

Summary of FFD Program Performance Reports for 2004

Since the fitness-for-duty (FFD) rule (10 CFR Part 26) was published, licensees have submitted program performance reports to the NRC as required by 10 CFR 26.71(d). In the past, the NRC published a summary and analysis of calendar year data submitted by the licensee in an annual volume of NUREG/CR-5758, "Fitness for Duty in the Nuclear Power Industry - Annual Summary of Program Performance Reports." The tables below provide the information for calendar year 2004 and summarize data from 1990 to 2003.

Table 1 - 2004 Test Results for Each Test category

TEST CATEGORY	NUMBER OF TESTS	POSITIVE TESTS	PERCENT POSITIVE
Pre-Access	76,119	737	0.97%
Random	51,239	127	0.25%
For-Cause	1,159	139	11.99%
Follow-Up	3,752	31	0.83%
Other	1,221	41	3.36%
TOTAL*	133,490	1,075	0.81%
TOTAL without OTHER Category	132,269	1,034	0.78%

*These totals were calculated using Other test category. This category includes results from the periodic testing done by some reporting units during annual physicals or similar periodic activities. Although some reporting units specified the nature of the Other tests (e.g., return to work), most reporting units did not give this information.

Table 2 - Test Results for Each Test Category and Work Category

(January through December 2004)

TEST CATEGORY	LICENSEE EMPLOYEES	LONG-TERM CONTRACTORS	SHORT-TERM CONTRACTORS	TOTAL
Pre-Access				
Number Tested	7,661	1,095	67,363	76,119
Number Positive	35	8	694	737
Percent Positive	0.46%	0.73%	1.03%	0.97%
Random				
Number Tested	34,723	1,399	15,117	51,239
Number Positive	51	6	70	127
Percent Positive	0.15%	0.43%	0.46%	0.25%
For-Cause				
Number Tested	458	46	655	1,159
Number Positive	23	1	115	139
Percent Positive	5.02%	2.17%	17.56%	11.99%
Follow-Up				
Number Tested	2,058	55	1,639	3,752
Number Positive	14	0	17	31
Percent Positive	0.68%	0.00%	1.04%	0.83%
Other				
Number Tested	630	117	474	1,221
Number Positive	4	0	37	41
Percent Positive	0.63%	0.00%	7.81%	3.36%
TOTAL				
Number Tested	45,530	2,712	85,248	133,490
Number Positive	127	15	933	1,075
Percent Positive	0.28%	0.55%	1.09%	0.81%
TOTAL without OTHER Category				
Number Tested	44,900	2,595	84,774	132,269
Number Positive	123	15	896	1,034
Percent Positive	0.27%	0.58%	1.06%	0.78%

Table 3 - 2004 Test Results by Test Category

(January through December 2004)

TEST CATEGORY	FIRST SIX MONTHS	SECOND SIX MONTHS	YEAR
Pre-Access			
Number Tested	38,390	37,729	76,119
Number Positive	381	356	737
Percent Positive	0.99%	0.94%	0.97%
Random			
Number Tested	25,465	25,774	51,239
Number Positive	54	73	127
Percent Positive	0.21%	0.28%	0.25%
For-Cause			
<i>Observed Behavior</i>			
Number Tested	344	357	701
Number Positive	68	66	134
Percent Positive	19.77%	18.49%	19.12%
<i>Post-Accident</i>			
Number Tested	211	247	458
Number Positive	2	3	5
Percent Positive	0.95%	1.21%	1.09%
Follow-Up			
Number Tested	1,825	1,927	3,752
Number Positive	18	13	31
Percent Positive	0.99%	0.67%	0.83%
Other			
Number Tested	681	540	1,221
Number Positive	18	23	41
Percent Positive	2.64%	4.26%	3.36%
TOTAL			
Number Tested	66,916	66,574	133,490
Number Positive	541	534	1,075
Percent Positive	0.81%	0.80%	0.81%
TOTAL without OTHER Category			
Number Tested	66,235	66,034	132,269
Number Positive	523	511	1,034
Percent Positive	0.79%	0.77%	0.78%

Table 4 - 2004 Test Results for Licensee Employees and Contractor Personnel

(January through December 2004)

