

TABLE T6.1

Distribution of settlements of the Lipetsk oblast in accordance with mean accumulated effective dose (mSv) of internal and external exposure of adults permanently resided in the affected areas since the Chernobyl accident to December 31, 1995

Range of accumulated effective dose, mSv		Number of settlements	Percentage, %
Lower limit	Upper limit		
The whole oblast: 142 settlements; mean accumulated effective dose - 3.2 ± 1.1 mSv			
0.2	1	2	1.4
1	2	18	12.7
2	3	57	40.1
3	4	43	30.3
4	5	15	10.6
5	7	5	3.5
7	10	2	1.4
Chaplyginsky rayon: 27 settlements; mean accumulated effective dose - 3.0 ± 1.6 mSv			
1	2	9	33.3
2	3	8	29.6
3	4	5	18.5
4	5	3	11.1
7	10	2	7.4
Dankovskiy rayon: 56 settlements; mean accumulated effective dose - 3.0 ± 1.0 mSv			
0.2	1	1	1.8
1	2	5	8.9
2	3	30	53.6
3	4	12	21.4
4	5	5	8.9
5	7	3	5.4
Gryazinsky rayon: 10 settlements; mean accumulated effective dose - 3.8 ± 0.6 mSv			
2	3	2	20.0
3	4	7	70.0
4	5	1	10.0
Izmalkovskiy rayon: 8 settlements; mean accumulated effective dose - 3.4 ± 0.6 mSv			
2	3	3	37.5
3	4	3	37.5
4	5	2	25.0
Krasninsky rayon: 3 settlements; mean accumulated effective dose - 3.6 ± 0.1 mSv			
3	4	3	100.0
Lev-Tolstovskiy rayon: 18 settlements; mean accumulated effective dose - 3.4 ± 1.0 mSv			
1	2	1	5.6
2	3	7	38.9
3	4	8	44.4
4	5	1	5.6
5	7	1	5.6
Lipetskiy rayon: 1 settlement; mean accumulated effective dose - 2.8 mSv			
2	3	1	100.0
Stanovlyanskiy rayon: 13 settlements; mean accumulated effective dose - 3.2 ± 1.2 mSv			
0.2	1	1	7.7
1	2	2	15.4
2	3	3	23.1
3	4	3	23.1
4	5	3	23.1
5	7	1	7.8

Range of accumulated effective dose, mSv		Number of settlements	Percentage, %
Lower limit	Upper limit		
Usmansky rayon: 6 settlements; mean accumulated effective dose - 2.8 ± 0.6 mSv			
1	2	1	16.7
2	3	3	50.0
3	4	2	33.3

TABLE T6.2

Mean accumulated effective external and internal doses in adults who have resided in settlements of the Lipetsk oblast since the Chernobyl accident to the end of 1995

The following is indicated in the table:

- σ_{137} - mean accumulated density of contamination with ^{137}Cs , kBq/m^2 ;
- D_{ex_1} - mean accumulated effective external dose for the first year after the Chernobyl accident, mSv ;
- D_{in_1} - mean accumulated effective internal dose for the first year after the Chernobyl accident, mSv ;
- D_{t_1} - mean accumulated effective radiation dose for the first year after the Chernobyl accident, mSv ;
- D_{ext} - mean accumulated effective external dose from the time of the Chernobyl accident to 31.12.1995, mSv ;
- D_{in} - mean accumulated effective internal dose from the time of the Chernobyl accident to 31.12.1995, mSv ;
- D_{tot} - mean accumulated effective dose from the time of the Chernobyl accident to 31.12.1995, mSv .

