual number	442	1, 131	183	96	765
	Percentage distribution	17. 3	44. 4	7. 2	3. 8	30. 0
Women	Actual number	592	732	184	137	1, 057
	Percentage distribution	22. 5	27. 8	7. 0	5. 2	40. 1
Total	Actual number	1, 034	1, 863	367	233	1, 822
	Percentage distribution	19. 9	35. 9	7. 1	4. 5	35. 2

Notes:

1. Health checkup recipient rates were calculated with the total number of respondents as the denominator (hereinafter the same).

2. Excluding those whose answers were unknown and those indicating no response

Next, we look at health checkup recipients by age group. The national survey results showed that both men and women aged 45-54 made up the highest percentage of health checkup recipients with 74.6% and 62.7%, respectively. This Hokkaido University survey (Table 6-23) indicated that those aged 60-69 represented the highest percentage with 71.9% on average for men and women combined, followed by those aged 70 or over with 68.8%. As such, older age groups had higher percentages of health checkup recipients compared with national survey figures.

Table 6-23 Breakdown of health checkup recipients by age group

Units: No. of people, %

		Under 30	30 - 39	40 - 49	50 - 59	60 - 69	70 or over	No response	Total
Those who had undergone health checkups	Actual number	471	384	673	834	623	333	44	3, 362
	Percentage	56. 5	59. 2	64. 5	66. 8	71. 9	68. 8	73. 3	64. 8
Those who had not undergone health checkups	Actual number	362	265	371	414	244	151	16	1, 823
	Percentage	43. 5	40. 8	35. 5	33. 2	28. 1	31. 2	26. 7	35. 2

A look at the age groups of those who had not undergone health checkups indicated that respondents under age 30 made up the highest percentage. In this Hokkaido University survey, those who had not undergone a health checkup accounted for 35.2% of all respondents, but by age group, the percentage was the highest among those under 30 at 43.5%, followed by those aged 30-39 at 40.8%. In contrast, the corresponding figure was relatively low at approximately 30% among those aged 60-69 and those aged 70 or over, suggesting that younger age groups had higher percentages of respondents who had not undergone health checkups.

Now, we consider the reasons why the percentage of those who had not undergone health checkups was higher among respondents under age 30, and those aged 30-39. Here, we focused on these two age groups and looked at health checkup opportunities. The results showed that the percentages of people who had undergone health checkups provided by municipal governments and complete medical checkups were low among these age groups. A look at municipal government health checkup recipients, who accounted for approximately 20% of all respondents who had undergone checkups (Table 6-24), indicated that those aged under 30 made up only 5.2% and even those aged 30-39 accounted for only 8.2%. However, the corresponding figure increased among those in higher age groups, with those aged 50-59 representing roughly 20% (19.2%), those aged 60-69 occupying 35.1% and those aged 70 or over making up 43.8%.

Table 6-24 Breakdown of municipal government health checkup recipients by age group Units: No. of people, %

	Under 30	30 - 39	40 - 49	50 - 59	60 - 69	70 or over	No response	Total
Actual number	43	53	170	239	304	212	13	1,034
Percentage	5.2	8.2	16.3	19.2	35.1	43.8	21.7	19.9

What about health checkups at work? The breakdown of workplace health checkup recipients by age group (Table 6-25) indicates that such respondents accounted for a bit more than 40% in all age groups from under 30 to 60 years of age, suggesting that many of those in employment had undergone health checkups at work. It should be noted, however, that even the highest percentage among those under 30 was only 44.3%. Since respondents in this age group had few opportunities to undergo health checkups outside the workplace, their overall health checkup recipient percentage was low.

Table 6-25 Breakdown of workplace health checkup recipients by age group Units: No. of people, %

	Under 30	30 - 39	40 - 49	50 - 59	60 - 69	70 or over	Total
Actual number	369	286	451	500	208	22	1,836
Percentage	44.3	44.1	43.2	40.1	24.0	4.5	35.8

Next, the breakdown of health checkup recipients by annual household income indicates that more than half of respondents had undergone health checkups in all four groups (under 3 million yen, 3 million to under 6 million yen, 6 million to under 9 million yen, and 9 million yen or over). This means that 30 to 40% of respondents in each group had not undergone a health checkup in the past year. In particular, a look at those without any income among those in the under-3-million-yen income group showed that 56.2% had not undergone a health checkup. As for checkup recipients, more than 40% of those with annual incomes of 3 to less than 6 million yen, and 6 to less than 9 million yen, had undergone regular health checkups at work, whereas the corresponding figures were lower among those with annual incomes of less than 3 million yen and those with 9 million yen or over (Table 6-26). As if to compensate for the gap, many had undergone checkups provided by municipal governments, but the number of those who had not had a checkup in the past year was an actual statistic. This is considered to stem from the inclusion of respondents not covered by workplace health checkups (such as those without employment, students, part-time, and temporary workers) among those with annual incomes of less than 3 million yen. It is possible that many employers of part-time and temporary workers did not provide health checkups. On the other hand, since

those with annual incomes of 9 million yen or over included many more family employees and self-employed workers than those in other income brackets, many may have opted to undergo health checkups provided by municipal governments or complete medical checkups at their own expense.