	LICENSEE EMPLOYEES			LONG-TERM CONTRACTORS			SHORT-TERM CONTRACTORS		
TEST CATEGORY	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year
Pre-Access									
Number Tested	4,183	3,478	7,661	476	619	1,095	33,731	33,632	67,363
Number Positive	22	13	35	2	6	8	357	337	694
Percent Positive	0.53%	0.37%	0.46%	0.42%	0.97%	0.73%	1.06%	1.00%	1.03%
Random									
Number Tested	17,613	17,110	34,723	594	805	1,399	7,258	7,859	15,117
Number Positive	24	27	51	1	5	6	29	41	70
Percent Positive	0.14%	0.16%	0.15%	0.17%	0.62%	0.43%	0.40%	0.52%	0.46%
For-Cause									
<i>Observed Behavior</i>									
Number Tested	139	127	266	7	11	18	198	219	417
Number Positive	13	10	23	0	0	0	55	56	111
Percent Positive	9.35%	7.87%	8.65%	0.00%	0.00%	0.00%	27.78%	25.57%	26.62%
<i>Post-Accident</i>									
Number Tested	108	84	192	8	20	28	95	143	238
Number Positive	0	0	0	1	0	1	1	3	4
Percent Positive	0.00%	0.00%	0.00%	12.50%	0.00%	3.57%	1.05%	2.10%	1.68%
Follow-Up									
Number Tested	986	1,072	2,058	22	33	55	817	822	1,639
Number Positive	8	6	14	0	0	0	10	7	17
Percent Positive	0.81%	0.56%	0.68%	0.00%	0.00%	0.00%	1.22%	0.85%	1.04%
Other									
Number Tested	331	299	630	76	41	117	274	200	474
Number Positive	4	0	4	0	0	0	14	23	37
Percent Positive	1.21%	0.00%	0.63%	0.00%	0.00%	0.00%	5.11%	11.50%	7.81%
TOTAL									
Number Tested	23,360	22,170	45,530	1,183	1,529	2,712	42,373	42,875	85,248
Number Positive	71	56	127	4	11	15	466	467	933
Percent Positive	0.30%	0.25%	0.28%	0.34%	0.72%	0.55%	1.10%	1.09%	1.09%
TOTAL w/o OTHER Category									
Number Tested	23,029	21,871	44,900	1,107	1,488	2,595	42,099	42,675	84,774
Number Positive	67	56	123	4	11	15	452	444	896
Percent Positive	0.29%	0.26%	0.27%	0.36%	0.74%	0.58%	1.07%	1.04%	1.06%

Table 5 - 2004 Number of Confirmed Positives by Substance

(January through December 2004)

TYPE OF SUBSTANCE	FIRST SIX MONTHS		SECOND SIX MONTHS		TOTAL	
	Number	Percent	Number	Percent	Number	Percent
Marijuana	275	50.74%	239	46.32%	514	48.58%
Cocaine	115	21.22%	132	25.58%	247	23.35%
Opiates	8	1.48%	6	1.16%	14	1.32%
Amphetamines	34	6.27%	26	5.04%	60	5.67%
Phencyclidine	1	0.18%	0	0.00%	1	0.09%
Alcohol	109	20.11%	113	21.90%	222	20.98%
TOTAL	542		516		1,058	

Table 6 - 2004 Confirmed Positive Test Results by Substance and Work Category

(January through December 2004)

TYPE OF SUBSTANCE	LICENSEE EMPLOYEES		CONTRACTORS (Long-Term/Short-Term)	
	Number	Percent	Number	Percent
Marijuana	43	33.82%	471	50.81%
Cocaine	23	17.56%	224	24.16%
Opiates	3	2.29%	11	1.19%
Amphetamines	5	3.82%	55	5.93%
Phencyclidine	0	0.00%	1	0.11%
Alcohol	57	43.51%	165	17.80%
TOTAL	131		927	

Table 7 - Significant Fitness-for-Duty Events (1990-1999)

Type of Event	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Reactor Operators	19	16	18	8	7	8	8	9	5	5	103
Licensee Supervisors	26	18	22	25	11	16	19	16	10	2	165
Contract Supervisors	12	24	28	16	11	10	8	10	10	12	141
FFD Program Personnel	1	5	0	0	1	0	2	0	3	2	14
Substances Found	6	8	6	2	0	5	5	4	0	2	38
Adulterated Specimen											0
Total	64	71	74	51	30	39	42	39	28	23	461

Table 7 - Cont'd Significant Fitness-for-Duty Events (2000 - 2004)

Type of Event	2000	2001	2002	2003	2004	Total
Reactor Operators	5	4	3	6	9	27
Licensee Supervisors	11	9	3	3	7	33
Contract Supervisors	8	12	12	8	4	44
FFD Program Personnel	0	0	3	0	0	3
Substances Found	3	0	1	2	9	15
Adulterated Specimen				9	23	32
Total	27	25	22	28	52	154

Table 8 - Trends in testing by test type (1990 - 1999)

