

PHYSIOLOGICAL EFFECTS OF IMPULSIVE  
NOISES ON HUMAN BEINGS

Tables of the results of a ten-minute  
exposure

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TABLE: 1. 1

EXPOSURE CODE: 1      PARAMETER: RESPIRATION CODE: 001

PERIOD      STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE:      1      2      3      4      5      6      7      8      9      10

MEAN VALUE IN NUMBER OF RESPIRATIONS PER MINUTE

3-05	A.	11.00	12.00	14.40	12.00	14.00	15.60	14.00	19.40	15.60	16.20
4-05	E.	10.60	11.20	11.00	11.20	13.80	15.80	15.00	18.80	16.80	14.20
4-10	P.	11.00	11.60	12.00	11.60	14.70	16.20	15.60	18.20	16.70	14.10
5-05	J.	11.80	10.20	12.60	10.40	15.00	14.60	15.80	20.00	15.20	13.40
6-05	L1	11.60	9.80	14.60	9.60	15.00	15.00	13.60	18.00	15.80	14.20
6-10	L2	10.60	10.00	14.20	10.00	14.40	15.20	14.40	18.40	14.60	14.20

STANDARD DEVIATION

3-05	A.	1.58	1.00	1.34	1.00	.71	.89	2.45	.89	1.67	.84
4-05	E.	.55	1.48	2.35	1.48	.84	.45	1.73	2.68	2.77	.45
4-10	P.	.82	1.51	2.26	1.26	1.25	.79	1.43	2.25	2.58	1.60
5-05	J.	.84	.84	2.61	1.34	1.00	1.82	.84	.71	1.92	1.14
6-05	L1	1.14	1.92	.55	1.67	0.00	0.00	2.79	2.92	.84	1.79
6-10	L2	1.52	1.00	2.05	1.00	1.14	.84	1.34	1.82	2.30	2.86

NUMBER OF RESPIRATIONS OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	9.00	12.00	15.00	12.00	14.00	15.00	16.00	20.00	15.00	17.00
4-01	D.	11.00	13.00	13.00	13.00	14.00	15.00	16.00	20.00	13.00	14.00
5-01	H.	12.00	11.00	14.00	12.00	16.00	12.00	16.00	20.00	15.00	14.00

NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	-.036	-.067	-.236	-.067	-.014	.013	.071	-.031	.077	-.123
(P.-A.)/A.	0.000	-.033	-.167	-.033	.050	.038	.114	-.062	.071	-.130
(P.-E.)/A.	.036	.033	.069	.033	.064	.026	.043	-.031	-.006	-.006
(J.-A.)/A.	.073	-.150	-.125	-.133	.071	-.064	.129	.031	-.026	-.173
(L1-A.)/A.	.055	-.183	.014	-.200	.071	-.038	-.029	-.072	.013	-.123
(L2-A.)/A.	-.036	-.167	-.014	-.167	.029	-.026	.029	-.052	-.064	-.123
(P.-L2)/A.	.036	.133	-.153	.133	.021	.064	.086	-.010	.135	-.006
(D.-B.)/A.	.182	.083	-.139	.083	0.000	0.000	0.000	0.000	-.128	-.185
(H.-B.)/A.	.273	-.083	-.069	0.000	.143	-.192	0.000	0.000	0.000	-.185

TABLE: 1. 2

EXPOSURE CODE: 2      PARAMETER: RESPIRATION CODE: 001

PERIOD                      STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE:                      1            2            3            4            5            6            7            8            9            10

MEAN VALUE IN NUMBER OF RESPIRATIONS PER MINUTE

3-05	A.	13.40	17.00	14.80	12.40	16.40	13.00	16.20	20.00	15.60	12.40
4-05	E.	11.80	16.20	15.60	12.60	16.80	15.00	13.80	19.20	17.60	13.20
4-10	P.	12.00	17.40	15.30	13.60	17.10	14.80	14.00	20.00	17.70	13.40
5-05	J.	13.40	18.00	14.60	13.20	16.40	13.60	15.80	21.20	14.40	15.20
6-05	L1	12.80	17.80	15.00	14.00	15.60	14.20	15.00	21.20	14.20	15.00
6-10	L2	12.50	16.80	15.40	12.00	16.20	14.40	15.20	20.40	12.40	14.40

STANDARD DEVIATION

3-05	A.	1.14	1.58	1.10	.89	.55	0.00	.45	.71	1.52	.89
4-05	E.	1.30	1.30	2.30	2.41	.45	.71	1.92	1.30	2.30	1.10
4-10	P.	1.25	1.71	1.77	2.17	.57	.92	2.05	1.41	1.89	1.35
5-05	J.	.55	1.41	1.95	1.79	.55	.89	.84	.84	3.78	1.30
6-05	L1	1.64	1.30	1.73	1.00	.55	1.92	1.87	.45	2.77	1.22
6-10	L2	.71	1.30	.89	3.87	.45	1.14	1.92	1.14	2.41	.55

NUMBER OF RESPIRATIONS OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	12.00	18.00	16.00	11.00	16.00	13.00	16.00	19.00	13.00	13.00
4-01	D.	11.00	18.00	12.00	11.00	16.00	16.00	16.00	20.00	17.00	13.00
5-01	H.	14.00	19.00	13.00	14.00	16.00	13.00	16.00	21.00	9.00	13.00

NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	-.119	-.047	.054	.016	.024	.154	-.148	-.040	.128	.065
(P.-A.)/A.	-.104	.024	.034	.097	.043	.138	-.136	0.000	.135	.081
(P.-E.)/A.	.015	.071	-.020	.081	.018	-.015	.012	.040	.006	.016
(J.-A.)/A.	0.000	.059	-.014	.065	0.000	.046	-.025	.060	-.077	.226
(L1-A.)/A.	-.045	.047	.014	.129	-.049	.092	-.074	.060	-.090	.210
(L2-A.)/A.	-.067	-.012	.041	-.032	-.012	.108	-.062	.020	-.205	.161
(P.-L2)/A.	-.037	.035	-.007	.129	.055	.031	-.074	-.020	.340	-.081
(D.-B.)/A.	-.075	0.000	-.270	0.000	0.000	.231	0.000	.050	.256	0.000
(H.-B.)/A.	.149	.059	-.203	.242	0.000	0.000	0.000	.100	-.256	0.000

TABLE: 1. 3

EXPOSURE CODE: 3      PARAMETER: RESPIRATION CODE: 001

PERIOD      STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE:      1      2      3      4      5      6      7      8      9      10

## MEAN VALUE IN NUMBER OF RESPIRATIONS PER MINUTE

3-05	A.	11.40	17.20	15.40	11.60	15.60	13.60	15.20	18.80	15.60	16.20
4-05	E.	11.40	15.40	16.60	12.00	15.80	14.40	15.80	17.40	15.40	15.60
4-10	P.	11.90	15.20	15.90	11.40	15.90	14.50	16.00	17.40	15.30	15.50
5-05	J.	12.00	17.20	15.60	11.80	15.60	15.00	16.00	18.80	18.20	16.20
6-05	L1	12.60	17.20	13.40	11.20	15.40	14.20	15.20	17.60	17.00	15.60
6-10	L2	11.60	16.20	13.80	12.00	16.40	14.20	12.00	18.60	14.40	15.00

## STANDARD DEVIATION

3-05	A.	.55	.84	.89	1.14	.55	2.30	2.28	1.79	.89	.45
4-05	E.	1.14	2.70	1.14	1.73	.84	.55	1.10	1.67	2.70	1.14
4-10	P.	.99	2.20	1.29	1.58	.74	.71	.82	2.12	2.26	.97
5-05	J.	.71	1.30	1.67	1.64	1.14	.71	.71	2.77	.45	.84
6-05	L1	.55	1.30	2.19	1.64	1.14	1.30	1.10	2.07	2.35	.55
6-10	L2	.55	1.48	3.42	1.58	.55	1.10	3.00	2.07	2.19	1.00

