

表1 平成16および26年の両年度に油症検診を受診した油症患者118名の血液中ダイオキシン類濃度

Congeners	Concentration (pg/g lipid)										Ratio 2014/2004
	2004					2014					
	Mean	Median	SD	Maximum	Minimum	Mean	Median	SD	Maximum	Minimum	
2, 3, 7, 8-TetraCDD	1.3	1.3	0.7	4.4	0.5	1.6	0.9	1.5	4.2	0.5	1.2
1, 2, 3, 7, 8-PentaCDD	8.7	8.1	4.3	33	1.0	9.6	5.4	8.9	41	1.9	1.1
1, 2, 3, 4, 7, 8-HexaCDD	2.5	2.4	1.5	8.3	1.0	2.2	1.6	2.1	12	1.0	0.9
1, 2, 3, 6, 7, 8-HexaCDD	46	37	35	247	4.8	41	35	29	248	3.0	0.9
1, 2, 3, 7, 8, 9-HexaCDD	4.3	3.3	3.4	23	1.0	3.2	3.0	2.6	18	1.0	0.7
1, 2, 3, 4, 6, 7, 8-HeptaCDD	49	44	25	196	16	37	24	33	208	11	0.8
OctaCDD	714	624	359	2305	181	511	292	424	1779	95	0.7
Total PCDDs	825	741	393	2459	205	605	318	517	1930	138	0.7
2, 3, 7, 8-TetraCDF	1.6	1.3	1.3	7.2	0.5	2.6	5.5	1.4	43	0.5	1.6
1, 2, 3, 7, 8-PentaCDF	0.8	0.5	0.7	4.1	0.5	1.1	1.1	0.5	5.6	0.5	1.4
2, 3, 4, 7, 8-PentaCDF	151	79	192	1240	4.1	137	180	67	1261	5.8	0.9
1, 2, 3, 4, 7, 8-HexaCDF	37	14	63	514	1.0	25	48	8.6	402	1.0	0.7
1, 2, 3, 6, 7, 8-HexaCDF	15	8.2	20	176	1.0	12	19	6.9	174	1.0	0.8
2, 3, 4, 6, 7, 8-HexaCDF	ND					ND					
1, 2, 3, 7, 8, 9-HexaCDF	ND					ND					
1, 2, 3, 4, 6, 7, 8-HeptaCDF	2.5	1.5	2.6	24	1.0	1.8	2.3	1.0	21	1.0	0.7
1, 2, 3, 4, 7, 8, 9-HeptaCDF	ND					ND					
OctaCDF	ND					ND					
Total PCDFs	213	109	273	1946	13	186	244	101	1875	16	0.9
TetraCB-77	ND					ND					
TetraCB-81	ND					ND					
PentaCB-126	82	66	62	441	5.0	91	65	77	428	17	1.1
PentaCB-169	121	105	79	361	11	180	124	149	677	23	1.5
Total Non-ortho PCBs	219	193	120	696	26	283	161	254	856	50	1.3
PenataCB-105	3111	2239	2425	15888	563	3197	2503	2654	19926	606	1.0
PentaCB-114	1721	1339	1363	8660	208	2033	1712	1622	10177	234	1.2
PentaCB-118	14872	11534	11468	80220	2355	16238	14513	12544	133844	2853	1.1
PentaCB-123	265	195	220	1385	5.0	249	223	196	1502	16	0.9
HexaCB-156	23217	17570	19537	90316	5.0	28518	27967	19752	175909	1961	1.2
HexaCB-157	6639	4980	5510	25277	351	7332	7635	5311	47932	318	1.1
HexaCB-167	3057	2360	2108	13497	483	3957	2838	3318	20467	541	1.3
HeptaCB-189	3402	2629	2720	11402	5.0	4276	3843	3261	23833	137	1.3
Total Mono-ortho PCBs	56283	45958	34608	159176	5971	65802	47855	56430	268679	6767	1.2
TEQ from PCDDs	16	14	8.3	63	2.4	16	9.2	15	72	3.7	1.0
TEQ from PCDFs	51	26	66	442	1.7	45	60	23	437	2.7	0.9
TEQ from PCDDs/PCDFs	67	40	72	505	4.1	62	68	38	509	6.4	0.9
TEQ from non-ortho PCBs	12	10	7.4	50	0.8	14	8.6	13	52	2.4	1.2
TEQ from mono-ortho PCBs	1.7	1.4	1.0	4.8	0.2	2.0	1.4	1.7	8.1	0.2	1.2
TEQ from dioxin-like PCBs	14	12	8.2	54	1.0	16	9.7	15	57	2.6	1.2
Total TEQ	80	52	75	533	5.2	78	73	54	545	11	1.0

