

NOES QUESTIONNAIRE ITEM NO. 52
Assessment of Economic Penalties in the Past Year as a
Result of a Protective Device Use Policy

Intent

The intent of this question was to determine whether management-directed actions had been taken in the past year for failure to use protective devices properly which involved direct or indirect economic loss to the worker(s) concerned.

This item was displayed on the questionnaire as:

52. Have any economic penalties been assessed in the past 12 months?

- 1 Yes
- 2 No, we know of no instances where violations of company policy have occurred within the last 12 months
- 3 No, although we know that there was a minimum of one violation of company policy within the last 12 months

Notes

This question was asked only of those who responded that the management-directed measures in their facility for improper use of personal protective equipment included the use of economic penalties.

As in question 51, economic penalties must be assessed by plant management, excluding action from any other source, such as a labor union.

Analysis

Two analyses of the responses to question 52 are presented.

(1) Response 52.1 - Economic penalties assessed in the past twelve months

The estimated proportions of plants and workers in plants which imposed economic penalties (fines) on workers in the past year for failure to properly use protective devices are displayed in Figures IV-102, IV-103, IV-104, and IV-105.

Figure IV-102 Workers in plants which fined employees in the past year for improper use of protective devices (by major industrial group)

Figure IV-103 Workers in plants which fined employees in the past year for improper use of protective devices (by 2-digit SIC)

Figure IV-104 Plants which fined workers in the past year for improper protective device use (by major industrial group)

Figure IV-105 Plants which fined workers in the past year for improper protective device use (by 2-digit SIC)

(2) Response 52.1, 52.2, or 52.3 - Categories of economic penalties imposed in the past twelve months

The estimates of the plants which have a policy of assessing economic penalties as part of their corrective measures for improper use of protective devices, by category of penalty assessment, and workers in those plants (by number and proportion of the total) are displayed in Figures IV-106 and IV-107, and Tables IV-69 and IV-70.

Figure IV-106	Proportion of workers in plants by category of economic penalty for failure to use protective devices properly
Figure IV-107	Proportion of plants by category of economic policy for failure to use protective devices properly
Table IV-69	Number and percent of plants and workers in plants by category of economic penalty for improper protective device use in the past year (by major industrial group)
Table IV-70	Number and percent of plants and workers in plants by category of economic penalty for improper protective device use in the past year (by 2-digit SIC)

FIGURE IV - 102
WORKERS IN PLANTS WHICH FINED EMPLOYEES IN THE
PAST YEAR FOR IMPROPER USE OF PROTECTIVE DEVICES
(NBS 1981-1983)

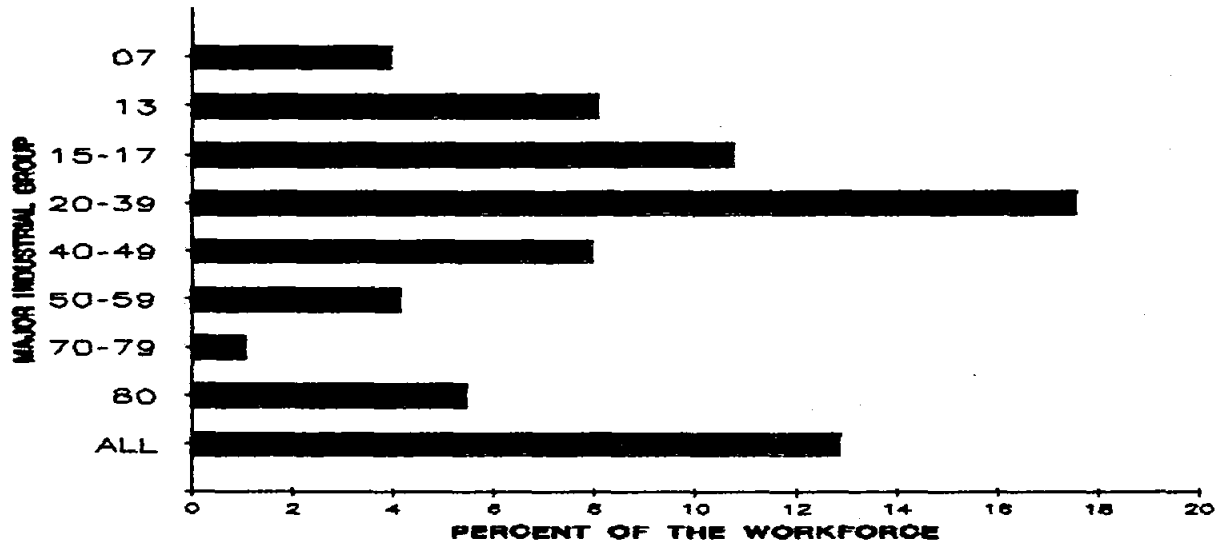


FIGURE IV - 103
WORKERS IN PLANTS WHICH FINED EMPLOYEES IN THE
PAST YEAR FOR IMPROPER USE OF PROTECTIVE DEVICES
(NOES 1981-1983)