## NUMBER OF RESPIRATIONS OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	11.00	18.00	15.00	13.00	16.00	14.00	14.00	18.00	15.00	16.00
4-01	D.	10.00	15.00	17.00	12.00	16.00	14.00	16.00	19.00	18.00	17.00
5-01	H.	12.00	17.00	17.00	12.00	16.00	15.00	16.00	19.00	19.00	16.00

## NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	0.000	-.105	.078	.034	.013	.059	.039	-.074	-.013	-.037
(P.-A.)/A.	.044	-.116	.032	-.017	.019	.066	.053	-.074	-.019	-.043
(P.-E.)/A.	.044	-.012	-.045	-.052	.006	.007	.013	0.000	-.006	-.006
(J.-A.)/A.	.053	0.000	.013	.017	0.000	.103	.053	0.000	.167	0.000
(L1-A.)/A.	.105	0.000	-.130	-.034	-.013	.044	0.000	-.064	.090	-.037
(L2-A.)/A.	.018	-.058	-.104	.034	.051	.044	-.211	-.011	-.077	-.074
(P.-L2)/A.	.026	-.058	.136	-.052	-.032	.022	.263	-.064	.058	.031
(D.-B.)/A.	-.088	-.174	.130	-.086	0.000	0.000	.132	.053	.192	.062
(H.-B.)/A.	.088	-.058	.130	-.086	0.000	.074	.132	.053	.256	0.000

TABLE: 1. 4

EXPOSURE CODE: 4 PARAMETER: RESPIRATION CODE: 001

PERIOD STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE: 1 2 3 4 5 6 7 8 9 10

MEAN VALUE IN NUMBER OF RESPIRATIONS PER MINUTE

3-05	A.	13.00	17.20	16.60	12.60	15.40	14.80	14.60	17.00	15.40	17.00
4-05	E.	12.00	17.20	15.80	12.20	16.40	14.40	15.60	18.60	15.20	17.20
4-10	P.	11.80	18.10	15.70	12.40	15.90	14.40	15.50	18.70	15.80	16.30
5-05	J.	12.40	18.40	15.00	12.00	16.40	14.00	16.80	17.60	12.40	16.60
6-05	L1	12.00	18.20	13.40	11.00	16.80	13.80	13.80	17.80	15.00	16.40
6-10	L2	0.00	17.60	15.00	10.80	16.00	12.40	14.40	18.20	12.80	16.60

STANDARD DEVIATION

3-05	A.	1.00	2.17	.89	1.67	.55	.45	.89	2.00	2.19	1.22
4-05	E.	1.41	2.39	1.48	.84	1.14	.55	.89	.55	2.49	.84
4-10	P.	1.03	2.38	2.31	1.07	.99	.52	1.08	.82	2.04	1.16
5-05	J.	1.14	1.52	1.58	1.22	1.34	1.00	.84	.55	2.61	1.14
6-05	L1	0.00	1.92	3.58	1.41	.45	.84	2.39	1.30	1.87	1.14
6-10	L2	0.00	1.52	1.58	.84	.71	1.52	1.34	.84	2.59	1.14

NUMBER OF RESPIRATIONS OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	14.00	19.00	16.00	12.00	16.00	14.00	14.00	18.00	16.00	15.00
4-01	D.	14.00	18.00	18.00	11.00	18.00	14.00	14.00	19.00	11.00	17.00
5-01	H.	12.00	19.00	15.00	13.00	17.00	14.00	16.00	18.00	14.00	17.00

NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	-.077	0.000	-.048	-.032	.065	-.027	.068	.094	-.013	.012
(P.-A.)/A.	-.092	.052	-.054	-.016	.032	-.027	.062	.100	.026	-.041
(P.-E.)/A.	-.015	.052	-.006	.016	-.032	0.000	-.007	.006	.039	-.053
(J.-A.)/A.	-.046	.070	-.096	-.048	.065	-.054	.151	.035	-.195	-.024
(L1-A.)/A.	-.077	.058	-.193	-.127	.091	-.068	-.055	.047	-.026	-.035
(L2-A.)/A.	0.000	.023	-.096	-.143	.039	-.162	-.014	.071	-.169	-.024
(P.-L2)/A.	0.000	.029	.042	.127	-.006	.135	.075	.029	.195	-.018
(D.-B.)/A.	0.000	-.058	.120	-.079	.130	0.000	0.000	.059	-.325	.118
(H.-B.)/A.	-.154	0.000	-.060	.079	.065	0.000	.137	0.000	-.130	.118

TABLE: 1. 5

EXPOSURE CODE: 5 PARAMETER: RESPIRATION CODE: 001

PERIOD STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE: 1 2 3 4 5 6 7 8 9 10

MEAN VALUE IN NUMBER OF RESPIRATIONS PER MINUTE

3-05	A.	0.00	17.40	13.40	12.40	15.60	14.80	14.40	20.60	14.60	16.60
4-05	E.	0.00	17.40	15.00	11.60	15.60	16.20	13.40	19.80	17.00	14.80
4-10	P.	0.00	17.80	13.10	11.70	15.90	16.50	14.10	19.60	16.50	15.00
5-05	J.	0.00	17.60	10.80	13.20	15.60	14.40	14.60	20.60	16.00	15.40
6-05	L1	0.00	17.20	12.60	13.40	16.00	15.20	14.60	19.80	14.40	14.80
6-10	L2	0.00	17.20	12.00	14.00	16.20	14.00	13.80	18.80	14.00	16.40

STANDARD DEVIATION

3-05	A.	0.00	1.34	1.14	1.14	1.14	.84	1.67	1.95	2.30	1.52
4-05	E.	0.00	1.52	1.22	2.51	.55	.84	1.34	2.28	1.22	.84
4-10	P.	0.00	1.99	2.51	1.89	.57	.85	1.85	1.96	1.43	.94
5-05	J.	0.00	1.67	1.48	1.92	.89	1.14	1.95	.55	2.55	1.14
6-05	L1	0.00	2.77	2.30	.55	.71	.45	1.67	1.30	2.88	.84
6-10	L2	0.00	1.92	1.58	.71	.84	2.24	1.10	2.68	1.87	.89

NUMBER OF RESPIRATIONS OF THE 1 MINUTE PERIODS B,D AND H

3-01	B.	0.00	16.00	12.00	14.00	15.00	16.00	12.00	19.00	17.00	14.00
4-01	D.	0.00	17.00	13.00	14.00	16.00	15.00	14.00	22.00	18.00	15.00
5-01	H.	0.00	15.00	13.00	10.00	16.00	14.00	16.00	21.00	16.00	17.00

NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	0.000	0.000	.119	-.065	0.000	.095	-.069	-.039	.164	-.108
(P.-A.)/A.	0.000	.023	-.022	-.056	.019	.115	-.021	-.049	.130	-.096
(P.-E.)/A.	0.000	.023	-.142	.008	.019	.020	.049	-.010	-.034	.012
(J.-A.)/A.	0.000	.011	-.194	.065	0.000	-.027	.014	0.000	.096	-.072
(L1-A.)/A.	0.000	-.011	-.060	.081	.026	.027	.014	-.039	-.014	-.108
(L2-A.)/A.	0.000	-.011	-.104	.129	.038	-.054	-.042	-.087	-.041	-.012
(P.-L2)/A.	0.000	.034	.082	-.185	-.019	.169	.021	.039	.171	-.084
(D.-B.)/A.	0.000	.057	.075	0.000	.064	-.068	.139	.146	.068	.060
(H.-B.)/A.	0.000	-.057	.075	-.323	.064	-.135	.278	.097	-.068	.181