ND (less than the determination limit) values introduced to half values of the detection limit.

SD : standard deviation.

CDD : chlorinated dibenzo-*p*-dioxin.

CDF : chlorinated dibenzofuran.

CB : chlorinated biphenyl.

表2 平成16および26年の両年度に油症検診を受診した油症患者51名の血液中ダイオキシン類濃度

Congeners	Concentration (pg/g lipid)										Ratio 2014/2004
	2004					2014					
	Mean	Median	SD	Maximum	Minimum	Mean	Median	SD	Maximum	Minimum	
2, 3, 7, 8-TetraCDD	1.4	0.8	1.3	4.4	0.5	1.8	0.8	1.7	4.0	0.5	1.2
1, 2, 3, 7, 8-PentaCDD	11	5	11	33	4.1	13	6.1	11	41	5.0	1.1
1, 2, 3, 4, 7, 8-HexaCDD	2.67	1.33	2.61	6.74	1.00	2.4	1.4	2.3	6.3	1.0	0.9
1, 2, 3, 6, 7, 8-HexaCDD	69	39	61	247	23	64	40	49	248	17	0.9
1, 2, 3, 7, 8, 9-HexaCDD	5.0	4.1	3.6	23	1.0	3.9	3.5	3.0	18	1.0	0.8
1, 2, 3, 4, 6, 7, 8-HeptaCDD	48	19	44	98	16	35	14	33	84	13	0.7
OctaCDD	687	297	612	1760	265	542	254	493	1317	107	0.8
Total PCDDs	825	330	738	1973	324	662	269	653	1463	161	0.8
2, 3, 7, 8-TetraCDF	2.22	1.64	1.92	7.20	0.50	2.3	2.5	1.8	16	0.5	1.1
1, 2, 3, 7, 8-PentaCDF	0.95	0.69	0.50	3.10	0.50	1.1	1.0	0.5	4.8	0.5	1.2
2, 3, 4, 7, 8-PentaCDF	301	211	231	1240	106	273	203	211	1261	87	0.9
1, 2, 3, 4, 7, 8-HexaCDF	76	81	49	514	14	52	64	29	402	3.7	0.7
1, 2, 3, 6, 7, 8-HexaCDF	27	26	20	176	6.6	23	26	15	174	2.8	0.8
2, 3, 4, 6, 7, 8-HexaCDF	ND					ND					
1, 2, 3, 7, 8, 9-HexaCDF	ND					ND					
1, 2, 3, 4, 6, 7, 8-HeptaCDF	2.5	1.8	2.0	8.4	1.0	2.0	2.9	1.0	21	1.0	0.8
1, 2, 3, 4, 7, 8, 9-HeptaCDF	ND					ND					
OctaCDF	ND					ND					
Total PCDFs	415	314	333	1946	135	359	290	262	1875	112	0.9
TetraCB-77	ND					ND					
TetraCB-81	ND					ND					
PentaCB-126	78	55	64	354	27	92	56	79	323	24	1.2
PentaCB-169	174	78	156	361	49	264	128	241	677	79	1.5
Total Non-ortho PCBs	268	119	256	696	91	367	161	333	856	132	1.4
PenataCB-105	2761	1988	2180	12894	941	2977	1665	2607	9721	909	1.1
PentaCB-114	2516	1493	1964	8660	848	3065	1769	2474	10177	837	1.2
PentaCB-118	13441	9333	10335	59893	4613	15409	8394	12698	47970	4863	1.1
PentaCB-123	223	198	180	1268	5.0	219	149	168	827	64	1.0
HexaCB-156	36739	20764	31628	90316	7320	46431	32682	38547	175909	9250	1.3
HexaCB-157	10130	5947	8477	25277	1996	12335	8943	10501	47932	2437	1.2
HexaCB-167	3444	2031	2626	10040	1002	4467	2038	3956	10483	1655	1.3
HeptaCB-189	5035	2718	4422	11402	960	6539	4243	5543	23833	1348	1.3
Total Mono-ortho PCBs	74289	35228	68154	159176	22680	91442	49916	79465	268679	28912	1.2
TEQ from PCDDs	21	9.1	20	63	7.5	22	10	20	72	8.0	1.0
TEQ from PCDFs	101	73	79	442	34	90	69	67	437	28	0.9
TEQ from PCDDs/PCDFs	122	81	107	505	44	112	78	87	509	38	0.9
TEQ from non-ortho PCBs	13	6.8	12	43	4.7	17	8.0	16	41	6.2	1.3
TEQ from mono-ortho PCBs	2.2	1.1	2.0	4.8	0.7	2.7	1.5	2.4	8.1	0.9	1.2
TEQ from dioxin-like PCBs	15	7.7	14	48	5.5	20	9.2	18	45	7.5	1.3
Total TEQ	137	84	119	533	50	132	83	113	545	47	1.0

