



HELLENIC REPUBLIC



MINISTRY OF ECONOMY AND FINANCE



**GENERAL SECRETARIAT OF  
THE NATIONAL STATISTICAL SERVICE  
OF GREECE**

**ACCIDENTS AT WORK AND WORK RELATED HEALTH  
PROBLEMS**

LABOUR FORCE SURVEY – AD HOC MODULE 2007

**FINAL QUALITY REPORT**

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## 1. Introduction

In 2006, Grant Agreement N°. 35200.2006.004-2006-296 was signed between the European Community, represented by the Commission of the European Communities and the National Statistical Service of Greece. Under the rules and conditions of this agreement, National Statistical Service of Greece will receive a grant from the European Commission in order to implement the 2007 Ad-hoc Module on “Accidents at work and work related health problems”.

The variables to be collected in the ad hoc module were laid down in Commission Regulation No 341/2006 of 24 February 2006.

The aim of this ad hoc module is to provide a description of the occurrence of accidents at work and of non-accidental work-related ill-health and in particular:

- to know the number of cases and days lost because of accidents at work and the number of cases and days lost because of non-accidental work-related health problems
- to analyse the differences in the occurrence of these accidents and health problems by:
  - factors linked to the employment characteristics of the worker (occupation, professional status, full-time/part-time distinction, permanency of the job, duration of the career, atypical working hours, etc.)
  - factors linked to employer's characteristics (economic activity, size of company)
- to know about the occurrence of factors at work that can adversely affect health.

## **2. Target population of Ad hoc module on transition from work to retirement**

Target population of the Quarterly LFS comprises of all persons that are living in private households. Therefore, the survey does not cover persons that live in collective households (hospitals, hotels, prisons, etc., or persons doing compulsory military service).

Ad hoc module on Accidents at work and work related health problems addressed to a subset of that population, and in particular:

- Persons age 15 years old or more that they were working (or had a job from which they were temporarily absent) during reference week, or they have been working during a period of 12 months prior to the reference week, or they have been in employment in the past.

## **3. Sampling design and sample selection**

Ad – hoc module's sample was based on LFS sample.

LFS sample is a sample of households that are selected with a two stage procedure. In the first stage, clusters of households are selected from 182 strata. These strata are formed in every NUT III area by allocating municipalities and communes in three different groups (Agglomerations and Municipalities with 10.000 inhabitants or more, Municipalities and Communes with 2.000 to 9.999 inhabitants, and Communes up to 1.999 inhabitants). The exceptions are Athens and Thessaloniki agglomerations, which were divided into 31 and 9 strata, respectively.

During this first stage, 2640 primary sampling units are selected (with probability proportional to their "size" (that is, proportional to the number of households residing in these areas at 2001 census).

During the second sampling stage, in every primary sampling unit of final stratum, a systematic sample of household is selected. All persons, living in these households and satisfying the above described criteria, were interviewed for the ad hoc survey.

The sample size for the ad hoc module was 49,299 persons, belonging to 27,915 different households. Interviews were contacted together with interviews for main Labour Force Survey, during the second quarter of 2007.

#### 4. Non response and proxies

Unit non response rates for 2006 module follow the non-response rates for the main Labour Force Survey, since the two surveys were contacted at the same time. Unit non response rates for NUT II areas are presented in the following table. Non response is higher in Athens agglomeration and in Thessaloniki agglomeration.

NUT II REGION		NON RESPONSE RATE
GR11	Anatoliki Makedonia, Thraki	6.39
GR12	Kentriki Makedonia (without Thessaloniki agglomeration)	3.57
GR13	Dytiki Makedonia	3.66
GR14	Thessalia	7.29
GR21	Ipeiros	8.51
GR22	lonia Nisia	3.89
GR23	Dytiki Ellada	6.18
GR24	Stereia Ellada	5.34
GR25	Peloponnisos	5.67
GR30	Attiki (without Athens agglomeration)	17.32
GR41	Voreio Aigaio	4.62
GR42	Notio Aigaio	5.21
GR43	Kriti	6.88
GR12	Thessaloniki agglomeration	18.16
GR30	Athens agglomeration	22.08

Total percentage of proxies, for persons interviewed for the ad hoc module, was 38.6%. The highest percentage of proxies was in men, aged 15 – 24 and the lowest was in women, aged 75 and older.

Age	Males			Females		
	Total Persons interviewed	Proxies	%proxies	Total Persons interviewed	Proxies	%proxies
15-24	1306	905	69.3	868	529	60.9
25-34	4239	2464	58.1	3467	1520	43.8
35-44	4873	2366	48.6	4255	1267	29.8
45-54	5007	2197	43.9	3707	1154	31.1
55-64	4373	1792	41.0	2888	788	27.3
65-74	4407	1417	32.2	3250	846	26.0
75+	3542	994	28.1	2797	652	23.3
TOTAL	27748	12136	43.7	21233	6757	31.8

## **5. Weighting and Estimation**

For the estimation of the ad hoc survey results, the same weights as in Quarterly LFS were used. These weights are computed in 3 steps.

In the first step, a design weight is assigned to each person in the data file. This weight is determined by the estimated probability of selection of the particular household where the person lives in.

At the second step, a correction factor is applied at primary sampling unit level to compensate for non-response.

Finally, at the third step, post stratification weights are applied to individual level. Post-stratification variables are sex, age (5-years groups) and NUT II area.