TABLE: 2. 1

EXPOSURE CODE: 1		PARAMETER: HEART BEAT CODE: 041									
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE IN NUMBER OF HEART-BEATS PER MINUTE											
3-05	A.	79.60	55.60	79.80	55.80	74.60	64.40	67.00	82.40	67.40	51.00
4-05	E.	77.40	54.40	79.80	60.60	72.80	59.60	65.40	81.20	64.20	51.80
4-10	P.	79.00	55.40	78.30	60.80	72.20	61.10	65.50	89.10	65.20	52.70
5-05	J.	78.00	55.40	77.60	57.20	70.00	61.40	64.00	0.00	67.20	54.00
6-05	L1	76.60	53.20	77.80	55.40	73.20	62.40	64.60	0.00	63.80	53.80
6-10	L2	76.60	51.60	75.60	55.80	73.20	62.00	61.40	0.00	64.40	55.60
STANDARD DEVIATION											
3-05	A.	2.61	1.82	1.48	5.63	2.61	1.14	3.94	1.82	2.19	1.22
4-05	E.	2.97	1.82	4.44	3.36	1.30	2.41	1.14	3.56	5.63	2.17
4-10	P.	3.33	1.90	3.95	2.66	1.40	2.42	1.43	8.88	3.91	2.63
5-05	J.	2.55	1.95	2.70	3.70	2.24	2.07	2.00	0.00	2.39	2.83
6-05	L1	1.67	1.79	2.39	2.61	1.64	1.52	3.58	0.00	1.92	3.49
6-10	L2	2.79	3.51	2.07	2.68	3.03	1.58	1.14	0.00	1.52	2.30
NUMBER OF HEART-BEATS OF THE 1 MINUTE PERIODS B, D AND H											
3-01	B.	79.00	56.00	82.00	57.00	72.00	66.00	70.00	84.00	64.00	52.00
4-01	D.	76.00	56.00	83.00	57.00	73.00	63.00	66.00	80.00	55.00	50.00
5-01	H.	82.00	54.00	77.00	58.00	67.00	65.00	65.00	97.00	65.00	52.00
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		-.028	-.022	0.000	.086	-.024	-.075	-.024	-.015	-.047	.016
(P.-A.)/A.		-.008	-.004	-.019	.090	-.032	-.051	-.022	.081	-.033	.033
(P.-E.)/A.		.020	.018	-.019	.004	-.008	.023	.001	.096	.015	.018
(J.-A.)/A.		-.020	-.004	-.028	.025	-.062	-.047	-.045	0.000	-.003	.059
(L1-A.)/A.		-.038	-.043	-.025	-.007	-.019	-.031	-.036	0.000	-.053	.055
(L2-A.)/A.		-.038	-.072	-.053	0.000	-.019	-.037	-.084	0.000	-.045	.090
(P.-L2)/A.		.030	.068	.034	.090	-.013	-.014	.061	0.000	.012	-.057
(D.-B.)/A.		-.038	0.000	.013	0.000	.013	-.047	-.060	-.049	-.134	-.039
(H.-B.)/A.		.038	-.036	-.063	.018	-.067	-.016	-.075	.158	.015	0.000

TABLE: 2. 2

EXPOSURE CODE:		2	PARAMETER: HEART BEAT CODE: 041								
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE IN NUMBER OF HEART-BEATS PER MINUTE											
3-05	A.	80.20	67.20	72.80	68.00	77.80	66.80	68.40	72.20	78.20	71.80
4-05	E.	79.20	61.40	71.80	71.20	79.00	65.80	69.60	72.00	75.40	65.40
4-10	P.	79.60	60.80	73.00	67.50	79.40	66.50	68.40	73.00	76.10	65.70
5-05	J.	76.40	61.80	73.00	66.60	78.40	67.40	65.60	72.40	78.40	63.40
6-05	L1	75.00	62.20	75.00	65.80	71.60	66.40	64.40	72.40	78.20	66.40
6-10	L2	76.40	62.00	72.20	66.20	73.00	63.00	62.00	71.60	78.80	62.80
STANDARD DEVIATION											
3-05	A.	1.92	1.10	2.17	5.34	2.68	1.30	1.67	1.64	3.49	1.92
4-05	E.	3.19	4.34	1.64	3.56	3.87	1.30	1.14	1.41	4.83	1.95
4-10	P.	2.91	3.05	2.21	5.25	2.67	1.27	1.65	1.63	3.98	2.11
5-05	J.	3.21	2.95	2.74	6.54	2.07	.55	1.14	1.52	1.34	2.61
6-05	L1	4.64	1.79	2.35	4.21	1.67	1.14	2.70	1.52	3.03	3.71
6-10	L2	1.14	1.22	.45	2.28	2.92	1.41	1.87	1.14	3.27	.84
NUMBER OF HEART-BEATS OF THE 1 MINUTE PERIODS B, D AND H											
3-01	B.	78.00	67.00	73.00	64.00	79.00	65.00	69.00	71.00	74.00	69.00
4-01	D.	77.00	63.00	70.00	71.00	74.00	67.00	70.00	72.00	72.00	63.00
5-01	H.	81.00	60.00	77.00	67.00	77.00	67.00	65.00	71.00	79.00	61.00
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		-.012	-.086	-.014	.047	.015	-.015	.018	-.003	-.036	-.089
(P.-A.)/A.		-.007	-.095	.003	-.007	.021	-.004	0.000	.011	-.027	-.085
(P.-E.)/A.		.005	-.009	.016	-.054	.005	.010	-.018	.014	.009	.004
(J.-A.)/A.		-.047	-.080	.003	-.021	.008	.009	-.041	.003	.003	-.117
(L1-A.)/A.		-.065	-.074	.030	-.032	-.080	-.006	-.058	.003	0.000	-.075
(L2-A.)/A.		-.047	-.077	-.008	-.026	-.062	-.057	-.094	-.008	.008	-.125
(P.-L2)/A.		.040	-.018	.011	.019	.082	.052	.094	.019	-.035	.040
(D.-B.)/A.		-.012	-.060	-.041	.103	-.064	.030	.015	.014	-.026	-.084
(H.-B.)/A.		.037	-.104	.055	.044	-.026	.030	-.058	0.000	.064	-.111

TABLE: 2. 3

EXPOSURE CODE: 3 PARAMETER: HEART BEAT CODE: 041

PERIOD STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE: 1 2 3 4 5 6 7 8 9 10

## MEAN VALUE IN NUMBER OF HEART-BEATS PER MINUTE

3-05	A.	73.60	60.60	80.00	63.00	68.60	63.00	64.80	85.80	00.00	61.80
4-05	E.	76.20	62.80	81.80	60.40	73.20	61.60	62.20	80.80	00.00	62.40
4-10	P.	73.00	62.30	80.50	60.60	72.30	60.80	62.40	80.80	00.00	61.40
5-05	J.	72.80	60.40	78.00	60.20	73.80	59.40	60.80	81.80	00.00	62.60
6-05	L1	74.20	59.60	77.00	58.80	71.40	58.00	58.60	81.40	75.40	62.40
6-10	L2	69.00	58.20	74.80	58.20	70.00	57.60	60.20	79.20	74.40	63.20

## STANDARD DEVIATION

3-05	A.	4.04	1.52	2.12	2.83	2.70	1.87	1.30	3.19	0.00	2.17
4-05	E.	2.28	3.27	3.11	3.21	5.93	1.52	1.64	3.19	0.00	2.97
4-10	P.	4.16	2.45	2.64	2.41	4.32	1.62	1.26	2.20	0.00	3.44
5-05	J.	3.56	1.14	1.41	.84	2.17	1.67	1.48	1.30	0.00	2.30
6-05	L1	2.39	2.19	1.87	2.59	1.67	2.74	1.52	1.82	1.34	.89
6-10	L2	2.24	1.64	2.59	5.36	1.87	.55	1.64	2.77	4.72	1.64

## NUMBER OF HEART-BEATS OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	78.00	61.00	77.00	60.00	69.00	63.00	65.00	84.00	00.00	63.00
4-01	D.	77.00	60.00	80.00	59.00	69.00	61.00	61.00	81.00	00.00	66.00
5-01	H.	70.00	60.00	77.00	59.00	71.00	58.00	59.00	81.00	00.00	60.00

## NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	.035	.036	.023	-.041	.067	-.022	-.040	-.058	0.000	.010
(P.-A.)/A.	-.008	.028	.006	-.038	.054	-.035	-.037	-.058	0.000	-.006
(P.-E.)/A.	-.043	-.008	-.016	.003	-.013	-.013	.003	0.000	0.000	-.016
(J.-A.)/A.	-.011	-.003	-.025	-.044	.076	-.057	-.062	-.047	0.000	.013
(L1-A.)/A.	.008	-.017	-.038	-.067	.041	-.079	-.096	-.051	0.000	.010
(L2-A.)/A.	-.063	-.040	-.065	-.076	.020	-.086	-.071	-.077	0.000	.023
(P.-L2)/A.	.054	.068	.071	.038	.034	.051	.034	.019	0.000	-.029
(D.-B.)/A.	-.014	-.017	.038	-.016	0.000	-.032	-.062	-.035	0.000	.049
(H.-B.)/A.	-.109	-.017	0.000	-.016	.029	-.079	-.093	-.035	0.000	-.049

TABLE: 2. 4

EXPOSURE CODE:	4	PARAMETER: HEART BEAT CODE: 041									
PERIOD	STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS										
CODE:	1	2	3	4	5	6	7	8	9	10	
MEAN VALUE IN NUMBER OF HEART-BEATS PER MINUTE											
3-05 A.	61.80	61.80	75.80	60.80	75.80	67.80	59.40	77.40	78.20	61.40	
4-05 E.	57.80	61.60	75.80	54.80	76.20	64.80	60.20	76.40	75.60	56.20	
4-10 P.	58.40	60.70	76.50	56.80	76.40	66.10	59.30	76.60	71.80	58.40	
5-05 J.	62.00	61.20	75.60	58.00	76.40	67.60	60.20	79.80	74.40	61.20	
6-05 L1	59.60	61.00	76.00	58.60	73.20	67.40	59.80	81.00	68.60	60.20	
6-10 L2	58.40	61.80	74.40	58.60	76.00	68.60	58.60	80.00	68.60	58.00	
STANDARD DEVIATION											
3-05 A.	8.64	1.48	.84	2.86	2.39	1.30	3.36	2.97	3.11	6.19	
4-05 E.	3.27	1.14	2.17	3.70	3.77	1.48	1.30	2.88	3.97	2.17	
4-10 P.	3.10	1.77	3.21	3.46	2.76	1.85	1.77	2.07	4.92	3.06	
5-05 J.	3.94	1.30	1.67	4.69	2.41	2.19	2.77	5.72	1.14	2.28	
6-05 L1	3.85	.71	1.87	2.70	2.49	1.14	2.49	3.39	4.56	2.77	
6-10 L2	4.51	1.64	1.14	2.61	3.67	1.82	.89	2.00	5.81	4.74	
NUMBER OF HEART-BEATS OF THE 1 MINUTE PERIODS B, D AND H											
3-01 B.	56.00	60.00	75.00	56.00	75.00	67.00	63.00	77.00	79.00	51.00	
4-01 D.	58.00	63.00	79.00	57.00	76.00	65.00	62.00	78.00	79.00	58.00	
5-01 H.	61.00	60.00	76.00	61.00	78.00	71.00	57.00	76.00	74.00	64.00	
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.	-.065	-.003	0.000	-.099	.005	-.044	.013	-.013	-.033	-.085	
(P.-A.)/A.	-.055	-.018	.009	-.066	.008	-.025	-.002	-.010	-.082	-.049	
(P.-E.)/A.	.010	-.015	.009	.033	.003	.019	-.015	.003	-.049	.036	
(J.-A.)/A.	.003	-.010	-.003	-.046	.008	-.003	.013	.031	-.049	-.003	
(L1-A.)/A.	-.036	-.013	.003	-.036	-.034	-.006	.007	.047	-.123	-.020	
(L2-A.)/A.	-.055	0.000	-.018	-.036	.003	.012	-.013	.034	-.123	-.055	
(P.-L2)/A.	0.000	-.018	.028	-.030	.005	-.037	.012	-.044	.041	.007	
(D.-B.)/A.	.032	.049	.053	.016	.013	-.029	-.017	.013	0.000	.114	
(H.-B.)/A.	.081	0.000	.013	.082	.040	.059	-.101	-.013	-.064	.212	

TABLE: 2. 5

EXPOSURE CODE:		5	PARAMETER: HEART BEAT CODE: 041								
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE IN NUMBER OF HEART-BEATS PER MINUTE											
3-05	A.	0.00	63.60	74.00	57.60	72.80	70.60	63.20	92.00	80.20	61.60
4-05	E.	0.00	61.00	76.00	56.80	73.80	67.20	62.60	89.40	76.80	61.00
4-10	P.	0.00	62.10	75.30	54.90	74.40	68.60	63.00	90.30	77.00	62.10
5-05	J.	0.00	61.20	75.20	50.60	74.60	67.40	61.80	97.00	79.40	62.60
6-05	L1	0.00	59.00	74.00	48.00	72.20	66.60	59.20	0.00	82.80	60.20
6-10	L2	0.00	59.80	73.60	48.20	71.40	69.20	58.40	0.00	84.80	58.80
STANDARD DEVIATION											
3-05	A.	0.00	1.14	1.22	2.70	1.64	3.05	1.64	1.00	2.59	2.61
4-05	E.	0.00	2.74	2.12	8.07	1.79	2.17	2.41	3.05	3.19	2.35
4-10	P.	0.00	2.56	2.21	6.06	1.43	2.41	2.79	2.45	2.83	3.75
5-05	J.	0.00	.94	1.30	2.07	.55	1.82	3.27	2.74	4.16	2.88
6-05	L1	0.00	3.08	3.81	2.35	3.49	1.82	1.30	0.00	1.92	1.64
6-10	L2	0.00	2.39	2.61	2.17	1.67	1.48	3.05	0.00	5.17	1.48
NUMBER OF HEART-BEATS OF THE 1 MINUTE PERIODS B, D AND H											
3-01	B.	0.00	63.00	73.00	56.00	75.00	72.00	66.00	91.00	79.00	59.00
4-01	D.	0.00	61.00	79.00	51.00	71.00	67.00	62.00	87.00	72.00	59.00
5-01	H.	0.00	62.00	77.00	53.00	75.00	65.00	60.00	93.00	79.00	62.00
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		0.000	-.041	.027	-.014	.014	-.048	-.009	-.028	-.042	-.010
(P.-A.)/A.		0.000	-.024	.018	-.047	.022	-.028	-.003	-.018	-.040	.008
(P.-E.)/A.		0.000	.017	-.009	-.033	.008	.020	.006	.010	.002	.018
(J.-A.)/A.		0.000	-.038	.016	-.122	.025	-.045	-.022	.054	-.010	.016
(L1-A.)/A.		0.000	-.072	0.000	-.167	-.008	-.057	-.063	0.000	.032	-.023
(L2-A.)/A.		0.000	-.060	-.005	-.163	-.019	-.020	-.076	0.000	.057	-.045
(P.-L2)/A.		0.000	.036	.023	.116	.041	-.008	.073	0.000	-.097	.054
(D.-B.)/A.		0.000	-.031	.081	-.087	-.055	-.071	-.063	-.043	-.087	0.000
(H.-B.)/A.		0.000	-.016	.054	-.052	0.000	-.099	-.095	.022	0.000	.049