SETTLEMENT	SEL'SOVET	σ_{137}	1-st year after the accident			From the accident to 31.12.1995		
			D _{ex_1}	D _{in_1}	D _{t_1}	D _{ext}	D _{in}	D _{tot}
CHAPLYGINSKY RAYON								
Arkhangelskoje	Petelinsky	50	0.80	1.70	2.50	1.90	2.00	3.90
Borshchevka	Petelinsky	43	0.69	1.50	2.20	1.60	1.70	3.30
Borshchevka Gosudarstvennaya	Petelinsky	31	0.49	1.10	1.60	1.20	1.20	2.40
Butyrki	Vednovsky	40	0.63	1.40	2.00	1.50	1.60	3.10
Dashino	Vednovsky	102	1.60	3.50	5.10	3.90	4.00	7.90
Gorlovo	Petelinsky	22	0.35	0.76	1.10	0.83	0.88	1.70
Gorodok	Urusovsky	16	0.25	0.54	0.79	0.59	0.63	1.20
Ivanovka	Vednovsky	20	0.32	0.69	1.00	0.76	0.81	1.60
Karevka	Urusovsky	26	0.41	0.88	1.30	0.97	1.00	2.00
Konyushkovskie Vyselki	Konushkovsky	59	0.94	2.00	2.90	2.20	2.30	4.50
Kuliki	Konushkovsky	58	0.93	2.00	2.90	2.20	2.30	4.50
Lisogradka	Petelinsky	54	0.87	1.90	2.80	2.10	2.20	4.30
Novoje Petelino	Petelinsky	37	0.60	1.30	1.90	1.40	1.50	2.90
Novosemenovka	Petelinsky	40	0.64	1.40	2.00	1.50	1.60	3.10
Protasjevo	Vednovsky	18	0.28	0.62	0.90	0.67	0.72	1.40
Ryazanka	Urusovsky	38	0.61	1.30	1.90	1.50	1.50	3.00
Skuratovka	Petelinsky	16	0.26	0.57	0.83	0.62	0.66	1.30
Sviridovka	Urusovsky	28	0.45	0.97	1.40	1.10	1.10	2.20
Tatishchevo	Petelinsky	92	1.50	3.10	4.60	3.50	3.60	7.10
Tyutchevo	Vednovsky	36	0.57	1.20	1.80	1.30	1.40	2.70
Urusovo	Urusovsky	24	0.38	0.83	1.20	0.91	0.97	1.90
Urusovo (railway point)*	Urusovsky	26	0.41	0.90	1.30	0.98	1.00	2.00
Vednoje	Vednovsky	37	0.58	1.30	1.90	1.40	1.50	2.90
Volkovo	Vednovsky	21	0.34	0.73	1.10	0.80	0.85	1.70
Vyselki*	Vednovsky	37	0.59	1.30	1.90	1.40	1.50	2.90
Zarechensky	Vednovsky	48	0.77	1.70	2.50	1.80	1.90	3.70
Zorino	Vednovsky	26	0.42	0.91	1.30	0.99	1.10	2.10
DANKOVSKY RAYON								
Alekseyevsky*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Alekseyevskie Vyselki	Khrushchevsky	42	0.67	1.40	2.10	1.60	1.60	3.20
Apraksino	Odojevsky	24	0.38	0.80	1.20	0.91	0.90	1.80
Avdulovo	Avdulovsky	32	0.51	1.10	1.60	1.20	1.20	2.40
Balovinki	Berezovsky	35	0.55	1.20	1.80	1.30	1.30	2.60
Berezovka	Berezovsky	40	0.64	1.30	1.90	1.50	1.50	3.00
Dankov		32	0.31	0.19	0.50	0.69	0.31	1.00
Dolgoje	Dolgovsky	26	0.41	0.87	1.30	0.98	0.97	2.00
Dolgoje*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Greko	Avdulovsky	47	0.75	1.60	2.40	1.80	1.70	3.50
Gusevka*	Avdulovsky	33	0.53	1.10	1.60	1.30	1.20	2.50
Ivanovka	Ivanovsky	43	0.68	1.40	2.10	1.60	1.60	3.20
Izmailovka	Baryatinsky	54	0.87	1.80	2.70	2.10	2.00	4.10
Kamynino*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Khoroshie Vody	Voskresensky	33	0.52	1.10	1.60	1.20	1.20	2.40
Khrushchevo-Podlesnoje	Khrushchevsky	39	0.63	1.30	1.90	1.50	1.50	3.00
Kolodezi	Ivanovsky	44	0.70	1.50	2.20	1.70	1.60	3.30
Kolodezi	Dolgovsky	51	0.81	1.70	2.50	1.90	1.90	3.80
Krasnaya*	Dolgovsky	48	0.77	1.60	2.40	1.80	1.80	3.60
Krasnaya Zarya	Dolgovsky	78	1.20	2.60	3.80	3.00	2.90	5.90
Kryukovka	Ivanovsky	40	0.63	1.30	1.90	1.50	1.50	3.00
Kutukovo*	Perekhvalsky	35	0.56	1.20	1.80	1.30	1.30	2.60
Levashovka*	Avdulovsky	33	0.53	1.10	1.60	1.30	1.20	2.50
Medvedchino	Dolgovsky	39	0.63	1.30	1.90	1.50	1.50	3.00
Nizhnaya Pavlovka	Dolgovsky	58	0.93	1.90	2.80	2.20	2.20	4.40
Novaya	Berezovsky	43	0.68	1.40	2.10	1.60	1.60	3.20
Novoalekseyevsky*	Avdulovsky	33	0.53	1.10	1.60	1.30	1.20	2.50