## 6. Frequencies by variable

**e209**

	Frequency	Percent
	717	1,0
0	29.160	39,3
1	534	0,7
2	66	0,1
9	43.653	58,9
Total	74.130	100,0

**e210**

	Frequency	Percent
	16	0,0
1	92	0,1
2	492	0,7
9	73.530	99,2
Total	74.130	100,0

**e211**

	Frequency	Percent
	29	0,0
00	7	0,0
01	1	0,0
02	150	0,2
03	50	0,1
04	185	0,2
05	98	0,1
06	37	0,0
07	35	0,0
08	2	0,0
09	5	0,0
10	1	0,0
99	73.530	99,2
Total	74.130	100,0

**e213**

	Frequency	Percent
	9	0,0
1	573	0,8
2	1	0,0
3	12	0,0
4	2	0,0
5	3	0,0
9	73.530	99,2
Total	74.130	100,0

**e214**

	Frequency	Percent
	2.049	2,8
0	42.259	57,0
1	3.389	4,6
2	1.602	2,2
9	24.831	33,5
Total	74.130	100,0

**e215**

	Frequency	Percent
	33	0,0
00	688	0,9
01	891	1,2
02	1.374	1,9
03	401	0,5
04	52	0,1
05	34	0,0
06	158	0,2
07	180	0,2
08	702	0,9
09	249	0,3
10	229	0,3
99	69.139	93,3
Total	74.130	100,0

**e217**

	Frequency	Percent
	79	0,1
0	692	0,9
1	2.947	4,0
2	1.273	1,7
9	69.139	93,3
Total	74.130	100,0

**e218**

	Frequency	Percent
	196	0,3
00	2.902	3,9
01	178	0,2
02	985	1,3
03	277	0,4
04	256	0,3
05	95	0,1
06	63	0,1
07	23	0,0
08	9	0,0
09	7	0,0
99	69.139	93,3
Total	74.130	100,0

**e220**

	Frequency	Percent
	93	0,1
1	1.647	2,2
2	3	0,0
3	1.123	1,5
4	11	0,0
5	46	0,1
9	71.207	96,1
Total	74.130	100,0

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**e221**

	Frequency	Percent
	856	1,2
0	24.306	32,8
1	194	0,3
2	179	0,2
3	3.513	4,7
9	45.082	60,8
Total	74.130	100,0

**e222**

	Frequency	Percent
	1.019	1,4
0	15.980	21,6
1	3.449	4,7
2	779	1,1
3	4.801	6,5
4	3.020	4,1
9	45.082	60,8
Total	74.130	100,0

## 7. Estimated confidence intervals and coefficients of variation, by variable

Standard errors were computed by SPSS' s Complex Samples procedure, taking in to account the stratification and clustering of the sample

E209	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	109.090	94.563	123.617	0,068
0	4.536.250	4.447.726	4.624.773	0,010
1	76.407	67.175	85.639	0,062
2	8.603	6.187	11.019	0,143

E210	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	2.293	1.053	3.534	0,276
1	14.286	10.938	17.635	0,120
2	68.430	59.911	76.949	0,063

E211/12	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	4.095	2.490	5.700	0,200
00	833	185	1.480	0,397
01	198	-190	586	1,000
02	19.909	15.832	23.985	0,104
03	6.793	4.548	9.039	0,169
04	26.094	21.549	30.638	0,089
05	15.064	11.674	18.454	0,115
06	5.664	3.740	7.588	0,173
07	5.000	3.133	6.867	0,190
08	304	-141	748	0,747
09	869	78	1.661	0,464
10	188	-180	556	1,000

E213	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	1.137	268	2.006	0,390
1	81.161	71.514	90.808	0,061
2	195	-187	578	1,000
3	1.748	671	2.826	0,314
4	389	-151	929	0,708
5	380	-72	832	0,607

E214	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	265.129	242.141	288.116	0,044
0	6.183.332	6.082.122	6.284.541	0,008
1	423.141	398.242	448.040	0,030
2	190.004	173.622	206.386	0,044

E215/16	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	4.298	2.545	6.051	0,208
00	79.527	71.244	87.809	0,053
01	97.740	88.419	107.062	0,049
02	173.264	159.742	186.787	0,040
03	47.009	41.161	52.856	0,063
04	8.272	5.619	10.924	0,164
05	4.086	2.546	5.625	0,192
06	25.048	20.561	29.535	0,091
07	24.186	19.798	28.575	0,093
08	84.260	75.872	92.647	0,051
09	35.223	28.897	41.550	0,092
10	30.233	25.485	34.980	0,080

E217	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	10.643	7.180	14.106	0,166
0	99.389	88.491	110.287	0,056
1	362.391	338.881	385.902	0,033
2	140.722	128.723	152.721	0,043

E218/19	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	26.385	21.137	31.633	0,101
00	317.560	297.234	337.886	0,033
01	24.870	20.538	29.202	0,089
02	143.292	129.098	157.487	0,051
03	38.199	31.641	44.757	0,088
04	34.551	29.060	40.042	0,081
05	13.306	10.059	16.554	0,124
06	9.062	6.476	11.648	0,146
07	3.472	1.901	5.042	0,231
08	1.495	428	2.563	0,364
09	952	222	1.681	0,391

E220	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	13.283	9.846	16.719	0,132
1	233.710	214.935	252.486	0,041
2	407	-66	880	0,592
3	134.761	124.150	145.372	0,040
4	1.932	722	3.143	0,319
5	6.898	4.646	9.149	0,166

E221	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	131.442	116.794	146.089	0,057
0	3.738.531	3.653.742	3.823.320	0,012
1	33.855	26.591	41.120	0,109
2	29.160	23.546	34.773	0,098
3	586.866	547.592	626.140	0,034

E222	Estimate	95% Confidence Interval		Coefficient of Variation
		Lower	Upper	
	153.894	133.915	173.873	0,066
0	2.555.421	2.485.202	2.625.640	0,014
1	522.734	493.403	552.066	0,029
2	130.554	117.658	143.450	0,050
3	698.494	665.781	731.207	0,024
4	458.757	433.957	483.556	0,028

## 8. Basic results per variable

**Table 209 a: Persons that had at least 1 accidental injury, by sex**

				Total
	No answer	Had no Accident	Had at least one Accident	
Male	64.155	2.732.570	73.211	2.869.936
%	2,2%	95,2%	2,6%	100,0%
Female	44.935	1.803.680	11.799	1.860.414
%	2,4%	97,0%	0,6%	100,0%
Total	109.090	4.536.250	85.010	4.730.350
%	2,3%	95,9%	1,8%	100,0%

85,000 persons, that were working at the reference week or they had a job during the last 12 months before reference week, had at least one accidental injury in their job (1.8% of the total). The percentage is higher for males.