TABLE: 3. 1

EXPOSURE CODE: 1		PARAMETER: ARITHMIA CODE: 044									
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE OF ARITHMIA QUOTIENT											
3-05	A.	8.09	13.73	8.03	15.36	10.45	11.61	12.98	6.25	7.25	3.78
4-05	E.	10.79	13.25	4.91	20.47	10.84	14.54	8.64	8.68	15.03	4.95
4-10	P.	9.12	13.85	5.55	20.46	10.18	13.19	8.29	18.95	10.77	8.33
5-05	J.	9.34	10.91	6.72	25.18	10.97	15.51	7.94	35.22	7.25	14.26
6-05	L1	9.48	15.28	4.26	18.41	9.45	12.61	9.33	30.14	7.27	10.17
6-10	L2	12.95	28.70	6.89	19.07	9.37	13.38	11.76	25.35	7.34	15.02
STANDARD DEVIATION											
3-05	A.	4.19	6.77	3.99	3.15	2.14	1.19	4.53	1.88	2.51	.88
4-05	E.	3.64	6.43	1.88	12.57	2.58	2.81	1.43	4.31	29.24	1.13
4-10	P.	3.26	5.92	2.37	14.23	2.06	2.83	2.30	12.85	20.69	4.39
5-05	J.	4.87	1.86	3.91	14.53	3.73	3.26	1.72	7.71	3.97	7.35
6-05	L1	5.26	10.25	.86	4.48	1.12	1.06	2.09	6.75	3.65	4.51
6-10	L2	7.51	29.39	5.22	4.14	1.89	2.54	3.35	3.21	2.27	6.17
MEAN VALUE OF THE ARITHMIA QUOTIENT OF THE 1 MINUTE PERIODS B, D AND H											
3-01	B.	5.97	8.63	8.81	12.30	12.21	11.88	8.33	7.64	4.86	2.71
4-01	D.	9.84	11.33	5.72	18.80	12.09	11.13	8.57	6.46	54.82	4.52
5-01	H.	17.90	10.43	6.50	14.50	10.23	16.46	8.74	28.43	5.27	14.00
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		.335	-.035	-.388	.332	.037	.253	-.334	.390	1.074	.311
(P.-A.)/A.		.128	.009	-.308	.332	-.025	.137	-.361	2.033	.487	1.206
(P.-E.)/A.		-.207	.044	.080	-.000	-.063	-.116	-.027	1.643	-.587	.895
(J.-A.)/A.		.155	-.205	-.163	.639	.050	.336	-.388	4.637	.000	2.774
(L1-A.)/A.		.173	.113	-.470	.198	-.095	.086	-.281	3.825	.003	1.691
(L2-A.)/A.		.602	1.091	-.141	.241	-.103	.153	-.094	3.057	.013	2.976
(P.-L2)/A.		-.474	-1.08	-.167	.091	.078	-.016	-.267	-1.02	.474	-1.77
(D.-B.)/A.		.480	.197	-.386	.423	-.012	-.065	.019	-.187	6.895	.480
(H.-B.)/A.		1.476	.131	-.288	.143	-.190	.395	.032	3.328	.057	2.989

TABLE: 3. 2

EXPOSURE CODE: 2      PARAMETER: ARITHMIA CODE: 044

PERIOD      STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE:      1      2      3      4      5      6      7      8      9      10

MEAN VALUE OF ARITHMIA QUOTIENT

3-05	A.	6.26	11.62	10.19	13.41	7.41	12.08	6.12	7.40	7.24	11.54
4-05	E.	8.49	14.40	11.60	18.26	6.84	10.78	9.31	8.49	4.72	10.54
4-10	P.	9.14	11.89	10.10	13.52	6.34	10.72	8.83	7.66	4.81	10.87
5-05	J.	7.12	9.97	7.96	18.03	7.05	10.48	5.58	6.43	9.67	8.10
6-05	L1	9.14	8.85	6.22	16.70	10.16	9.59	6.94	6.55	8.49	9.02
6-10	L2	9.02	9.56	7.89	18.86	10.57	10.97	8.71	7.44	15.79	9.10

STANDARD DEVIATION

3-05	A.	2.02	3.90	7.77	5.45	1.18	2.29	1.02	2.79	4.46	3.36
4-05	E.	3.21	11.65	12.38	9.83	1.46	1.13	3.95	1.96	1.51	2.09
4-10	P.	5.05	8.51	9.20	8.71	1.27	2.56	4.60	2.00	1.68	3.01
5-05	J.	2.45	4.48	2.34	6.43	1.47	2.92	.83	.88	9.60	1.87
6-05	L1	4.14	5.17	1.21	8.65	1.44	2.22	2.15	1.76	6.14	1.85
6-10	L2	4.11	4.18	2.52	11.11	2.22	1.23	2.55	1.22	6.28	1.86

MEAN VALUE OF THE ARITHMIA QUOTIENT  
OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	7.27	11.44	15.10	17.15	9.03	10.93	6.00	9.33	11.48	10.45
4-01	D.	9.63	13.69	31.09	6.76	8.05	9.73	12.11	6.90	4.34	11.00
5-01	H.	5.64	8.16	12.26	17.14	7.08	13.54	6.03	7.23	21.03	11.28

NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	.356	.240	.138	.361	-.078	-.108	.522	.146	-.349	-.087
(P.-A.)/A.	.460	.023	-.008	.009	-.144	-.113	.443	.035	-.336	-.059
(P.-E.)/A.	.105	-.216	-.147	-.354	-.066	-.005	-.079	-.111	.013	.028
(J.-A.)/A.	.137	-.141	-.219	.344	-.049	-.133	-.087	-.132	.334	-.298
(L1-A.)/A.	.461	-.238	-.389	.245	.370	-.206	.133	-.116	.173	-.219
(L2-A.)/A.	.441	-.177	-.226	.406	.427	-.092	.424	.005	1.180	-.211
(P.-L2)/A.	.020	.200	.217	-.398	-.571	-.021	.019	.030	-1.52	.153
(D.-B.)/A.	.377	.194	1.570	-.774	-.132	-.099	.998	-.328	-.987	.048
(H.-B.)/A.	-.261	-.282	-.279	-.001	-.262	.216	.005	-.283	1.318	.072

TABLE: 3. 3

EXPOSURE CODE: 3 PARAMETER: ARITHMIA CODE: 044

PERIOD STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE: 1 2 3 4 5 6 7 8 9 10

MEAN VALUE OF ARITHMIA QUOTIENT

3-05	A.	9.53	9.08	5.16	14.05	10.56	17.22	9.71	4.49	6.74	9.53
4-05	E.	10.10	10.70	5.53	15.93	9.35	19.03	11.16	6.91	9.96	10.32
4-10	P.	8.99	11.52	5.80	16.54	9.74	18.89	9.97	6.44	10.91	12.11
5-05	J.	8.37	12.59	5.45	16.36	9.65	18.50	7.58	6.09	4.82	12.11
6-05	L1	7.29	11.22	7.39	18.79	10.48	19.64	9.28	5.47	9.17	12.84
6-10	L2	8.65	11.31	7.88	15.60	10.87	6.85	10.39	5.94	16.58	12.13

STANDARD DEVIATION

3-05	A.	1.26	4.58	1.36	5.82	2.05	3.57	6.06	1.53	7.49	2.25
4-05	E.	4.34	4.15	3.03	4.69	1.92	2.68	8.03	2.84	9.42	2.50
4-10	P.	3.40	4.96	3.02	4.46	1.85	2.16	6.20	2.43	12.07	7.80
5-05	J.	2.85	5.78	.76	3.69	1.84	3.04	1.38	2.16	1.41	3.63
6-05	L1	1.63	1.96	2.96	7.42	1.21	24.37	2.36	2.88	8.87	3.66
6-10	L2	2.12	3.78	1.78	4.91	1.53	11.93	3.72	.93	16.03	4.24

MEAN VALUE OF THE ARITHMIA QUOTIENT  
OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	10.14	5.72	5.54	13.65	9.35	15.31	18.34	3.87	3.43	9.08
4-01	D.	10.60	9.62	4.88	13.94	11.57	21.00	8.74	6.10	7.59	9.29
5-01	H.	9.49	17.59	5.82	18.54	11.54	20.27	6.33	4.30	4.96	9.34

NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	.060	.178	.072	.134	-.114	.105	.150	.539	.478	.082
(P.-A.)/A.	-.057	.268	.124	.177	-.078	.097	.027	.435	.620	.270
(P.-E.)/A.	-.116	.091	.052	.043	.036	-.008	-.123	-.104	.142	.188
(J.-A.)/A.	-.122	.386	.058	.164	-.086	.075	-.219	.358	-.284	.271
(L1-A.)/A.	-.235	.235	.433	.337	-.007	.141	-.044	.219	.361	.347
(L2-A.)/A.	-.092	.245	.528	.111	.029	-.602	.070	.323	1.461	.273
(P.-L2)/A.	.035	.023	-.404	.067	-.107	.699	-.043	.111	-.841	-.003
(D.-B.)/A.	.048	.429	-.129	.021	.211	.330	-.989	.497	.617	.022
(H.-B.)/A.	-.068	1.307	.054	.348	.208	.288	-1.24	.095	.226	.027



TABLE: 3. 4

EXPOSURE CODE:		4	PARAMETER: ARITHMIA CODE: 044								
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE OF ARITHMIA QUOTIENT											
3-05	A.	15.87	8.25	6.61	15.18	8.15	12.28	10.86	17.33	5.68	9.00
4-05	E.	13.29	9.33	6.06	14.66	7.50	14.13	9.45	12.11	6.85	10.05
4-10	P.	14.57	8.16	6.12	13.49	7.67	13.73	8.83	14.43	6.89	13.27
5-05	J.	16.85	6.51	8.01	15.05	6.95	12.44	7.85	13.16	6.59	8.97
6-05	L1	18.41	7.55	7.54	14.93	7.79	13.51	11.24	9.87	8.32	13.96
6-10	L2	12.61	6.65	5.65	16.98	7.17	12.86	9.08	22.79	8.52	13.89
STANDARD DEVIATION											
3-05	A.	6.28	2.49	3.76	5.63	1.05	1.97	2.09	15.55	1.47	3.84
4-05	E.	5.01	2.76	1.69	5.45	2.03	2.46	2.95	6.73	3.33	1.87
4-10	P.	4.08	2.53	1.99	4.32	1.63	2.29	2.28	8.14	2.52	7.93
5-05	J.	5.19	2.03	5.62	4.89	.78	1.59	2.38	8.16	.73	2.84
6-05	L1	5.85	3.67	4.40	4.78	.89	3.21	6.17	6.52	1.76	9.18
6-10	L2	5.27	1.51	.69	5.65	1.57	2.11	1.15	9.53	2.62	4.95
MEAN VALUE OF THE ARITHMIA QUOTIENT OF THE 1 MINUTE PERIODS B,D AND H											
3-01	R.	24.00	6.88	5.06	10.47	8.12	13.25	8.68	6.46	4.93	15.53
4-01	D.	15.19	7.87	6.47	12.32	6.46	13.95	13.61	12.89	13.32	9.09
5-01	H.	12.95	6.60	5.36	8.43	7.12	13.48	9.92	21.53	7.44	6.50
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		-.162	.131	-.084	-.034	-.080	.151	-.130	-.301	.206	.116
(P.-A.)/A.		-.082	-.011	-.074	-.111	-.060	.118	-.187	-.167	.213	.474
(P.-E.)/A.		.080	-.141	.010	-.077	.020	-.033	-.057	.134	.007	.358
(J.-A.)/A.		.062	-.211	.212	-.008	-.148	.013	-.277	-.241	.160	-.003
(L1-A.)/A.		.160	-.085	.141	-.016	-.044	.100	.036	-.431	.465	.551
(L2-A.)/A.		-.205	-.195	-.146	.119	-.120	.047	-.163	.315	.499	.543
(P.-L2)/A.		.123	.184	.072	-.230	.061	.071	-.023	-.482	-.286	-.069
(D.-B.)/A.		-.555	.119	.213	.122	-.203	.057	.455	.371	1.475	-.716
(H.-B.)/A.		-.696	-.034	.045	-.134	-.123	.018	.114	.869	.441	-1.00

TABLE: 3. 5

EXPOSURE CODE: 5 PARAMETER: ARITHMIA CODE: 044

PERIOD STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE: 1 2 3 4 5 6 7 8 9 10

MEAN VALUE OF ARITHMIA QUOTIENT

3-05	A.	0.00	7.07	5.49	16.30	8.32	11.27	9.14	3.20	10.96	10.01
4-05	E.	0.00	8.25	6.22	16.55	9.38	10.78	10.22	3.66	10.27	11.94
4-10	P.	0.00	7.99	6.62	16.39	8.75	9.57	10.30	3.68	11.16	11.79
5-05	J.	0.00	8.63	7.49	16.04	7.90	11.09	12.22	12.54	14.95	13.27
6-05	L1	0.00	13.99	8.21	17.09	9.02	12.29	10.42	26.50	7.33	15.01
6-10	L2	0.00	8.67	8.59	22.19	9.16	11.49	13.31	28.43	4.95	14.46

STANDARD DEVIATION

3-05	A.	0.00	1.71	.69	3.45	1.12	2.84	2.55	.45	11.88	3.04
4-05	E.	0.00	2.40	3.27	5.90	1.55	1.60	3.70	1.02	11.95	5.16
4-10	P.	0.00	2.44	2.66	4.44	1.39	1.94	4.69	1.29	13.08	4.40
5-05	J.	0.00	3.93	3.32	4.21	.76	1.77	5.77	9.24	14.33	3.37
6-05	L1	0.00	10.76	2.85	3.67	1.55	1.80	2.93	8.68	7.08	5.15
6-10	L2	0.00	2.66	4.28	10.14	1.07	2.37	3.93	3.78	3.64	4.37

MEAN VALUE OF THE ARITHMIA QUOTIENT  
OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	0.00	8.59	6.06	13.53	8.13	10.50	9.68	3.62	7.66	8.83
4-01	D.	0.00	10.08	12.42	13.02	10.00	11.18	10.23	3.30	5.72	7.88
5-01	H.	0.00	13.08	5.08	21.92	6.96	11.12	11.01	6.29	5.65	11.43

NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	0.000	.167	.133	.015	.127	-.044	.119	.144	-.062	.192
(P.-A.)/A.	0.000	.129	.206	.006	.051	-.151	.128	.150	.018	.177
(P.-E.)/A.	0.000	-.037	.072	-.009	-.076	-.107	.009	.005	.081	-.015
(J.-A.)/A.	0.000	.220	.363	-.016	-.051	-.015	.337	2.915	.364	.325
(L1-A.)/A.	0.000	.977	.494	.048	.084	.091	.141	7.276	-.331	.499
(L2-A.)/A.	0.000	.226	.564	.361	.101	.020	.456	7.878	-.548	.444
(P.-L2)/A.	0.000	-.097	-.359	-.355	-.049	-.171	-.328	-7.73	.567	-.267
(D.-B.)/A.	0.000	.211	1.157	-.032	.225	.060	.060	-.100	-.178	-.095
(H.-B.)/A.	0.000	.634	-.179	.514	-.140	.055	.145	.834	-.184	.260