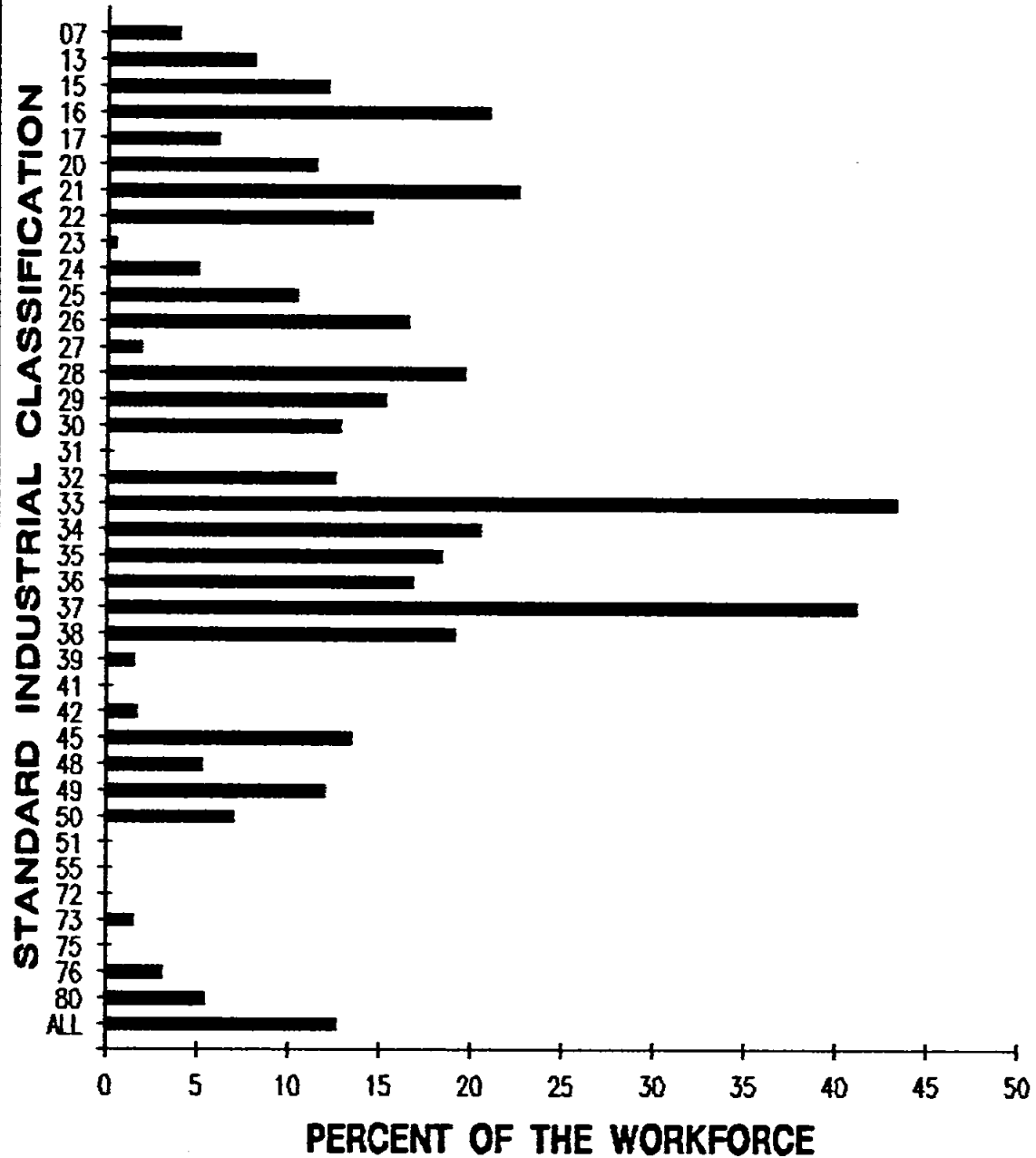


FIGURE IV - 104
PLANTS WHICH FINED WORKERS IN THE PAST
YEAR FOR IMPROPER PROTECTIVE DEVICE USE
(NOS 1961-1983)