**Table 209 b: Persons that had at least 1 accidental injury, by occupation\***

				Total
	No answer	Had no Accident	Had at least one Accident	
Did not report a profession	0	0	1.905	1.905
%	0,0%	0,0%	100,0%	100,0%
Other unclassified persons	1.477	57.850	397	59.724
%	2,5%	96,9%	0,7%	100,0%
Legislators, senior officials and managers	10.979	461.624	5.684	478.287
%	2,3%	96,5%	1,2%	100,0%
Professionals	14.554	644.209	1.374	660.137
%	2,2%	97,6%	0,2%	100,0%
Technicians and associate professionals	8.929	394.685	3.789	407.403
%	2,2%	96,9%	0,9%	100,0%
Clerk	12.868	521.872	2.331	537.071
%	2,4%	97,2%	0,4%	100,0%
Service workers and shop and market sale workers	18.062	655.201	6.285	679.548
%	2,7%	96,4%	0,9%	100,0%
Skilled agricultural and fishery workers	10.284	503.250	9.132	522.666
%	2,0%	96,3%	1,7%	100,0%
Craft and related trade workers	15.980	665.688	33.430	715.098
%	2,2%	93,1%	4,7%	100,0%
Plant and machine operators and assembler	8.855	325.286	13.282	347.423
%	2,5%	93,6%	3,8%	100,0%
Elementary occupations	7.102	306.584	7.401	321.087
%	2,2%	95,5%	2,3%	100,0%
Total	109.090	4.536.249	85.010	4.730.349
%	2,3%	95,9%	1,8%	100,0%

\*for persons, that had an accident, the profession reported in c213 was taken in to account, while for persons that had no accident, the profession of their current job (if they are working) or their last job was taken in to account.

The highest percentage of accidents was found among Craft and related trade workers (4.7%) and Plant and machine operators and assemblers (3.8%) while the lowest was found among professionals (0.2%) and clerks (0.4) .

**Table 211/12 a: Number of days off work, due to accident, by sex**

Number of days off work	MALE	FEMALE	TOTAL
No answer	3,698 5.1%	396 3.4%	4,094 4.8%
No more than 1 day	21,790 29.8%	4,912 41.6%	26,702 31.4%
2 days to 2 weeks	36,705 50.1%	4,452 37.7%	41,157 48.4%
2 weeks to 6 months	9,150 12.5%	1,818 15.4%	10,968 12.9%
6 months or more (or has not return yet to job)	1,868 2.6%	220 1.9%	2,088 2.5%
Total	73,211 100.0%	11,798 100.0%	85,009 100.0%

Almost half of accidents (48.4) , led to an absence from job of 2 days to 2 weeks, while 31.4% result in not more than 1 day absence from job. The percentage of severe accidents (leading to more than 6 months absence) is 2.5% and is higher for men. In general, men tend to be absent more days than women.

**Table 214a: Persons that report at least one physical or psychic health problem, by sex**

				Total
	No answer	Had no Problem	Had at least one Problem	
Male	131.783	3.521.690	359.604	4.013.077
%	3,3	87,8	9,0	100,0
Female	133.346	2.661.642	253.541	3.048.529
%	4,4	87,3	8,3	100,0
Total	265.129	6.183.332	613.145	7.061.606
%	3,8	87,6	8,7	100

**Table 214b: Persons that report at least one physical or psychic health problem, by age group**

Age group				Total
	No answer	Had no Problem	Had at least one Problem	
15-24	9.909	314.804	5.885	330.598
%	3,0	95,2	1,8	100
25-54	103.197	3.831.044	220.437	4.154.678
%	2,5	92,2	5,3	100
55-64	41.346	836.366	124.088	1.001.800
%	4,1	83,5	12,4	100
65-74	55.250	687.812	146.258	889.320
%	6,2	77,3	16,4	100
75+	55.428	513.306	116.477	685.211
%	8,1	74,9	17,0	100
Total	265.130	6.183.332	613.145	7.061.607
%	3,8	87,6	8,7	100

The percentage of persons that reported a physical or psychical problem caused or made worse from their job is slightly higher for men. As expected, is correlated with age, with persons 65 years old or more reporting a health problem 3 times more often than persons 25 to 54 years old. That means that if we want to study the existence of health problems for various professions, sectors, etc, the age of the respondents should be taken in to account.

**Table 214c: Persons that report at least one physical or psychic health problem, by occupation\*, and age group**

Less than 55 years old				Total
	No answer	Had no Problem	Had at least one Problem	
Did not report a profession	11.819	117.653	21.716	151.188
%	7,8	77,8	14,4	100
Other unclassified persons	2.211	57.994	1.907	62.112
%	3,6	93,4	3,1	100
Legislators, senior officials and managers	10.165	362.270	15.490	387.925
%	2,6	93,4	4,0	100
Professionals	13.232	564.997	17.287	595.516
%	2,2	94,9	2,9	100
Technicians and associate professionals	11.047	371.829	17.787	400.663
%	2,8	92,8	4,4	100
Clerk	14.139	525.279	15.247	554.665
%	2,5	94,7	2,7	100
Service workers and shop and market sale workers	19.583	652.575	25.768	697.926
%	2,8	93,5	3,7	100
Skilled agricultural and fishery workers	5.262	319.733	26.349	351.344
%	1,5	91,0	7,5	100
Craft and related trade workers	11.780	601.214	48.965	661.959
%	1,8	90,8	7,4	100
Plant and machine operators and assembler	5.462	290.450	19.102	315.014
%	1,7	92,2	6,1	100
Elementary occupations	8.405	281.853	16.703	306.961
%	2,7	91,8	5,4	100
Total	113.105	4.145.847	226.321	4.485.273
%	2,5	92,4	5,0	100

