

Summary of FFD Program Performance Reports for 2003

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 2003 and summarize data from 1990 to 2003.

Table 1 - 2003 Test Results for Each Test Category

TEST CATEGORY	NUMBER OF TESTS	2003 POSITIVE TESTS	PERCENT POSITIVE
Pre-Access	72,988	757	1.04%
Random	49,402	132	0.27%
For-Cause	1,052	126	11.98%
Followup	3,142	42	1.34%
Other	1,201	37	3.08%
TOTAL *	127,785	1,094	0.86%
TOTAL without OTHER Category	126,584	1,057	0.84%

* These totals were calculated using the 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 - 2003 Test Results for Each Test Category and Work Category

(January through December 2003)

Test Category	Licensee Employees	Long-Term Contractors	Short-Term Contractors	Total
Pre-Access				
Number Tested	8,309	779	63,900	72,988
Number Positive	41	8	708	757
Percent Positive	0.49%	1.03%	1.11%	1.04%
Random				
Number Tested	34,202	1,133	14,067	49,402
Number Positive	61	3	68	132
Percent Positive	0.18%	0.26%	0.48%	0.27%
For-Cause				
Number Tested	439	29	584	1,052
Number Positive	23	0	103	126
Percent Positive	5.24%	0.00%	17.64%	11.98%
Followup				
Number Tested	1,942	26	1,174	3,142
Number Positive	21	1	20	42
Percent Positive	1.08%	3.85%	1.70%	1.34%
Other				
Number Tested	545	59	597	1,201
Number Positive	1	0	36	37
Percent Positive	0.18%	0.00%	6.03%	3.08%
TOTAL				
Number Tested	45,437	2,026	80,322	127,785
Number Positive	147	12	935	1,094
Percent Positive	0.32%	0.59%	1.16%	0.86%
TOTAL without OTHER Category				
Number Tested	44,892	1,967	79,725	126,584
Number Positive	146	12	899	1,057
Percent Positive	0.33%	0.61%	1.13%	0.84%

Table 3 - 2003 Test Results by Test Category

(January through December 2003)

TEST CATEGORY	FIRST SIX MONTHS	SECOND SIX MONTHS	YEAR
Pre-Access			
Number Tested	37,996	34,992	72,988
Number Positive	433	324	757
Percent Positive	1.14%	0.93%	1.04%
Random			
Number Tested	25,060	24,342	49,402
Number Positive	75	57	132
Percent Positive	0.03%	0.23%	0.27%
For-Cause			
Observed Behavior			
Number Tested	359	278	637
Number Positive	68	55	123
Percent Positive	18.94%	19.78%	19.31%
Post-Accident			
Number Tested	227	188	415
Number Positive	3	0	3
Percent Positive	1.32%	0.00%	0.72%
Follow-Up			
Number Tested	1,577	1,565	3,142
Number Positive	24	18	42
Percent Positive	1.32%	1.15%	1.34%
Other			
Number Tested	680	521	1,201
Number Positive	18	19	37
Percent Positive	2.65%	3.65%	3.08%
TOTAL			
Number Tested	65,899	61,886	127,785
Number Positive	621	473	1,094
Percent Positive	0.94%	0.76%	0.86%
TOTAL without OTHER Category			
Number Tested	65,219	61,365	126,584
Number Positive	603	454	1,057
Percent Positive	0.92%	0.74%	0.84%

Table 4 - 2003 Test Results for Licensee Employees and

Contractor Personnel

(January through December 2003)