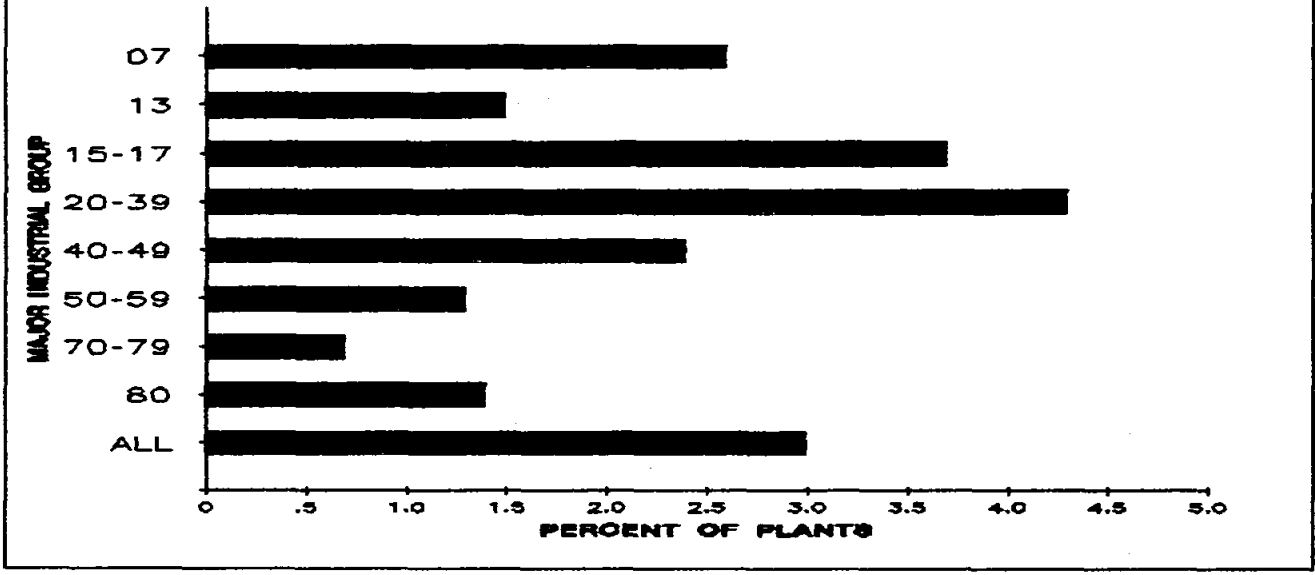
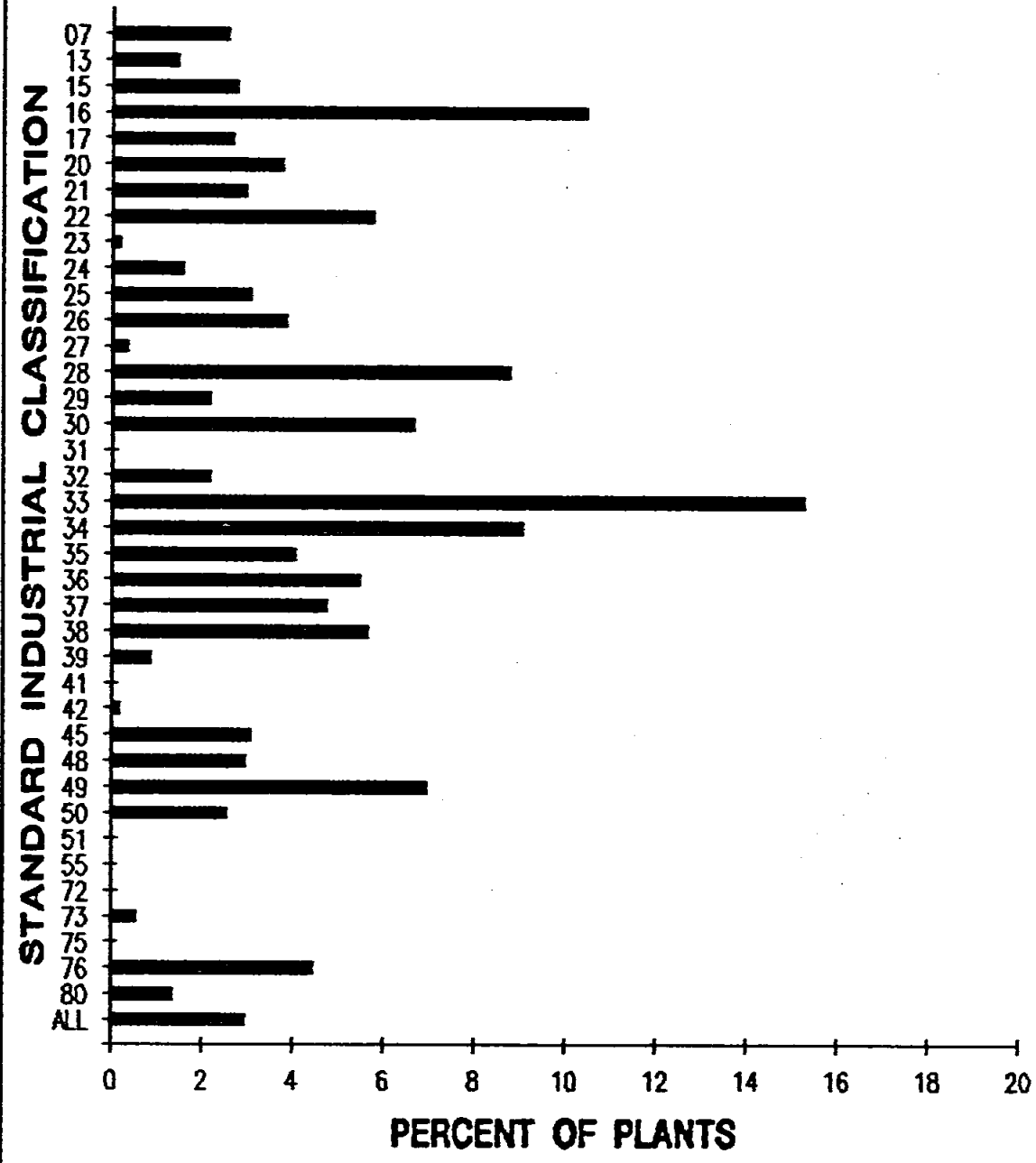


