

## Summary of FFD Program Performance Reports for 2001

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 2001 and summarize data from 1990 to 2001.

**Table 1 - 2001 Test Results for Each Test Category**

TEST CATEGORY	NUMBER OF TESTS	2001 POSITIVE TESTS	PERCENT POSITIVE
Pre-Access	63,744	720	1.13%
Random	50,080	148	0.30%
For-Cause	730	101	13.84%
Followup	2,649	35	1.32%
Other	1,527	32	2.10%
TOTAL *	118,730	1,036	0.87%
TOTAL without OTHER Category	117,203	1,004	0.86%

\* 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 - 2001 Test Results for Each Test Category and Work Category**

(January through December 2001)

Test Category	Licensee Employees	Long-Term Contractors	Short-Term Contractors	Total
Pre-Access				
Number Tested	8,442	1,641	53,661	63,744
Number Positive	44	16	660	720
Percent Positive	0.52%	0.98%	1.23%	1.13%
Random				
Number Tested	36,048	1,697	12,335	50,080
Number Positive	64	4	80	148
Percent Positive	0.18%	0.24%	0.65%	0.30%
For-Cause				
Number Tested	326	33	371	730
Number Positive	20	2	79	101
Percent Positive	6.13%	6.06%	21.29%	13.84%
Followup				
Number Tested	1,650	70	931	2,649
Number Positive	19	0	16	35
Percent Positive	1.15%	0.00%	1.72%	1.32%
Other				
Number Tested	586	305	636	1,527
Number Positive	4	1	27	32
Percent Positive	0.68%	0.33%	4.25%	2.10%
TOTAL				
Number Tested	47,052	3,744	67,298	118,730
Number Positive	151	23	835	1,036
Percent Positive	0.32%	0.61%	1.27%	0.87%
TOTAL without OTHER Category				
Number Tested	46,466	3,439	67,298	117,203
Number Positive	147	22	835	1,004
Percent Positive	0.32%	0.64%	1.24%	0.86%

**Table 3 - 2001 Test Results by Test Category**

(January through December 2001)

TEST CATEGORY	FIRST SIX MONTHS	SECOND SIX MONTHS	YEAR
Pre-Access			
Number Tested	33,857	29,887	63,744
Number Positive	407	313	720
Percent Positive	1.20%	1.05%	1.13%
Random			
Number Tested	25,703	24,377	50,080
Number Positive	80	68	148
Percent Positive	0.31%	0.28%	0.30%
For-Cause			
Observed Behavior			
Number Tested	226	280	506
Number Positive	53	46	99
Percent Positive	23.45%	16.43%	19.57%
Post-Accident			
Number Tested	116	108	224
Number Positive	2	0	2
Percent Positive	1.72%	0.00%	0.89%
Follow-Up			
Number Tested	1,381	1,268	2,649
Number Positive	22	13	35
Percent Positive	1.59%	1.03%	1.32%
Other			
Number Tested	823	705	1,527
Number Positive	22	10	32
Percent Positive	2.67%	1.42%	2.10%
TOTAL			
Number Tested	62,106	56,624	118,730
Number Positive	586	450	1,036
Percent Positive	0.94%	0.79%	0.87%
TOTAL without OTHER Category			
Number Tested	61,283	55,920	117,203
Number Positive	564	440	1,004
Percent Positive	0.92%	0.79%	0.86%

**Table 4 - 2001 Test Results for Licensee Employees and**

# Contractor Personnel

(January through December 2001)

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	4,453	3,989	8,422	941	700	1,641	28,463	25,198	53,661
Number Positive	24	20	44	13	3	16	370	290	660
Percent Positive	0.54%	0.50%	0.52%	1.08%	0.43%	0.98%	1.30%	1.15%	1.23%
Random									
Number Tested	18,441	17,607	36,048	991	706	1,697	6,271	6,064	12,335
Number Positive	38	26	64	3	1	4	39	41	80
Percent Positive	0.21%	0.15%	0.18%	0.30%	0.14%	0.24%	0.62%	0.68%	0.65%
For-Cause									
Observed Behavior									
Number Tested	96	123	219	9	11	20	121	146	267
Number Positive	11	9	20	1	1	2	41	36	77
Percent Positive	11.46%	7.32%	9.13%	11.11%	9.09%	10.00%	33.88%	24.66%	28.84%
Post-Accident									
Number Tested	59	48	107	7	6	13	50	54	104
Number Positive	0	0	0	0	0	0	2	0	2
Percent Positive	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00%	1.92%
Followup									
Number Tested	790	860	1,650	34	34	68	557	374	931
Number Positive	10	9	19	0	0	0	12	4	16
Percent Positive	1.27%	1.05%	1.15%	0.00%	0.00%	0.00%	2.15%	1.07%	1.72%
Other									
Number Tested	296	290	586	171	134	305	356	280	636
Number Positive	3	1	4	1	0	1	18	9	27
Percent Positive	1.01%	0.34%	0.68%	0.58%	0.00%	0.33%	5.06%	3.21%	4.25%
TOTAL									
Number Tested	24,135	22,917	47,052	2,153	1,591	3,744	35,818	32,116	67,934
Number Positive	86	65	151	18	5	23	482	380	862
Percent Positive	0.36%	0.28%	0.32%	0.84%	0.31%	0.61%	1.35%	1.18%	1.27%
TOTAL without OTHER Category									
Number Tested	23,839	22,627	46,466	1,982	1,457	3,439	35,462	31,836	67,298
Number Positive	83	64	147	17	5	22	464	371	835
Percent Positive	0.35%	0.28%	0.32%	0.86%	0.34%	0.83%	1.31%	1.17%	1.24%