Table 6-26 Breakdown of health checkups by annual household income (multiple answers)

Units: No. of people, %

		Regular health checkups at work	Health checkups provided by municipal governments	Complete medical checkups at own expense	Other	No health checkup	Valid cases
0 – under 3 million yen	Actual number	631	445	145	102	739	2, 018
	Percentage	31. 3	22. 1	7. 2	5. 1	36. 6	100. 0
3 million – under 6 million yen	Actual number	788	298	111	69	582	1, 798
	Percentage	43. 8	16. 6	6. 2	3. 8	32. 4	100. 0
6 million – under 9 million yen	Actual number	226	97	26	18	167	520
	Percentage	43. 5	18. 7	5. 0	3. 5	32. 1	100. 0
9 million yen or over	Actual number	89	94	44	23	168	408
	Percentage	21. 8	23. 0	10. 8	5. 6	41. 2	100. 0

Note: Excluding those whose answers were unknown and those indicating no response

Lastly, we examine these results by region (Table 6-27). A look at the percentages of those who had not undergone health checkups in the past year revealed that the figures varied more than those in the breakdown by age group.

Table 6-27 Breakdown of those who had not undergone health checkups by region

Units: No. of people, %

	Ishikari Subprefecture	Oshima Subprefecture	Kamikawa, Soya, and Abashiri Subprefecture	Tokachi Subprefecture	Iburi Subprefecture	Hidaka Subprefecture	Kushiro and Nemuro Subprefectures	Areas where the Hokkaido Utari Association has no branches	Total
Actual number	243	167	43	139	557	512	154	8	1, 823
Percentage of those who had not undergone health checkups	36. 9	46. 6	51. 2	41. 7	30. 6	35. 1	35. 6	18. 2	35. 1

Note: Excluding those whose answers were unknown and those indicating no response

The highest percentage of respondents who had not undergone health checkups in the past year was in the Kamikawa/Soya/Abashiri region at 51.2%—more than half. Conversely, the lowest percentage was in the Iburi region (30.6%), except for areas where the Hokkaido Utari Association had no branches. It was thus found that there was a difference of more than 20 percentage points between the highest and lowest figures. What caused these regional variations? To investigate this, let us look at the circumstances of health checkups (Table 6-28).

Table 6-28 Breakdown of health checkup recipients by region and by circumstance

Units: No. of people, %

		Ishikari Subprefecture	Oshima Subprefecture	Kamikawa, Soya, and Abashiri Subprefecture	Tokachi Subprefecture	Iburi Subprefecture	Hidaka Subprefecture	Kushiro and Nemuro Subprefectures	Areas where the Hokkaido Utari Association has no branches	Total
Regular health checkups at work	Actual number	262	50	26	115	755	514	111	30	1, 863
	Percentage of those who had undergone health checkups	39. 8	14. 0	31. 0	34. 5	41. 5	35. 3	25. 7	68. 2	35. 9
Health checkups provided by municipal governments	Actual number	89	120	9	51	377	252	134	3	1, 035
	Percentage of those who had undergone health checkups	13. 5	33. 5	10. 7	15. 3	20. 7	17. 3	31. 0	6. 8	20. 0
Complete medical checkups at own expense	Actual number	41	19	3	23	93	165	23	2	369
	Percentage of those who had undergone health checkups	6. 2	5. 3	3. 6	6. 9	5. 1	11. 3	5. 3	4. 5	7. 1
Other	Actual number	40	7	4	10	78	69	23	2	233
	Percentage of those who had undergone health checkups	6. 1	2. 0	4. 8	3. 0	4. 3	4. 7	5. 3	4. 5	4. 5

Note: Excluding those whose answers were unknown and those indicating no response

A comparison between Iburi, where the percentage of health checkup recipients was the highest, and the lowest-percentage region of Kamikawa/Soya/Abashiri revealed that in Iburi, the percentage of those who had undergone checkups provided by employers and the figure for municipal government check recipients were both higher than those in the other regions. On the other hand, those who had undergone workplace checkups in the Kamikawa/Soya/Abashiri region accounted for 31.0% (10 percentage points lower than the corresponding figure for Iburi), but there were regions with lower figures—Kushiro/Nemuro with 25.7% and Oshima with 14.0%. However, in Kushiro/Nemuro and Oshima, while the percentage of those who had undergone checkups at work was low, the figure for recipients of checkups provided by municipal governments was high at 33.5% in Oshima and 31.0% in Kushiro/Nemuro. However, in the Kamikawa/Soya/Abashiri region, the percentage of those who had undergone checkups provided by municipal governments was low at 10.7%, thereby lowering the overall rate of recipients.

Summary

We have looked at the actual health conditions of Ainu people in terms of smoking, drinking, gambling, and health checkups. The results clarify that the percentage of Ainu people who habitually partake in smoking, drinking, and gambling (pachinko/pachislot) was higher than the corresponding figures obtained from general national and prefectural surveys.

Additionally, although result breakdowns by age group, region, and employment condition indicated variations, no particular difference was found by income bracket. As for gambling habits, comprehensive investigation will be necessary with the addition of various conditions such as whether or not respondents are in environments that facilitate gambling, and the availability of leisure activities other than gambling.

As such, it was revealed that Ainu people tended to have high levels of health risk in their daily lives. In this regard, health care must be viewed as an important consideration. Although the percentage of those undergoing health checkups (considered a part of health care) is an important metric, there was little difference between the percentage of Ainu people who had undergone health checkups and the national average. However, an in-depth look at the data indicated that trends differed by region; the overall health checkup recipient percentage was low in some areas. Considering that the numbers of habitual smokers and drinkers were not particularly low in these regions, the health condition of Ainu people there is a cause for concern. In the future, it is hoped that a governmental approach to health promotion in individual regions might also be examined.

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