*\*for persons, that had an accident, the profession reported in c213 was taken in to account, while for persons that had no accident, the profession of their current job (if they are working) or their last job was taken in to account.*

**Table 214c: Persons that report at least one physical or psychic health problem, by occupation\*, and age group (continued)**

55 years old or more	No answer	Had no Problem	Had at least one Problem	Total
Did not report a profession	102.976	1.022.035	222.550	1.347.561
%	7,6	75,8	16,5	100
Other unclassified persons	0	3.336	694	4.030
%	0,0	82,8	17,2	100
Legislators, senior officials and managers	6.043	126.503	13.151	145.697
%	4,1	86,8	9,0	100
Professionals	3.647	112.613	4.940	121.200
%	3,0	92,9	4,1	100
Technicians and associate professionals	3.050	45.683	3.636	52.369
%	5,8	87,2	6,9	100
Clerk	2.858	74.277	4.876	82.011
%	3,5	90,6	5,9	100
Service workers and shop and market sale workers	4.018	73.037	9.760	86.815
%	4,6	84,1	11,2	100
Skilled agricultural and fishery workers	16.423	290.064	63.169	369.656
%	4,4	78,5	17,1	100
Craft and related trade workers	5.923	137.328	31.260	174.511
%	3,4	78,7	17,9	100
Plant and machine operators and assembler	2.933	78.752	18.995	100.680
%	2,9	78,2	18,9	100
Elementary occupations	4.152	73.857	13.794	91.803
%	4,5	80,5	15,0	100
Total	152.023	2.037.485	386.825	2.576.333
%	5,9	79,1	15,0	100

People working (or having worked) as skilled agricultural and fishery workers report more often a health problem (caused or made worse by job) among persons less than 55 years old. In the group of persons 55 years old or older the reporting of health problems is more frequent among Plant and machine operators and assemblers.

**Table 215/216 a: Type of most serious complaint, by sex**

		Male	Female	Total
No answer		2116	2182	4298
	%	0,6	0,9	0,7
Bone, joint or muscle problem which mainly affects neck, shoulders, arms or hands		41747	37780	79527
	%	11,6	14,9	13,0
Bone, joint or muscle problem which mainly affects hips, legs or feet		43801	53939	97740
	%	12,2	21,3	15,9
Bone, joint or muscle problem which mainly affects back		104743	68521	173264
	%	29,1	27,0	28,3
Breathing or lung problem		33968	13040	47008
	%	9,4	5,1	7,7
Skin problem		4251	4020	8271
	%	1,2	1,6	1,3
Hearing problem		3650	435	4085
	%	1,0	0,2	0,7
Stress, depression or anxiety		14837	10211	25048
	%	4,1	4,0	4,1
Headache and/or eyestrain		14444	9742	24186
	%	4,0	3,8	3,9
Heart disease or attack, or other problems in the circulatory system		60298	23961	84259
	%	16,8	9,5	13,7
Infectious disease (virus, bacteria or other type of infection)		18659	16564	35223
	%	5,2	6,5	5,7
Other types of complaint		17087	13146	30233
	%	4,8	5,2	4,9
Total		359601	253541	613142
	%	100	100	100

Most common complaint is Bone, joint or muscle problem which mainly affects back. There are no significant differences in the problems that are reported by men and women, with the exception of Bone, joint or muscle problems which mainly affect feet which are reported almost two times more often by women, and Heart diseases or problems of circulatory system that are reported much more often by men.

**Table 217 a. Limitations in every-day activities caused by most serious health problem, by sex**

		Male	Female	Total
No answer		6689	3954	10643
	%	1,9	1,6	1,7
No limitation		63356	36033	99389
	%	17,6	14,2	16,2
To some extent		211813	150579	362392
	%	58,9	59,4	59,1
Considerable limitations		77746	62975	140721
	%	21,6	24,8	23,0
Total		359604	253541	613145
		100	100	100

Women tend to report slightly more limitations in every day activities, but in general there are no significant differences in the reported “severity” of problem between sexes.

**Table 217 b. Limitations in every-day activities caused by most serious health problem, by age group**

		15-24	25-54	55-64	65-74	75+	Total
No answer		938	2960	1502	2736	2507	10643
	%	15,9	1,3	1,2	1,9	2,2	1,7
No limitation		2108	62573	18255	12124	4328	99388
	%	35,8	28,4	14,7	8,3	3,7	16,2
To some extent		2641	124156	76028	93071	66496	362392
	%	44,9	56,3	61,3	63,6	57,1	59,1
Considerable limitations		198	30747	28303	38327	43147	140722
	%	3,4	13,9	22,8	26,2	37,0	23,0
		5885	220436	124088	146258	116478	613145
		100	100	100	100	100	100

As expected, the “severity” of problems tend to increase with age. The percentage of persons that face considerable limitations is almost double for persons more than 55 years old than for persons 25 to 54. At the same time, the percentage of persons that have no limitations (because of the health problem) falls from 28,4% (for the age group 25 – 54) to 8,3% (for the age group 65 – 74).