TEST CATEGORY	LICENSEE EMPLOYEES			LONG-TERM CONTRACTORS			SHORT-TERM CONTRACTORS		
	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	4,477	3,832	8,309	410	369	779	33,109	30,791	63,900
Number Positive	27	14	41	6	2	8	400	308	708
Percent Positive	0.60%	0.37%	0.49%	1.46%	0.54%	1.03%	1.21%	1.00%	1.11%
Random									
Number Tested	17,236	16,966	34,202	592	541	1,133	7,232	6,835	14,067
Number Positive	35	26	61	1	2	3	39	29	68
Percent Positive	0.20%	0.15%	0.18%	0.17%	0.37%	0.26%	0.54%	0.42%	0.48%
For-Cause									
Observed Behavior									
Number Tested	124	108	232	6	6	12	229	164	393
Number Positive	13	9	22	0	0	0	55	46	101
Percent Positive	10.48%	8.33%	9.48%	0.00%	0.00%	0.00%	24.02%	28.05%	25.70%
Post-Accident									
Number Tested	111	96	207	9	8	17	107	84	191
Number Positive	1	0	1	0	0	0	2	0	2
Percent Positive	0.90%	0.00%	0.48%	0.00%	0.00%	0.00%	1.87%	0.00%	1.05%
Followup									
Number Tested	948	994	1,942	8	18	26	621	553	1,174
Number Positive	9	12	21	1	0	1	14	6	20
Percent Positive	0.95%	1.21%	1.08%	12.50%	0.00%	3.85%	2.25%	1.08%	1.70%
Other									
Number Tested	273	272	545	30	29	59	377	220	597
Number Positive	0	1	1	0	0	0	18	18	36
Percent Positive	0.00%	0.37%	0.18%	0.00%	0.00%	0.00%	4.77%	8.18%	6.03%
TOTAL									
Number Tested	23,169	22,268	45,437	1,055	971	2,026	41,675	38,647	80,322
Number Positive	85	62	147	8	4	12	528	407	935
Percent Positive	0.37%	0.28%	0.32%	0.76%	0.41%	0.59%	1.27%	1.05%	1.16%
TOTAL without OTHER Category									
Number Tested	22,896	21,996	44,892	1,025	942	1,967	41,298	38,427	79,725
Number Positive	85	61	146	8	4	12	510	389	899
Percent Positive	0.37%	0.28%	0.33%	0.78%	0.42%	0.61%	1.23%	1.01%	1.13%

Table 5 - 2003 Number of Confirmed Positives by Substance

(January through December 2003)

	FIRST SIX MONTHS		SECOND SIX MONTHS		TOTAL	
TYPE OF SUBSTANCE	Number	Percent	Number	Percent	Number	Percent
Marijuana	291	50.35%	231	50.22%	522	50.29%
Cocaine	130	22.49%	103	22.39%	233	22.45%
Opiates	10	1.73%	7	1.52%	17	1.64%
Amphetamines	32	5.54%	32	6.96%	64	6.17%
Phencyclidine	0	0.00%	0	0.00%	0	0.00%
Alcohol	115	19.90%	87	18.91%	202	19.46%
TOTAL	578		460		1,038	

Table 6 - 2003 Confirmed Positive Test Results by Substance and Work Category

(January through December 2003)

	LICENSEE EMPLOYEES		CONTRACTORS (Long-Term/Short-Term)	
TYPE OF SUBSTANCE	Number	Percent	Number	Percent
Marijuana	50	35.97%	472	52.50%
Cocaine	25	17.99%	208	23.14%
Opiates	5	3.60%	12	1.33%
Amphetamines	11	7.91%	53	5.90%
Phencyclidine	0	0.00%	0	0.00%
Alcohol	48	34.53%	154	17.13%
TOTAL	139		899	

Table 7 - 2003 Confirmed Positives Test Results by Substance for Each Worker Category

(January through December 2003)

	Licensee Employees		Contractors (Long-Term/Short-Term)	
TYPE OF SUBSTANCE	Number	Percent	Number	Percent
Marijuana	50	36.97%	468	52.76%
Cocaine	25	17.99%	203	22.89%
Opiates	5	3.60%	12	1.35%
Amphetamines	11	7.91%	53	5.98%
Phencyclidine	0	0.00%	0	0.00%
Alcohol	48	34.53%	151	17.02%
TOTAL*	139		887	

*These numbers include tests results for the "Other" test category.