ND (less than the determination limit) values introduced to half values of the detection limit.

SD : standard deviation.

CDD : chlorinated dibenzo-*p*-dioxin.

CDF : chlorinated dibenzofuran.

CB : chlorinated biphenyl.

表3 平成16および26年の両年度に油症検診を受診した男性油症患者61名の血液中ダイオキシン類濃度

Congeners	Concentration (pg/g lipid)										Ratio 2014/2004
	2004					2014					
	Mean	Median	SD	Maximum	Minimum	Mean	Median	SD	Maximum	Minimum	
2, 3, 7, 8-TetraCDD	1.3	0.8	1.3	4.4	0.5	1.6	0.8	1.5	3.8	0.5	1.2
1, 2, 3, 7, 8-PentaCDD	7.8	3.4	7.7	18	1.0	8.4	4.0	7.9	21	1.9	1.1
1, 2, 3, 4, 7, 8-HexaCDD	2.5	1.6	2.4	8.3	1.0	2.3	1.8	2.1	12	1.0	0.9
1, 2, 3, 6, 7, 8-HexaCDD	40	28	34	132	4.8	33	26	25	115	3.0	0.8
1, 2, 3, 7, 8, 9-HexaCDD	4.0	3.1	3.1	19	1.0	2.7	2.6	2.1	17	1.0	0.7
1, 2, 3, 4, 6, 7, 8-HeptaCDD	48	28	41	196	16	40	31	34	208	11	0.8
OctaCDD	705	376	594	1811	181	531	335	422	1779	107	0.8
Total PCDDs	809	418	712	2135	205	619	369	504	1930	161	0.8
2, 3, 7, 8-TetraCDF	1.6	1.2	1.3	7.2	0.5	3.0	5.5	1.3	28	0.5	1.8
1, 2, 3, 7, 8-PentaCDF	0.8	0.7	0.5	4.1	0.5	1.3	1.3	0.5	5.0	0.5	1.6
2, 3, 4, 7, 8-PentaCDF	92	107	55	541	4.1	81	93	50	479	5.8	0.9
1, 2, 3, 4, 7, 8-HexaCDF	20	33	10	234	1.0	12	22	6	164	1.0	0.6
1, 2, 3, 6, 7, 8-HexaCDF	10	12	7.2	85	1.0	8.1	9.5	5.6	70	1.0	0.8
2, 3, 4, 6, 7, 8-HexaCDF	ND					ND					
1, 2, 3, 7, 8, 9-HexaCDF	ND					ND					
1, 2, 3, 4, 6, 7, 8-HeptaCDF	2.8	3.4	2.0	24	1.0	1.8	1.7	1.0	12	1.0	0.7
1, 2, 3, 4, 7, 8, 9-HeptaCDF	ND					ND					
OctaCDF	ND					ND					