TABLE: 4. 1

EXPOSURE CODE: 1		PARAMETER: REL. IMPEDANCE PLETHYSMOGRAM CODE: 003									
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE OF REL. IMPEDANCE PLETHYSMOGRAM											
3-05	A.	23.58	24.91	10.75	17.12	22.32	25.98	18.41	25.53	18.83	39.55
4-05	E.	20.76	25.31	9.36	15.94	18.81	15.35	16.14	19.93	21.17	37.49
4-10	P.	20.94	24.93	8.51	16.33	19.69	16.61	16.79	21.01	20.73	37.50
5-05	J.	18.44	25.69	7.54	16.20	20.58	17.74	21.79	24.23	18.95	39.79
6-05	L1	20.73	27.18	10.81	17.10	22.03	20.28	19.58	18.69	18.67	43.13
6-10	L2	18.69	29.34	10.97	13.36	24.24	18.96	22.87	18.32	20.15	44.32
STANDARD DEVIATION											
3-05	A.	1.88	1.26	.72	1.41	1.08	1.11	1.58	1.71	.96	2.23
4-05	E.	3.72	1.83	.91	2.16	1.83	3.47	2.20	1.99	1.67	2.71
4-10	P.	3.02	1.62	1.11	2.03	2.01	3.17	2.28	2.24	1.56	3.30
5-05	J.	2.12	1.23	.73	2.58	1.46	1.85	3.23	1.28	1.25	1.67
6-05	L1	1.70	1.56	.78	1.57	2.48	.70	2.78	1.10	1.76	4.28
6-10	L2	1.84	2.21	1.43	2.45	1.13	1.24	1.97	1.28	1.80	5.54
MEAN VALUE OF THE REL. IMPEDANCE PLETHYSMOGRAM OF THE 1 MINUTE PERIODS B, D AND H											
3-01	B.	22.16	26.29	9.96	15.94	22.03	25.51	18.27	23.43	19.03	39.40
4-01	D.	22.65	27.85	10.55	17.67	20.53	21.33	18.68	23.33	20.02	40.36
5-01	H.	17.22	25.94	7.35	16.56	19.67	16.67	19.21	24.78	19.89	41.94
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		-.120	.016	-.128	-.069	-.157	-.409	-.123	-.219	.124	-.052
(P.-A.)/A.		-.112	.001	-.208	-.046	-.118	-.361	-.088	-.177	.101	-.052
(P.-E.)/A.		.008	-.015	-.080	.022	.039	.049	.035	.042	-.023	.000
(J.-A.)/A.		-.218	.031	-.298	-.054	-.078	-.317	.184	-.051	.007	.006
(L1-A.)/A.		-.121	.091	.006	-.002	-.013	-.219	.064	-.268	-.008	.091
(L2-A.)/A.		-.207	.178	.021	-.220	.086	-.271	.242	-.282	.070	.121
(P.-L2)/A.		.095	-.177	-.229	.173	-.204	-.090	-.330	.106	.031	-.173
(D.-B.)/A.		.021	.062	.054	.101	-.067	-.161	.022	-.004	.053	.024
(H.-B.)/A.		-.209	-.014	-.242	.036	-.106	-.341	.051	.053	.046	.064

TABLE: 4. 2

EXPOSURE CODE: 2 PARAMETER: REL. IMPEDANCE PLETHYSMOGRAM CODE: 003

PERIOD STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS

CODE: 1 2 3 4 5 6 7 8 9 10

## MEAN VALUE OF REL. IMPEDANCE PLETHYSMOGRAM

3-05	A.	17.66	17.48	14.42	19.19	25.01	45.39	31.99	0.00	25.82	45.49
4-05	E.	15.86	21.41	11.75	12.57	24.42	29.69	33.90	0.00	27.00	46.36
4-10	P.	16.54	23.45	12.80	14.41	24.56	34.87	37.10	0.00	25.79	46.87
5-05	J.	17.40	28.06	14.25	13.73	25.89	44.94	43.42	0.00	23.03	47.68
6-05	L1	15.33	30.91	14.25	13.87	27.40	44.29	35.66	0.00	21.57	48.76
6-10	L2	15.84	33.16	11.26	14.45	28.56	41.86	40.24	0.00	28.05	48.45

## STANDARD DEVIATION

3-05	A.	1.21	.96	.51	3.60	1.96	3.87	4.08	0.00	3.18	2.91
4-05	E.	2.66	2.47	1.15	3.14	1.00	4.48	3.91	0.00	3.00	3.00
4-10	P.	2.01	2.76	1.48	3.18	1.17	6.82	5.39	0.00	3.24	3.36
5-05	J.	1.94	1.13	1.03	3.34	1.81	3.18	5.05	0.00	2.56	3.09
6-05	L1	1.47	1.99	1.33	2.66	2.50	3.56	4.54	0.00	2.09	3.29
6-10	L2	.89	1.34	1.73	1.54	3.01	4.94	6.82	0.00	6.26	3.74

MEAN VALUE OF THE REL. IMPEDANCE PLETHYSMOGRAM  
OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	17.19	18.23	13.83	21.60	22.55	45.65	29.78	0.00	28.47	46.65
4-01	D.	16.39	18.01	12.93	16.08	25.10	32.76	32.82	0.00	24.88	47.53
5-01	H.	18.15	27.28	14.31	13.48	25.10	40.82	47.99	0.00	19.60	46.08

## NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	-.102	.225	-.186	-.345	-.024	-.346	.060	0.000	.046	.019
(P.-A.)/A.	-.064	.342	-.112	-.249	-.018	-.232	.160	0.000	-.001	.031
(P.-E.)/A.	.038	.117	.073	.096	.006	.114	.100	0.000	-.047	.011
(J.-A.)/A.	-.015	.606	-.012	-.285	.035	-.010	.358	0.000	-.108	.048
(L1-A.)/A.	-.132	.768	-.012	-.277	.096	-.024	.115	0.000	-.165	.072
(L2-A.)/A.	-.103	.898	-.220	-.247	.142	-.078	.258	0.000	.086	.065
(P.-L2)/A.	.039	-.556	.107	-.002	-.160	-.154	-.098	0.000	-.087	-.035
(D.-B.)/A.	-.046	-.013	-.062	-.287	.102	-.284	.095	0.000	-.139	.019
(H.-B.)/A.	.054	.518	.033	-.423	.102	-.107	.569	0.000	-.344	-.013

TABLE: 4. 3

EXPOSURE CODE: 3		PARAMETER: REL. IMPEDANCE PLETHYSMOGRAM CODE: 003									
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE OF REL. IMPEDANCE PLETHYSMOGRAM											
3-05	A.	34.10	32.54	37.71	24.16	13.88	31.55	26.45	32.26	29.55	33.94
4-05	E.	33.64	26.63	34.51	23.64	13.83	29.84	23.57	25.36	26.98	32.34
4-10	P.	34.62	26.08	33.23	24.46	13.37	28.66	22.93	25.43	28.76	33.04
5-05	J.	35.10	24.75	28.76	25.66	12.63	22.22	25.31	19.36	28.24	32.54
6-05	L1	34.43	23.94	29.45	27.04	13.74	23.68	25.62	21.35	30.05	32.92
6-10	L2	36.32	25.92	28.21	24.04	12.52	21.32	25.91	18.40	28.10	34.26
STANDARD DEVIATION											
3-05	A.	2.00	2.29	1.47	2.96	2.93	1.32	2.38	1.22	1.73	3.84
4-05	E.	3.40	3.08	1.49	4.42	1.45	1.96	1.43	1.89	5.11	3.36
4-10	P.	2.96	2.61	2.34	3.55	1.33	3.07	2.18	1.91	4.29	3.38
5-05	J.	2.22	.88	2.94	2.90	1.16	1.73	1.36	2.13	1.94	2.49
6-05	L1	1.84	1.82	2.70	2.85	1.43	2.35	1.16	1.85	3.42	2.99
6-10	L2	2.24	1.28	1.65	5.57	.75	1.66	1.98	1.19	4.34	3.12
MEAN VALUE OF THE REL. IMPEDANCE PLETHYSMOGRAM OF THE 1 MINUTE PERIODS B, D AND H											
3-01	R.	33.82	34.39	38.15	24.08	12.76	31.99	24.01	32.93	30.69	37.13
4-01	D.	33.94	31.45	35.63	28.49	12.10	29.69	25.65	27.40	22.16	28.25
5-01	H.	34.99	24.91	30.00	27.20	11.78	21.21	25.28	21.47	30.90	33.54
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		-.014	-.181	-.085	-.022	-.004	-.054	-.109	-.214	-.087	-.047
(P.-A.)/A.		.015	-.199	-.119	.012	-.037	-.092	-.133	-.212	-.027	-.026
(P.-E.)/A.		.029	-.017	-.034	.034	-.033	-.037	-.024	.002	.060	.021
(J.-A.)/A.		.029	-.239	-.237	.062	-.090	-.296	-.043	-.400	-.044	-.041
(L1-A.)/A.		.010	-.264	-.219	.119	-.011	-.249	-.031	-.338	.017	-.030
(L2-A.)/A.		.065	-.203	-.252	-.005	-.098	-.324	-.021	-.429	-.049	.010
(P.-L2)/A.		-.050	.005	.133	.017	.061	.233	-.113	.218	.022	-.036
(D.-B.)/A.		.004	-.090	-.067	.183	-.048	-.073	.062	-.172	-.289	-.262
(H.-B.)/A.		.034	-.291	-.216	.129	-.071	-.342	.048	-.355	.007	-.106