**Table 218. Number of days off work, due to the most serious complain, by sex**

No answer		13399	12986	26385
	%	7,2	11,8	8,9
Expects never to work again due to this illness		15704	9167	24871
	%	8,5	8,3	8,4
Less than one day or no time off		93051	50241	143292
	%	50,3	45,5	48,5
At least one day but less than four days		24457	13742	38199
	%	13,2	12,4	12,9
At least four days but less than two weeks		20924	13627	34551
	%	11,3	12,3	11,7
At least two weeks but less than one month		8216	5090	13306
	%	4,4	4,6	4,5
At least one month but less than three months		5421	3642	9063
	%	2,9	3,3	3,1
At least three months but less than six months		2305	1166	3471
	%	1,2	1,1	1,2
At least six months but less than nine months		848	648	1496
	%	0,5	0,6	0,5
At least nine months		828	124	952
	%	0,4	0,1	0,3
Total		185153	110433	295586
	%	100	100	100

Data in Table 218 refer to persons that did not report that they have not worked during last 12 months due to other reason than the health problem. Almost half of them report that they were off job less than a day (or not at all) while about 10% were more than 2 weeks away from job and 8,9% believe that they are not going to work again because of this problem. There are no significant differences between men and women, with men reporting more often that they lost less than one work-day because of the health problem

**Table 221 a: Exposure to factors that affect mental well being, by sex**

		e221				
			0	1	2	3
Male	Count	80.196	2.263.880	17.828	22.225	377.517
	%	2,9%	82,0%	0,6%	0,8%	13,7%
Female	Count	51.246	1.474.651	16.028	6.935	209.349
	%	2,9%	83,9%	0,9%	0,4%	11,9%
Total	Count	131.442	3.738.531	33.856	29.160	586.866
	%	2,9%	82,7%	0,7%	0,6%	13,0%

The percentage of people who believe that are exposed to harassment, bullying or violence and threat of violence, in a degree that can affect his/her mental well-being is quite small (below 1%). In contrast, more than one in ten (13%) are affected by time pressure of work overload. The situation appears to be slightly worse for men than for women.

**Table 221 b: Exposure to factors that affect mental well being, by age group**

Age group		e221				
			0	1	2	3
15-24	Count	10.916	238.400	3.019	1.501	29.672
	%	3,9%	84,1%	1,1%	0,5%	10,5%
25-34	Count	35.483	1.003.025	10.657	9.646	161.181
	%	2,9%	82,2%	0,9%	0,8%	13,2%
35-44	Count	36.062	1.091.032	9.418	8.663	180.074
	%	2,7%	82,3%	0,7%	0,7%	13,6%
45-54	Count	32.080	879.199	7.504	6.445	144.895
	%	3,0%	82,2%	0,7%	0,6%	13,5%
55-64	Count	14.446	447.760	2.891	2.405	64.239
	%	2,7%	84,2%	0,5%	0,5%	12,1%
65-74	Count	2.192	70.744	367	500	6.063
	%	2,7%	88,6%	0,5%	0,6%	7,6%
75+	Count	263	8.372	0	0	742
	%	2,8%	89,3%	0,0%	0,0%	7,9%
Total	Count	131.442	3.738.532	33.856	29.160	586.866
	%	2,9%	82,7%	0,7%	0,6%	13,0%

Concerning differences in the exposure to factors that affect mental well-being, between different age groups, we see that higher percentages are found among people 25 to 54 years old. We should note, though, that these differences are not statistically significant.

**Table 221 c: Exposure to factors that affect mental well being, by nationality**

Nationality		e221				
			0	1	2	3
Greek	Count	122.417	3.495.710	27.090	27.540	542.928
	%	2,9%	82,9%	0,6%	0,7%	12,9%
Other	Count	9.025	242.821	6.765	1.620	43.938
	%	3,0%	79,8%	2,2%	0,5%	14,4%
Total	Count	131.442	3.738.531	33.855	29.160	586.866
	%	2,9%	82,7%	0,7%	0,6%	13,0%

It appears that persons of foreign nationality are more exposed to factors that affect their mental well being , and in particular harassment and bullying, even though the relevant percentage is low.

**Table 221 d: Exposure to factors that affect mental well being, by sector of economic activity**

Sector		e221				
			0	1	2	3
Agriculture, animal breeding, hunting and forestry	Count	12.487	455.911	859	179	37.846
	%	2,5%	89,9%	0,2%	0,0%	7,5%
Fishing	Count	944	12.958	141	99	940
	%	6,3%	85,9%	0,9%	0,7%	6,2%
Mining and quarrying	Count	413	14.660	0	0	3.074
	%	2,3%	80,8%	0,0%	0,0%	16,9%
Manufacturing	Count	13.108	448.623	4.847	1.673	90.603
	%	2,3%	80,3%	0,9%	0,3%	16,2%
Electricity, gas, steam and water supply	Count	1.078	34.488	188	204	4.066
	%	2,7%	86,2%	0,5%	0,5%	10,2%
Construction	Count	13.819	327.135	3.397	1.116	48.895
	%	3,5%	83,0%	0,9%	0,3%	12,4%
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	Count	27.019	666.694	2.704	3.165	101.042
	%	3,4%	83,3%	0,3%	0,4%	12,6%
Hotels and restaurants	Count	9.224	258.609	3.929	1.397	44.737
	%	2,9%	81,4%	1,2%	0,4%	14,1%
Transport, storage and communication	Count	9.219	206.342	2.276	4.820	44.972
	%	3,4%	77,1%	0,9%	1,8%	16,8%
Financial intermediation	Count	3.163	84.621	591	1.117	23.198
	%	2,8%	75,1%	0,5%	1,0%	20,6%
Real estate, renting and business activities	Count	9.625	228.071	2.180	2.344	52.575
	%	3,3%	77,4%	0,7%	0,8%	17,8%
Public administration and defence; compulsory social security	Count	10.491	322.603	4.606	9.840	43.331
	%	2,7%	82,5%	1,2%	2,5%	11,1%
Education	Count	8.476	293.388	734	971	24.866
	%	2,6%	89,3%	0,2%	0,3%	7,6%
Health and social work	Count	6.603	190.432	2.807	818	40.193
	%	2,7%	79,1%	1,2%	0,3%	16,7%
Other community, social and personal service activities	Count	3.688	135.827	2.179	788	19.893
	%	2,3%	83,7%	1,3%	0,5%	12,3%
Private households with employed persons	Count	2.085	57.162	2.142	629	6.528
	%	3,0%	83,4%	3,1%	0,9%	9,5%
Extra-territorial organizations and bodies	Count	0	1.007	276	0	107
	%	0,0%	72,4%	19,9%	0,0%	7,7%
	Count	131.442	3.738.531	33.856	29.160	586.866
Total	%	2,9%	82,7%	0,7%	0,6%	13,0%

Concerning differences among different sectors of economic activity, we can see that the percentage of people that are exposed in factors that affect their mental well being (and in particular, to time pressure and work overload) is much higher in Financial Intermediation and Real Estate, renting and business activities.