Table 8 - Significant Fitness-for-Duty Events (1990-2003)

Type of Event	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Reactor Operators*	19	16	18	8	7	8	8	9	5	5	5	4	3	6	121
Licensee Supervisors	26	18	22	25	11	16	19	16	10	2	11	9	3	3	191
Contract Supervisors	12	24	28	16	11	10	8	10	10	12	8	12	12	8	181
FFD Program Personnel	1	5	0	0	1	0	2	0	3	2	0	0	3	0	17
Substances Found	6	8	6	2	0	5	5	4	0	2	3	0	1	2	44
Adulterated Specimen														9	9
Total	64	69	74	51	30	39	42	39	28	23	27	25	22	28	563

* Reactor Operators- this category refers to licensee reactor operators and to any person licensed under 10 CFR Part 55.

Table 9 - Trends in testing by test type (1990 - 2003)

Type of Test	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	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	68,333	63,744	73,155	72,988	1,164,700
Number Positive	1,548	983	1,110	952	977	1,122	1,132	1,096	822	934	965	720	805	757	13,923
Percent Positive	1.26%	0.94%	1.06%	1.04%	1.22%	1.41%	1.40%	1.30%	1.19%	1.35%	1.41%	1.13%	1.10%	1.04%	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	51,955	50,080	49,741	49,402	1,186,818
Number Positive	550	510	461	341	223	180	202	172	157	140	204	148	114	132	3,534
Percent Positive	0.37%	0.33%	0.29%	0.23%	0.28%	0.27%	0.32%	0.28%	0.28%	0.26%	0.39%	0.30%	0.23%	0.27%	0.30%
For-Cause															
Number Tested	732	727	696	751	758	763	848	722	720	736	883	730	1,072	1,052	11,190
Number Positive	214	167	178	163	122	139	138	149	100	120	138	101	112	126	1,967
Percent Positive	29.23%	22.97%	25.27%	21.70%	16.09%	18.22%	16.27%	20.64%	13.89%	16.30%	15.67%	13.84%	10.45%	11.98%	17.58%
Followup															
Number Tested	2,633	3,544	4,283	4,139	3,875	3,262	3,262	3,296	2,863	3,008	2,861	2,649	2,892	3,142	45,709
Number Positive	65	62	69	56	50	35	40	31	43	30	49	35	21	42	628
Percent Positive	2.47%	1.75%	1.61%	1.35%	1.29%	1.07%	1.23%	0.94%	1.50%	1.00%	1.71%	1.32%	0.73%	1.34%	1.37%
TOTAL*															
Number Tested	274,599	262,597	266,551	242,966	163,241	150,121	147,458	149,167	129,698	127,340	124,032	117,203	127,000	126,584	2,408,557
Number Positive	2,377	1,722	1,818	1,512	1,372	1,476	1,512	1,448	1,122	1,224	1,356	1,004	1,052	1,057	20,052
Percent Positive	0.87%	0.66%	0.68%	0.62%	0.84%	0.98%	1.03%	0.97%	0.87%	0.96%	1.09%	0.86%	0.83%	0.84%	0.82%

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

Table 10 - Trends in Substances Identified (1990-2003)

Substance	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Marijuana	1,153	746	953	781	739	819	868	842	606	672	620	523	560	518
Cocaine	706	549	470	369	344	374	352	336	269	273	251	225	228	228
Alcohol	452	401	427	357	251	265	281	262	212	230	211	212	214	199
Amphetamines	69	31	31	51	54	61	53	49	46	40	50	50	47	64
Opiates	45	24	8	13	11	17	14	39	19	16	32	17	21	17
Phencyclidine	8	11	4	5	1	7	2	0	1	2	1	2	3	0
Total*	2,433	1,762	1,893	1,576	1,400	1,543	1,570	1,528	1,153	1,233	1,168	1,029	1,069	1,026

* 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 11 - Trends In Positive Test Rates For Workers With Unescorted Access (1990 - 2003)*

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%

*Includes random, for-cause, and follow-up testing results. The reduction in random test rate from 100% to 50% has been in effect since 1994.