SETTLEMENT	SEL'SOVET	σ ₁₃₇	1-st year after the accident			From the accident to 31.12.1995		
			D _{ex_1}	D _{in_1}	D _{t_1}	D _{ext}	D _{in}	D _{tot}
Novonikolskoje	Novonikolsky	46	0.74	1.50	2.20	1.80	1.70	3.50
Odoevshchino	Odoevsky	71	1.10	2.40	3.50	2.70	2.60	5.30
Olgino	Odoevsky	26	0.41	0.85	1.30	0.97	0.95	1.90
Orlovka*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Osinovye Prudki	Berezovsky	85	1.40	2.80	4.20	3.20	3.10	6.30
Perekhval	Perekhvalsky	31	0.50	1.00	1.50	1.20	1.20	2.40
Perekhvalskie Vyselki	Perekhvalsky	39	0.62	1.30	1.90	1.50	1.40	2.90
Pervovka	Avdulovsky	31	0.50	1.00	1.50	1.20	1.20	2.40
Petrovsky	Odoevsky	66	1.10	2.20	3.30	2.50	2.40	4.90
Pisarevo	Avdulovsky	44	0.71	1.50	2.20	1.70	1.60	3.30
Ploskoje*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Podosinki	Avdulovsky	23	0.37	0.77	1.10	0.87	0.86	1.70
Prudki*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Repty*	Novonikolsky	31	0.50	1.00	1.50	1.20	1.20	2.40
Skorodnoje*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Speshnovo-Podlesnoje	Khrushchevsky	35	0.55	1.20	1.80	1.30	1.30	2.60
Strebki*	Voskresensky	30	0.47	0.99	1.50	1.10	1.10	2.20
Streshnevo	Dolgovsky	35	0.55	1.20	1.80	1.30	1.30	2.60
Sugroby	Novonikolsky	22	0.35	0.73	1.10	0.83	0.82	1.70
Telepnevo	Telepnevsky	48	0.77	1.60	2.40	1.80	1.80	3.60
Trebunskie Vyselki	Malinkovsky	49	0.78	1.60	2.40	1.90	1.80	3.70
Verkhnyaya Pavlovka	Polibinsky	40	0.64	1.30	1.90	1.50	1.50	3.00
Voskresenkoje	Voskresensky	28	0.44	0.93	1.40	1.10	1.00	2.10
Vyazovenka*	Berezovsky	63	1.00	2.10	3.10	2.40	2.30	4.70
Yanushevo	Trebunsky	38	0.61	1.30	1.90	1.40	1.40	2.80
Yaroslavy	Odoevsky	47	0.75	1.60	2.40	1.80	1.70	3.50
Znamenka*	Avdulovsky	33	0.53	1.10	1.60	1.30	1.20	2.50
Znamenskaya	Khrushchevsky	32	0.51	1.10	1.60	1.20	1.20	2.40
Zubovsky*	Berezovsky	63	1.00	2.10	3.10	2.40	2.30	4.70
GRYAZINSKY RAYON								
Durasovka*	Fashchevsky	54	0.86	1.80	2.70	2.00	2.00	4.00
Dvurechki	Dvurechensky	64	1.00	2.10	3.10	2.40	2.40	4.80
Fashchevka	Fashchevsky	54	0.86	1.80	2.70	2.00	2.00	4.00
Malei	Yarlukovsky	39	0.62	1.30	1.90	1.50	1.40	2.90
Pisarevka*	Fashchevsky	54	0.86	1.80	2.70	2.00	2.00	4.00
Podlyakino*	Fashchevsky	54	0.86	1.80	2.70	2.00	2.00	4.00
Prudki	Fashchevsky	54	0.86	1.80	2.70	2.00	2.00	4.00
Sadovy*	Fashchevsky	54	0.86	1.80	2.70	2.00	2.00	4.00
Solomonovka*	Fashchevsky	54	0.86	1.80	2.70	2.00	2.00	4.00
Yarluково	Yarlukovsky	34	0.55	1.10	1.70	1.30	1.30	2.60
IZMALKOVSKY RAYON								
Maiorovka	Vasiljevsky	63	1.00	2.00	3.00	2.40	2.20	4.60
Osinovo	Lebyazhensky	38	0.61	1.30	1.90	1.50	1.40	2.90
Prilepy	Vasiljevsky	38	0.61	1.30	1.90	1.40	1.40	2.80
Rassvet	Lebyazhensky	43	0.68	1.40	2.10	1.60	1.50	3.10
Romashkovka	Vasiljevsky	41	0.65	1.30	2.00	1.60	1.50	3.10
Yazykovo	Lebyazhensky	40	0.64	1.30	1.90	1.50	1.50	3.00
Zarya	Lebyazhensky	55	0.87	1.80	2.70	2.10	2.00	4.10
Znamenskoje	Vasiljevsky	54	0.86	1.80	2.70	2.00	1.90	3.90
KRASNINSKY RAYON								
Nikolskoje	Sukhodolsky	49	0.78	1.60	2.40	1.80	1.80	3.60
Sukhodol	Sukhodolsky	47	0.76	1.60	2.40	1.80	1.80	3.60
Zharky Verkh	Sotnikovskiy	46	0.74	1.50	2.20	1.80	1.70	3.50
LEV-TOLSTOVSKY RAYON								
Baryatino*	Znamensky	52	0.83	1.70	2.50	2.00	1.90	3.90