Type of Test	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Pre-Access											
Number Tested	122,491	104,508	104,842	91,471	80,217	79,305	81,041	84,320	69,146	69,139	886,480
Number Positive	1,548	983	1,110	952	977	1,122	1,132	1,096	822	934	10,676
Percent Positive	1.26%	0.94%	1.06%	1.04%	1.22%	1.41%	1.40%	1.30%	1.19%	1.35%	1.20%
Random											
Number Tested	148,743	153,818	156,730	146,605	78,391	66,791	62,307	60,829	56,969	54,457	985,640
Number Positive	550	510	461	341	223	180	202	172	157	140	2,936
Percent Positive	0.37%	0.33%	0.29%	0.23%	0.28%	0.27%	0.32%	0.28%	0.28%	0.26%	0.30%
For-Cause											
Number Tested	732	727	696	751	758	763	848	722	720	736	7,453
Number Positive	214	167	178	163	122	139	138	149	100	120	1,490
Percent Positive	29.23%	22.97%	25.27%	21.70%	16.09%	18.22%	16.27%	20.64%	13.89%	16.30%	20.00%
Followup											
Number Tested	2,633	3,544	4,283	4,139	3,875	3,262	3,262	3,296	2,863	3,008	34,165
Number Positive	65	62	69	56	50	35	40	31	43	30	481
Percent Positive	2.47%	1.75%	1.61%	1.35%	1.29%	1.07%	1.23%	0.94%	1.50%	1.00%	1.41%
TOTAL*											
Number Tested	274,599	262,597	266,551	242,966	163,241	150,121	147,458	149,167	129,698	127,340	1,913,738
Number Positive	2,377	1,722	1,818	1,512	1,372	1,476	1,512	1,448	1,122	1,224	15,583
Percent Positive	0.87%	0.66%	0.68%	0.62%	0.84%	0.98%	1.03%	0.97%	0.87%	0.96%	0.81%

* Does not include test results from the "Other" test category.

Table 8 - Cont'd Trends in testing by test type (2000 - 2004)

Type of Test	2000	2001	2002	2003	2004	Total
Pre-Access						
Number Tested	68,333	63,744	73,155	72,988	76,119	354,339
Number Positive	965	720	805	757	737	3,984
Percent Positive	1.41%	1.13%	1.10%	1.04%	0.97%	1.12%
Random						
Number Tested	51,955	50,080	49,741	49,402	51,239	252,417
Number Positive	204	148	114	132	127	724
Percent Positive	0.39%	0.30%	0.23%	0.27%	0.25%	0.29%
For-Cause						
Number Tested	883	730	1,072	1,052	1,159	4,892
Number Positive	138	101	112	126	139	615
Percent Positive	15.67%	13.84%	10.45%	11.98%	11.99%	12.57%
Followup						
Number Tested	2,861	2,649	2,892	3,142	3,752	15,257
Number Positive	49	35	21	42	31	178
Percent Positive	1.71%	1.32%	0.73%	1.34%	0.83%	1.17%
TOTAL*						
Number Tested	124,032	118,730	128,321	127,785	132,269	630,192
Number Positive	1,356	1,036	1,091	1,094	1,034	5,606
Percent Positive	1.09%	1,004	0.85%	0.86%	0.78%	0.89%

* Does not include test results from the "Other" test category.

Table 9 - Trends In Substances Identified (1990 - 1999)

Substance	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Marijuana	1,153	746	953	781	739	819	868	842	606	672
Cocaine	706	549	470	369	344	374	352	336	269	273
Alcohol	452	401	427	357	251	265	281	262	212	230
Amphetamines	69	31	31	51	54	61	53	49	46	40
Opiates	45	24	8	13	11	17	14	39	19	16
Phencyclidine	8	11	4	5	1	7	2	0	1	2
Total*	2,433	1,762	1,893	1,576	1,400	1,543	1,570	1,528	1,153	1,233

*These totals do not equal the total number of positives for each year because some positives were for multiple substances and for other substances than those listed above.

Table 9 - Cont'd Trends In Substances Identified (2000 - 2004)

Substance	2000	2001	2002	2003	2004
Marijuana	620	523	560	518	514
Cocaine	251	225	228	228	247
Alcohol	211	212	214	199	222
Amphetamines	50	50	47	64	60
Opiates	32	17	21	17	14
Phencyclidine	1	2	3	0	1
Total*	1,168	1,029	1,069	1,026	1,056

*These totals do not equal the total number of positives for each year because some positives were for multiple substances and for other substances than those listed above.

Table 10 - Trends In Positive Test Rates For Workers With Unescorted Access (1990 - 2004)*

Year	Positive Test Rate
1990	0.54%
1991	0.47%
1992	0.44%
1993	0.37%
1994	0.48%
1995	0.50%
1996	0.57%
1997	0.54%
1998	0.50%
1999	0.50%
2000	0.70%
2001	0.53%
2002	0.46%
2003	0.56%
2004	0.51%
*Includes random, for-cause, testing results. The reduction in random test rate from 100% to 50% has been in effect since 1994.	