**Table 222 a: Exposure to factors that affect physical health, by sex**

		e222					
			0	1	2	3	4
Male	Count	93.319	1.317.964	346.384	95.252	498.928	409.799
	%	3,4%	47,7%	12,5%	3,4%	18,1%	14,8%
Female	Count	60.575	1.237.457	176.351	35.302	199.566	48.957
	%	3,4%	70,4%	10,0%	2,0%	11,4%	2,8%
Total	Count	153.894	2.555.421	522.735	130.554	698.494	458.756
	%	3,4%	56,5%	11,6%	2,9%	15,5%	10,1%

Almost half of people in the sample (40.1%) believe that in their working environment they are exposed to factors that can adversely affect the physical health. This is more evident in men (48.9%) than in women (26.6%) .

**Table 222 b: Exposure to factors that affect physical health by age group**

		e222					
			0	1	2	3	4
15-24	Count	11.215	145.724	36.213	8.568	47.099	34.688
	%	4,0%	51,4%	12,8%	3,0%	16,6%	12,2%
25-34	Count	41.935	718.535	127.883	39.103	169.932	122.603
	%	3,4%	58,9%	10,5%	3,2%	13,9%	10,0%
35-44	Count	41.851	766.691	148.136	36.399	194.583	137.590
	%	3,2%	57,9%	11,2%	2,7%	14,7%	10,4%
45-54	Count	37.380	598.530	133.404	31.629	163.128	106.052
	%	3,5%	55,9%	12,5%	3,0%	15,2%	9,9%
55-64	Count	17.007	278.755	67.577	13.240	102.759	52.403
	%	3,2%	52,4%	12,7%	2,5%	19,3%	9,9%
65-74	Count	3.938	42.251	8.644	1.369	18.846	4.817
	%	4,9%	52,9%	10,8%	1,7%	23,6%	6,0%
75+	Count	568	4.935	876	247	2.147	603
	%	6,1%	52,6%	9,3%	2,6%	22,9%	6,4%
TOTAL	Count	153.894	2.555.421	522.733	130.555	698.494	458.756
	%	3,4%	56,5%	11,6%	2,9%	15,5%	10,1%

There are no striking differences between different age groups concerning the exposure to factors that affect their physical health. The percentage of people who answered that are exposed to some factor affecting their physical health tends to be higher with age, (something that can be explained by the fact that people are more vulnerable in risk factors when they get older). At the same time, we can see that the higher percentage of people affected by some factor is found among the youngest age group.

**Table 222 c: Exposure to factors that affect physical health by nationality**

Nationality		e222					
			0	1	2	3	4
Greek	Count	144.981	2.445.072	479.258	121.648	612.438	412.290
	%	3,4%	58,0%	11,4%	2,9%	14,5%	9,8%
Other	Count	8.913	110.349	43.477	8.906	86.056	46.467
	%	2,9%	36,3%	14,3%	2,9%	28,3%	15,3%
Total	Count	153.894	2.555.421	522.735	130.554	698.494	458.757
	%	3,4%	56,5%	11,6%	2,9%	15,5%	10,1%

The percentage of people of foreign nationality that are not exposed in some risk factor is much smaller than the corresponding for people of Greek nationality. The main risk factor is "Difficult work postures, work movements or handling heavy loads", for both groups (28.3% and 14.5 percent, respectively) .

**Table 222 d: Exposure to factors that affect physical health by sector of economic activity**

	e222					
		0	1	2	3	4
Agriculture, animal breeding, hunting and forestry	15.330 3,0% 878	183.655 36,2% 3.880	107.252 21,1% 461	3.574 0,7% 111	168.301 33,2% 4.141	29.172 5,8% 5.612
Fishing	5,8% 1.503	25,7% 1.929	3,1% 5.850	0,7% 895	27,5% 2.113	37,2% 5.857
Mining and quarrying	8,3% 16.829	10,6% 240.860	32,2% 100.136	4,9% 40.184	11,6% 91.403	32,3% 69.441
Manufacturing	3,0% 1.112	43,1% 22.004	17,9% 5.608	7,2% 1.057	16,4% 2.459	12,4% 7.783
Electricity, gas, steam and water supply	2,8% 11.234	55,0% 71.176	14,0% 46.031	2,6% 16.613	6,1% 131.238	19,4% 118.070
Construction	2,8% 30.476	18,0% 505.249	11,7% 61.048	4,2% 17.413	33,3% 144.769	29,9% 41.668
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	3,8% 11.808	63,1% 186.390	7,6% 59.143	2,2% 4.704	18,1% 40.901	5,2% 14.948
Hotels and restaurants	3,7% 11.475	58,6% 121.620	18,6% 14.542	1,5% 14.153	12,9% 32.869	4,7% 72.970
Transport, storage and communication	4,3% 2.436	45,4% 101.438	5,4% 3.400	5,3% 1.390	12,3% 2.486	27,3% 1.539
Financial intermediation	2,2% 8.542	90,0% 237.173	3,0% 19.280	1,2% 8.398	2,2% 10.241	1,4% 11.163
Real estate, renting and business activities	2,9% 13.947	80,5% 277.726	6,5% 22.524	2,8% 10.430	3,5% 14.605	3,8% 51.638
Public administration and defence; compulsory social security	3,6% 9.900	71,1% 296.314	5,8% 8.332	2,7% 3.995	3,7% 4.806	13,2% 5.087
Education	3,0% 9.077	90,2% 168.194	2,5% 25.436	1,2% 2.102	1,5% 21.004	1,5% 15.040
Health and social work	3,8% 6.290	69,8% 94.981	10,6% 38.135	0,9% 4.235	8,7% 12.010	6,2% 6.723
Other community, social and personal service activities	3,9% 3.056	58,5% 42.078	23,5% 5.556	2,6% 1.181	7,4% 14.762	4,1% 1.912
Private households with employed persons	4,5% 0	61,4% 756	8,1% 0	1,7% 119	21,5% 383	2,8% 132
Extra-territorial organizations and bodies	0,0% 153.893	54,4% 2.555.423	0,0% 522.734	8,6% 130.554	27,6% 698.491	9,5% 458.755
Total	3,4%	56,5%	11,6%	2,9%	15,5%	10,1%

The percentage of persons that are not exposed in harmful for their physical health factors varies considerably for different sectors of economic activity, from 90.2% (for people working in Education) to 10.6% (for people working in Mining and quarrying).