Total PCDFs	133	150	78	871	13	113	122	75	725	16	0.8
TetraCB-77	ND					ND					
TetraCB-81	ND					ND					
PentaCB-126	91	78	69	441	5.0	96	77	80	428	17	1.1
PentaCB-169	118	73	107	361	11	169	116	146	677	23	1.4
Total Non-ortho PCBs	225	137	182	696	26	278	171	237	856	50	1.2
PenataCB-105	3424	2733	2890	15888	563	3290	2355	2709	12923	606	1.0
PentaCB-114	1378	997	1101	5098	208	1505	1181	1269	6021	244	1.1
PentaCB-118	15612	11372	13364	62223	2355	15995	11383	12318	62596	2853	1.0
PentaCB-123	289	244	231	1385	5.0	255	227	202	1484	17	0.9
HexaCB-156	20945	17096	16866	90316	393	24609	24675	18604	161802	1961	1.2
HexaCB-157	5927	4867	4691	23883	351	6062	6562	4545	43561	318	1.0
HexaCB-167	2988	2269	2323	13497	483	3765	2768	3327	18126	541	1.3
HeptaCB-189	3352	2654	2654	11402	311	4080	3898	2940	23833	137	1.2
Total Mono-ortho PCBs	53915	34349	44754	159176	5971	59560	43870	48702	268340	6767	1.1
TEQ from PCDDs	14	6.8	13	33	2.4	14	7.0	13	37	3.7	1.0
TEQ from PCDFs	31	36	18	195	1.7	27	31	16	168	2.7	0.9
TEQ from PCDDs/PCDFs	46	41	33	225	4.1	41	36	33	204	6.4	0.9
TEQ from non-ortho PCBs	13	9.1	10	50	0.8	15	10	13	52	2.4	1.2
TEQ from mono-ortho PCBs	1.6	1.0	1.3	4.8	0.2	1.8	1.3	1.5	8.1	0.2	1.1
TEQ from dioxin-like PCBs	14	10	12	54	1.0	16	11	14	57	2.6	1.2
Total TEQ	60	45	49	252	5.2	58	43	48	249	11	1.0

ND (less than the determination limit) values introduced to half values of the detection limit.

SD : standard deviation.

CDD : chlorinated dibenzo-*p*-dioxin.

CDF : chlorinated dibenzofuran.

CB : chlorinated biphenyl.