**Table 5 - 2001 Number of Confirmed Positives by Substance**

(January through December 2001)

TYPE OF SUBSTANCE	FIRST SIX MONTHS		SECOND SIX MONTHS		TOTAL	
	Number	Percent	Number	Percent	Number	Percent
Marijuana	300	50.85%	219	50.85%	519	50.73%
Cocaine	121	20.51%	102	23.56%	223	21.80%
Opiates	7	1.19%	10	2.31%	17	1.66%
Amphetamines	35	5.93%	15	3.46%	50	4.89%
Phencyclidine	1	0.17%	1	0.23%	2	0.20%
Alcohol	126	21.36%	86	19.86%	212	20.72%
TOTAL	590		433		1,023	

**Table 6 - 2001 Confirmed Positive Test Results by Substance and Work Category**

(January through December 2001)

TYPE OF SUBSTANCE	LICENSEE EMPLOYEES		CONTRACTORS (Long-Term/Short-Term)	
	Number	Percent	Number	Percent
Marijuana	56	38.10%	463	52.85%
Cocaine	24	16.33%	199	22.72%
Opiates	0	0.00%	17	1.94%
Amphetamines	12	8.16%	38	4.34%
Phencyclidine	0	0.00%	2	0.23%
Alcohol	55	37.41%	157	17.92%
TOTAL	147		876	

**Table 7 - 2001 Confirmed Positives Test Results by Substance for Each Worker Category**

(January through December 2001)

	Licensee Employees		Contractors (Long-Term/Short-Term)	
TYPE OF SUBSTANCE	Number	Percent	Number	Percent
Marijuana	55	37.93%	468	52.94%
Cocaine	24	16.55%	201	22.74%
Opiates	0	0.00%	17	1.92%
Amphetamines	12	8.28%	38	4.30%
Phencyclidine	0	0.00%	2	0.23%
Alcohol	54	37.24%	158	17.87%
TOTAL*	145		884	

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

**Table 8 - Significant Fitness-for-Duty Events (1990-2001)**

Type of Event	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Reactor Operators	19	16	18	8	7	8	8	9	5	5	5	4	112
Licensee Supervisors	26	18	22	25	11	16	19	16	10	2	11	9	183
Contract Supervisors	12	24	28	16	11	10	8	10	10	12	8	12	161
FFD Program Personnel	1	5	0	0	1	0	2	0	3	2	0	0	14
Substances Found	6	8	6	2	0	5	5	4	0	2	3	0	41
Total	64	69	74	51	30	39	42	39	28	23	27	25	511

**Table 9 - Trends in testing by test type (1990 - 2001)**

Type of Test	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	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	1,018,557
Number Positive	1,548	983	1,110	952	977	1,122	1,132	1,096	822	934	965	720	12,361
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%	1.14%
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	1,087,675
Number Positive	550	510	461	341	223	180	202	172	157	140	204	148	3,288
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%	0.30%
For-Cause													
Number Tested	732	727	696	751	758	763	848	722	720	736	883	730	9,066
Number Positive	214	167	178	163	122	139	138	149	100	120	138	101	1,729
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%	19.07%
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	39,918
Number Positive	65	62	69	56	50	35	40	31	43	30	49	35	565
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%	1.42%
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	2,154,973
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	17,943
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%

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



**Table 10 - Trends in Substances Identified (1990-2001)**

Substance	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Marijuana	1,153	746	953	781	739	819	868	842	606	672	620	523
Cocaine	706	549	470	369	344	374	352	336	269	273	251	225
Alcohol	452	401	427	357	251	265	281	262	212	230	211	212
Amphetamines	69	31	31	51	54	61	53	49	46	40	50	50
Opiates	45	24	8	13	11	17	14	39	19	16	32	17
Phencyclidine	8	11	4	5	1	7	2	0	1	2	1	2
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

\* 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 - 2001)\***

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%

\*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.