TABLE: 4. 4

EXPOSURE CODE: 4 PARAMETER: REL. IMPEDANCE PLETHYSMOGRAM CODE: 003  
 PERIOD STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS  
 CODE: 1 2 3 4 5 6 7 8 9 10

## MEAN VALUE OF REL. IMPEDANCE PLETHYSMOGRAM

3-05	A.	17.38	20.96	24.34	15.03	34.67	15.81	33.14	34.29	19.86	27.36
4-05	E.	17.87	21.98	24.47	13.87	25.78	13.42	32.79	28.39	20.36	27.60
4-10	P.	17.12	21.44	24.32	12.05	28.25	14.34	31.83	27.69	20.87	28.26
5-05	J.	17.05	21.71	25.23	12.44	25.93	15.67	31.65	28.02	19.42	29.19
6-05	L1	16.90	22.90	21.75	13.75	22.74	16.73	25.10	26.85	19.78	30.27
6-10	L2	16.72	23.34	20.16	12.19	21.99	15.65	29.19	25.62	20.42	31.88

## STANDARD DEVIATION

3-05	A.	.93	.77	2.14	6.49	5.88	.77	2.67	2.00	1.54	3.29
4-05	E.	1.10	1.18	2.47	1.73	4.72	1.86	3.20	3.75	1.74	2.32
4-10	P.	1.39	1.07	2.19	2.65	4.79	1.81	2.63	3.26	1.69	3.06
5-05	J.	.80	1.05	1.92	2.82	2.84	.74	1.19	2.62	2.34	2.58
6-05	L1	1.27	1.74	1.53	1.23	1.71	1.44	2.29	2.64	1.84	3.39
6-10	L2	1.41	2.27	1.48	1.36	1.04	1.31	2.54	1.98	2.26	3.36

MEAN VALUE OF THE REL. IMPEDANCE PLETHYSMOGRAM  
OF THE 1 MINUTE PERIODS B, D AND H

3-01	B.	17.50	22.00	25.87	13.92	34.90	14.96	29.10	33.54	21.32	27.74
4-01	D.	18.91	22.35	26.45	14.45	33.25	16.31	31.15	33.58	19.62	25.54
5-01	H.	16.58	21.47	23.85	9.97	28.90	15.85	31.55	27.88	23.44	25.66

## NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS

(E.-A.)/A.	.028	.048	.005	-.077	-.257	-.151	-.011	-.172	.025	.009
(P.-A.)/A.	-.015	.023	-.001	-.198	-.185	-.093	-.039	-.192	.051	.033
(P.-E.)/A.	-.043	-.026	-.006	-.122	.071	.059	-.029	-.020	.026	.024
(J.-A.)/A.	-.019	.036	.037	-.172	-.252	-.009	-.045	-.183	-.023	.067
(L1-A.)/A.	-.028	.093	-.107	-.085	-.344	.058	-.242	-.217	-.004	.106
(L2-A.)/A.	-.038	.113	-.172	-.189	-.366	-.010	-.119	-.253	.028	.165
(P.-L2)/A.	.023	-.091	.171	-.010	.180	-.083	.080	.060	.022	-.132
(D.-B.)/A.	.081	.016	.024	.036	-.048	.085	.062	.001	-.086	-.080
(H.-B.)/A.	-.053	-.026	-.083	-.263	-.173	.056	.074	-.165	.107	-.076

TABLE: 4. 5

EXPOSURE CODE: 5		PARAMETER: REL. IMPEDANCE PLETHYSMOGRAM CODE: 003									
PERIOD		STATISTICAL VALUES PER PERIOD OF 10 SUBJECTS									
CODE:		1	2	3	4	5	6	7	8	9	10
MEAN VALUE OF REL. IMPEDANCE PLETHYSMOGRAM											
3-05	A.	0.00	27.24	17.60	17.77	11.80	35.61	32.95	38.25	19.29	28.68
4-05	E.	0.00	27.22	16.61	13.11	14.39	32.02	32.08	34.22	19.33	27.13
4-10	P.	0.00	27.46	16.40	14.09	13.71	33.27	33.96	33.83	18.79	26.28
5-05	J.	0.00	29.05	17.99	15.93	15.87	35.76	35.56	34.01	16.94	27.07
6-05	L1	0.00	29.12	18.31	13.82	16.23	38.08	38.82	26.98	21.73	27.83
6-10	L2	0.00	29.29	17.47	14.78	16.00	39.26	40.69	28.95	18.57	27.19
STANDARD DEVIATION											
3-05	A.	0.00	1.71	1.09	3.36	1.62	2.58	5.78	3.75	3.38	1.32
4-05	E.	0.00	1.41	1.06	2.66	1.15	3.55	4.24	3.10	1.90	1.83
4-10	P.	0.00	1.29	1.07	2.66	1.37	2.87	4.68	2.58	1.89	1.82
5-05	J.	0.00	1.95	2.91	1.95	2.25	3.35	4.06	1.54	2.54	2.54
6-05	L1	0.00	2.95	1.48	2.09	.74	2.59	1.86	1.80	2.19	1.52
6-10	L2	0.00	1.82	1.42	1.90	2.20	3.08	4.22	1.99	2.35	1.63
MEAN VALUE OF THE REL. IMPEDANCE PLETHYSMOGRAM OF THE 1 MINUTE PERIODS B, D AND H											
3-01	B.	0.00	26.38	17.24	17.60	14.38	34.60	31.09	41.86	22.96	28.98
4-01	D.	0.00	26.53	16.67	14.17	16.29	29.78	27.50	36.46	18.83	28.31
5-01	H.	0.00	31.20	17.10	14.91	13.31	36.00	37.01	33.82	18.32	29.28
NORMALIZED DIFFERENCES BETWEEN SEVERAL PERIODS											
(E.-A.)/A.		0.000	-.001	-.056	-.262	.220	-.101	-.026	-.105	.002	-.054
(P.-A.)/A.		0.000	.008	-.068	-.207	.163	-.066	.031	-.116	-.026	-.084
(P.-E.)/A.		0.000	.009	-.012	.055	-.057	.035	.057	-.010	-.028	-.030
(J.-A.)/A.		0.000	.067	.022	-.103	.345	.004	.079	-.111	-.122	-.056
(L1-A.)/A.		0.000	.069	.040	-.222	.376	.069	.178	-.295	.126	-.030
(L2-A.)/A.		0.000	.075	-.007	-.168	.356	.103	.235	-.243	-.037	-.052
(P.-L2)/A.		0.000	-.067	-.061	-.039	-.193	-.168	-.204	.128	.011	-.032
(D.-B.)/A.		0.000	.006	-.033	-.193	.162	-.135	-.109	-.141	-.214	-.024
(H.-B.)/A.		0.000	.177	-.008	-.151	-.091	.039	.180	-.210	-.241	.011