表4 平成16および26年の両年度に油症検診を受診した女性油症患者57名の血液中ダイオキシン類濃度

Congeners	Concentration (pg/g lipid)										Ratio 2014/2004
	2004					2014					
	Mean	Median	SD	Maximum	Minimum	Mean	Median	SD	Maximum	Minimum	
2, 3, 7, 8-TetraCDD	1.3	0.6	1.3	3.1	0.5	1.5	0.9	1.5	4.2	0.5	1.2
1, 2, 3, 7, 8-PentaCDD	9.7	5.0	8.3	33	3.3	11	6.3	9.7	41	2.8	1.1
1, 2, 3, 4, 7, 8-HexaCDD	2.5	1.3	2.4	6.8	1.0	2.1	1.3	2.2	6.3	1.0	0.8
1, 2, 3, 6, 7, 8-HexaCDD	52	40	43	247	6.4	49	41	40	248	8.1	0.9
1, 2, 3, 7, 8, 9-HexaCDD	4.6	3.8	3.8	23	1.0	3.7	3.4	2.9	18	1.0	0.8
1, 2, 3, 4, 6, 7, 8-HeptaCDD	50	20	47	104	16	34	14	30	80	12	0.7
OctaCDD	722	341	630	2305	242	489	234	424	1251	95	0.7
Total PCDDs	843	364	762	2459	306	590	253	568	1366	138	0.7
2, 3, 7, 8-TetraCDF	1.7	1.4	1.3	5.8	0.5	2.3	5.6	1.5	43	0.5	1.4
1, 2, 3, 7, 8-PentaCDF	0.8	0.6	0.5	2.9	0.5	0.9	0.8	0.5	5.6	0.5	1.2
2, 3, 4, 7, 8-PentaCDF	213	238	136	1240	5.3	197	225	136	1261	8.5	0.9
1, 2, 3, 4, 7, 8-HexaCDF	55	80	29	514	1.0	39	62	17	402	2.2	0.7
1, 2, 3, 6, 7, 8-HexaCDF	20	25	11	176	1.0	17	25	9.3	174	1.0	0.9
2, 3, 4, 6, 7, 8-HexaCDF	ND					ND					
1, 2, 3, 7, 8, 9-HexaCDF	ND					ND					
1, 2, 3, 4, 6, 7, 8-HeptaCDF	2.2	1.4	1.0	5.8	1.0	1.8	2.8	1.0	21	1.0	0.8
1, 2, 3, 4, 7, 8, 9-HeptaCDF	ND					ND					
OctaCDF	ND					ND					
Total PCDFs	298	340	178	1946	14	264	309	166	1875	20	0.9
TetraCB-77	ND					ND					
TetraCB-81	ND					ND					
PentaCB-126	72	37	64	157	25	85	47	76	211	22	1.2
PentaCB-169	124	84	104	361	23	191	130	164	588	36	1.5
Total Non-ortho PCBs	211	98	198	493	61	287	150	268	712	69	1.4
PenataCB-105	2776	1989	2180	13355	843	3098	2649	2607	19926	773	1.1
PentaCB-114	2087	1588	1736	8660	272	2599	1989	2034	10177	234	1.2
PentaCB-118	14081	11517	10573	80220	4180	16499	17241	12698	133844	4521	1.2
PentaCB-123	239	187	187	1178	5.0	243	219	189	1502	16	1.0
HexaCB-156	25647	21586	18613	83648	5.0	32702	30557	26711	175909	3292	1.3
HexaCB-157	7400	6031	5596	25277	770	8691	8427	6797	47932	694	1.2
HexaCB-167	3132	1917	2376	9186	736	4162	2897	3251	20467	982	1.3
HeptaCB-189	3455	2788	2615	11211	5.0	4487	3773	3736	19231	460	1.3
Total Mono-ortho PCBs	58818	34705	51520	158563	13428	72481	50941	62139	268679	14193	1.2
TEQ from PCDDs	18	9.4	16	63	6.2	18	11	16	72	4.7	1.0
TEQ from PCDFs	72	82	45	442	2.1	65	76	43	437	3.3	0.9
TEQ from PCDDs/PCDFs	89	90	60	505	8.3	84	85	61	509	9.4	0.9
TEQ from non-ortho PCBs	11	4.8	11	23	3.5	14	6.9	13	30	3.3	1.3
TEQ from mono-ortho PCBs	1.8	1.0	1.5	4.8	0.4	2.2	1.5	1.9	8.1	0.4	1.2
TEQ from dioxin-like PCBs	13	6	12	28	3.9	16	8.1	15	36	3.8	1.3
Total TEQ	102	93	70	533	12	100	91	73	545	15	1.0

ND (less than the determination limit) values introduced to half values of the detection limit.

SD : standard deviation.

CDD : chlorinated dibenzo-*p*-dioxin.

CDF : chlorinated dibenzofuran.

CB : chlorinated biphenyl.