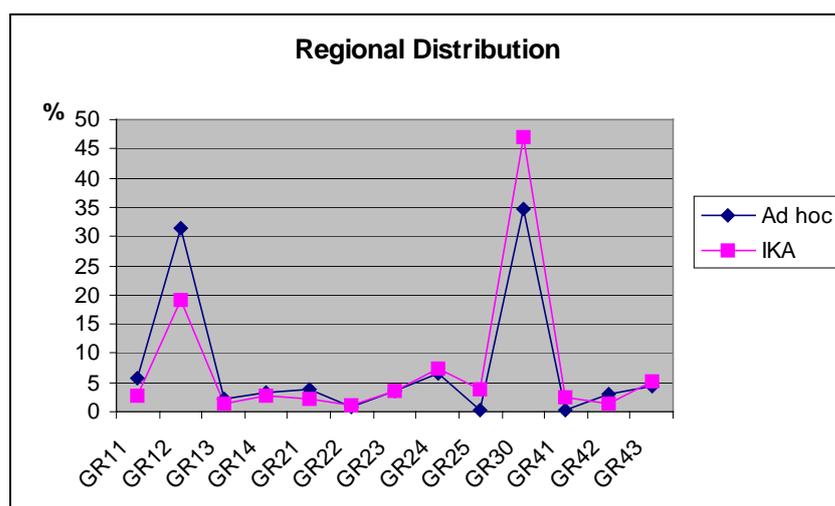
## 9.Coherence

An administrative source that was available for comparison with 2007 ad hoc results, was “IKA-ETAM” report for accidents at work, where IKA-ETAM stands for “SOCIAL INSURANCE INSTITUTE - UNIFIED INSURANCE FUND OF EMPLOYEES”, the main social security and insurance organization in Greece for employees.

We must note that, the available data from “IKA-ETAM” refer to 2005, so the comparison concern more the “order of magnitude” for the reported number of accidents and the distribution of certain characteristics (as age, sex, occupation) of the persons that reported accidents at work.

**Table C1. Reported accidents at work by NUT region**

	Ad hoc	%	IKA	%
GR11 Anatoliki Makedonia, Thraki	2.776	5,8	358	2,6
GR12 Kentriki Makedonia	15.178	31,5	2.619	19,0
GR13 Dytiki Makedonia	1.056	2,2	190	1,4
GR14 Thessalia	1.525	3,2	383	2,8
GR21 Ipeiros	1.854	3,8	316	2,3
GR22 Ionia Nisia	433	0,9	148	1,1
GR23 Dytiki Ellada	1.681	3,5	483	3,5
GR24 Sterea Ellada	3.173	6,6	1.027	7,5
GR25 Peloponnisos	209	0,4	537	3,9
GR30 Attiki	16.683	34,6	6.463	47,0
GR41 Voreio Aigaio	174	0,4	335	2,4
GR42 Notio Aigaio	1.377	2,9	195	1,4
GR43 Kriti	2.093	4,3	701	5,1
Total Greece	48.212	100,0	13.755	100,0

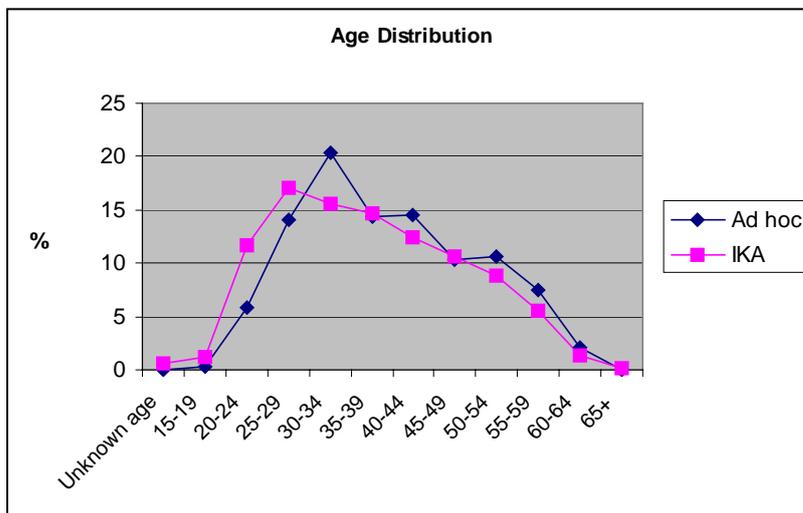


**Table C2. Reported accidents at work by sex**

	Ad hoc				IKA			
	Male	%	Female	%	Male	%	Female	%
Total	42723	89	5490	11	11403	83	2352	17