SETTLEMENT	SEL'SOVET	σ_{137}	1-st year after the accident			From the accident to 31.12.1995		
			D _{ex_1}	D _{in_1}	D _{t_1}	D _{ext}	D _{in}	D _{tot}
Bezvodnya*	Topovsky	41	0.65	1.30	2.00	1.50	1.50	3.00
Bolshaya Karpovka	Domachevsky	34	0.54	1.10	1.60	1.30	1.20	2.50
Denisjevo*	Topovsky	41	0.65	1.30	2.00	1.50	1.50	3.00
Domachi	Domachevsky	64	1.00	2.10	3.10	2.40	2.30	4.70
Gagarino*	Topovsky	41	0.65	1.30	2.00	1.50	1.50	3.00
Khripunovka*	Topovsky	41	0.65	1.30	2.00	1.50	1.50	3.00
Kordyuki	Topovsky	50	0.80	1.60	2.40	1.90	1.80	3.70
Krasny*	Znamensky	52	0.83	1.70	2.50	2.00	1.90	3.90
Malaya Karpovka*	Domachevsky	48	0.77	1.60	2.40	1.80	1.70	3.50
Malaya Znamenka	Znamensky	42	0.67	1.40	2.10	1.60	1.50	3.10
Orlovka*	Domachevsky	48	0.77	1.60	2.40	1.80	1.70	3.50
Plemyannikovo*	Znamensky	52	0.83	1.70	2.50	2.00	1.90	3.90
Sovetsky*	Topovsky	41	0.65	1.30	2.00	1.50	1.50	3.00
Svishchevka	Znamensky	31	0.49	1.00	1.50	1.20	1.10	2.30
Topki	Topovsky	25	0.40	0.82	1.20	0.94	0.90	1.80
Zagryadchino	Topovsky	48	0.76	1.60	2.40	1.80	1.70	3.50
Znamenskoje	Znamensky	87	1.40	2.80	4.20	3.30	3.10	6.40
LIPETSKY RAYON								
Kuleshovka	Kosyrevsky	37	0.60	1.20	1.80	1.40	1.40	2.80
STANOVLYANSKY RAYON								
Bolshie Vyselki	Uspensky	41	0.65	1.30	2.00	1.60	1.50	3.10
Chernoles	Uspensky	40	0.64	1.30	1.90	1.50	1.50	3.00
Elizavetovka	Uspensky	68	1.10	2.20	3.30	2.60	2.50	5.10
Filenki	Georgievsky	5	0.08	0.17	0.25	0.18	0.19	0.37
Georgievoje	Georgievsky	60	0.96	2.00	3.00	2.30	2.20	4.50
Grunin Vorgol	Grunino-Vorgolsky	25	0.40	0.82	1.20	0.94	0.90	1.80
Laukhino	Grunino-Vorgolsky	40	0.64	1.30	1.90	1.50	1.50	3.00
Malye Vyselki	Uspensky	56	0.89	1.80	2.70	2.10	2.00	4.10
Ozerki	Uspensky	49	0.78	1.60	2.40	1.90	1.80	3.70
Poryakhino	Georgievsky	59	0.94	1.90	2.80	2.20	2.10	4.30
Uspenskoje	Uspensky	25	0.40	0.82	1.20	0.94	0.90	1.80
Uvarovka	Uspensky	40	0.63	1.30	1.90	1.50	1.40	2.90
Verigino	Ostrovsky	48	0.77	1.60	2.40	1.80	1.70	3.50
USMANSKY RAYON								
Bochinovka	Prigorodny	40	0.64	1.30	1.90	1.50	1.50	3.00
Prigorodka	Prigorodny	33	0.53	1.10	1.60	1.30	1.20	2.50
Storozhevoje	Storozhevsky	39	0.63	1.30	1.90	1.50	1.40	2.90
Ternovka	Storozhevsky	48	0.76	1.60	2.40	1.80	1.70	3.50
Usman	Rayon subordination	55	0.53	0.30	0.83	1.20	0.48	1.70
Verkhnyaya Mosolovka	Verkhmosolovsky	44	0.71	1.50	2.20	1.70	1.60	3.30

*) - density of contamination of the territory of a settlement was accepted to be mean accumulated density of contamination in settlements of a sel'soviet;

**) - density of contamination of the territory of a settlement was accepted to be 37 kBq/km².