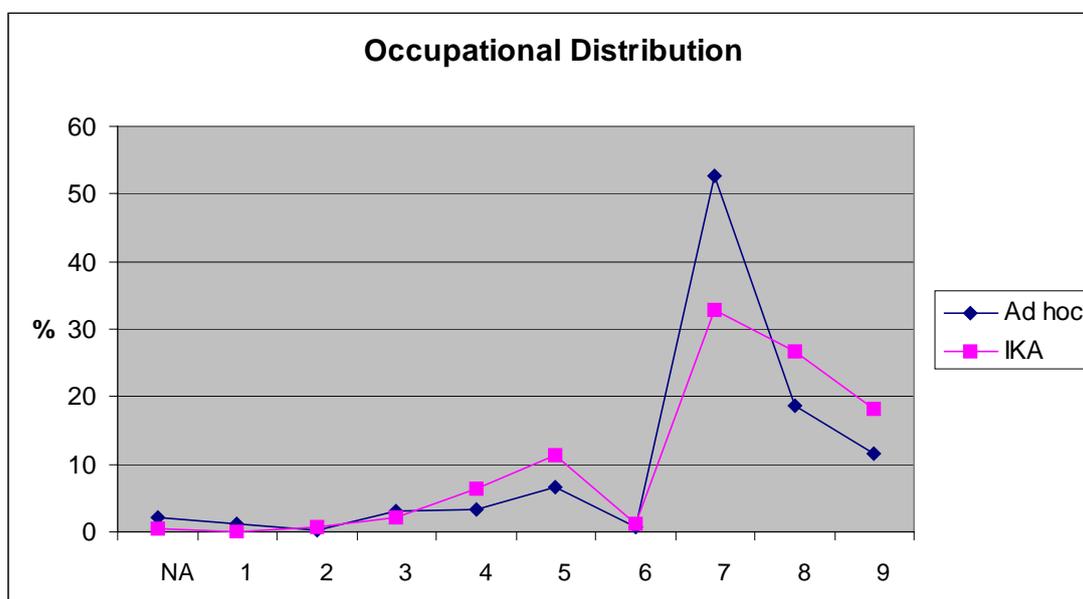
**Table C3. Reported accidents at work by age group**

Age Group	Ad hoc		IKA	
	Total	%	Total	%
Unknown age	0	0,0	88	0,6
15-19	136	0,3	169	1,2
20-24	2826	5,9	1608	11,7
25-29	6738	14,0	2358	17,1
30-34	9850	20,4	2147	15,6
35-39	6937	14,4	2015	14,6
40-44	7009	14,5	1718	12,5
45-49	4995	10,4	1457	10,6
50-54	5110	10,6	1223	8,9
55-59	3608	7,5	751	5,5
60-64	1004	2,1	198	1,4
65+	0	0,0	23	0,2
Total	48213	100,0	13755	100



**Table C4. Reported accidents at work by occupation**

Occupation	Ad hoc		IKA	
	Number of accidents	%	Number of accidents	%
Unknown	1.006	2,1	52	0,4
Legislators, senior officials and managers	575	1,2	15	0,1
Professionals	77	0,2	112	0,8
Technicians and associate professionals	1.518	3,1	295	2,1
Clerk	1.538	3,2	867	6,3
Service workers and shop and market sale workers	3.156	6,5	1.560	11,3
Skilled agricultural and fishery workers	373	0,8	146	1,1
Craft and related trade workers	25.381	52,6	4.510	32,8
Plant and machine operators and assemblers	8.994	18,7	3.677	26,7
Elementary occupations	5.593	11,6	2.521	18,3
<b>Total</b>	<b>48.211</b>	<b>100</b>	<b>13.755</b>	<b>100</b>



The number of accidents reported in ad hoc module is much higher than the relevant numbers in IKA data (48.211 to 13.755).

Regional distribution is similar but there are two main differences. The main differences are found in GR30 and GR12: These are the NUT II areas where we have the largest number of

accidents in both data sets (which is natural since they include Athens and Thessaloniki respectively) but the relevant percentage (over the total number of accidents) is different.

Age distribution is also similar, with main difference in the age group in which the highest percentage of accidents appears: in Ad hoc is the age group of 30 – 34 and in IKA the age group 25 – 29.

Differences are found also in the distribution by occupation. Craft and related trade workers, Plant and machine operators and assemblers and Elementary occupations comprise the vast majority of persons that suffered accidents in both cases, but while in ad hoc more than half of persons with accidents are Craft and related trade workers, in the case of IKA, the relevant percentage is about 33%.

We must note one other important difference between the two data sets, which can explain in a certain extent the large difference in the reported number of accidents. According to IKA, 99% of the reported accidents resulted in work interruption, at least for one day. According to Ad hoc data, less than 70% of accidents, resulted in work interruption (at least for one day). We can conclude, that people tend to “under-report” to IKA “small” accidents (mainly because they have no financial incentive to report them).

Another difference between ad hoc and IKA data, concern traffic accidents. According IKA, only 6.2% of accidents was a traffic accident at work place (or in the course of work) and 8.9 were traffic accidents while traveling to or from work. According to Ad hoc data 16% of accidents was a traffic accident. In this case, we can conclude that a number of traffic accidents (during traveling to or from job), may have been reported in the ad hoc module as traffic accidents in job.

## **10. Main problems encountered in implementing Ad hoc module and recommendations for a repetition of the module**

1. In Greek LFS interviews are carried out with printed questionnaires. The filtering in the ad hoc module was quite complicated in some questions and this resulted in problems during field work.

2. As it turned out, it was difficult for interviewed persons to distinguish traffic accidents during traveling from and to work, from accidents at work. As a result, a high number of traffic accidents at work is reported.

3. Questions on health problems were asked, depending on the idea of the respondent about the "cause" of the health problem (that is, if the health problem was caused or made worse by job). This is a very difficult and subjective judgment and two different people can give (under exactly the same conditions) quite different answers. More important, in many cases respondents do not know if a health problem is caused (or made worse) by their job - and these questions are sometimes controversial even among scientists. So it is not clear to what extent the data collected through this question reveal a relation between a certain professional activity and a health problem or reveal the idea (or knowledge) that the respondent has about the consequences of his/her profession in his/her health.

We believe that in a repetition of the ad hoc module we should avoid to include this variable.

4. Concerning factors that affect physical or mental health, we believe that they should be included as separate variables (one variable for each factor).