FIGURE IV - 105
PLANTS WHICH FINED WORKERS IN THE PAST
YEAR FOR IMPROPER PROTECTIVE DEVICE USE
(NOES 1981-1983)



NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. IV-69

NUMBER AND PERCENT OF PLANTS AND WORKERS IN PLANTS BY CATEGORY OF ECONOMIC PENALTY FOR IMPROPER PROTECTIVE DEVICE USE IN THE PAST YEAR

MAJOR GROUP	PLANTS			WORKERS		
	ASSESSED PENALTIES	NO VIOLATIONS	UNPENALIZED VIOLATIONS	ASSESSED PENALTIES	NO VIOLATIONS	UNPENALIZED VIOLATIONS
07	149* (147) 2.6%	1727* (689) 30.7%	...	4456* (4395) 4.0%	44293* (15193) 40.0%	...
13	143* (59) 1.5%	4695 (1109) 48.6%	916* (388) 9.5%	33518* (10924) 8.1%	210370* (65717) 50.8%	80751* (29177) 19.5%
15-17	3699 (879) 3.7%	33715 (2331) 34.2%	7579 (1560) 7.7%	332098* (96637) 10.8%	1129095 (100786) 36.8%	322961 (69397) 10.5%
20-39	8221 (1046) 4.3%	57683 (2753) 30.2%	15420 (1638) 8.1%	3388180 (298401) 17.6%	7067702 (384528) 36.7%	3059629 (298278) 15.9%
40-49	1445* (584) 2.4%	14040 (2119) 23.6%	4561 (591) 7.7%	251909* (71575) 8.0%	1092411 (189492) 34.6%	422853 (75864) 13.4%
50-59	824* (391) 1.3%	16044 (2940) 26.3%	2402* (833) 3.9%	65087* (25750) 4.2%	501666 (88928) 32.7%	82343* (25655) 5.4%
70-79	557* (499) .7%	17464 (2581) 23.0%	2145* (1098) 2.8%	24255* (16707) 1.1%	644924 (103940) 29.4%	115534* (34752) 5.3%
80	100* (42) 1.4%	3378 (437) 47.8%	232* (85) 3.3%	199411* (80168) 5.5%	2205092 (309678) 60.3%	318075* (112164) 8.7%
ALL	15136 (1624) 3.0%	148747 (5892) 29.2%	33254 (2743) 6.5%	4298914 (333186) 12.9%	12895552 (559544) 38.6%	4402146 (338879) 13.2%

*Standard error >25% of the estimate. The estimate may be unreliable.
...No facilities observed.

NUMBER AND PERCENT OF PLANTS AND WORKERS IN PLANTS BY CATEGORY OF ECONOMIC PENALTY FOR IMPROPER PROTECTIVE DEVICE USE IN THE PAST YEAR

SIC CODE	PLANTS			WORKERS		
	ASSESSED PENALTIES	NO VIOLATIONS	UNPENALIZED VIOLATIONS	ASSESSED PENALTIES	NO VIOLATIONS	UNPENALIZED VIOLATIONS
07	149* (147) 2.6%	1727* (689) 30.7%	...	4456* (4395) 4.0%	44293* (15193) 40.0%	...
13	143* (59) 1.5%	4695 (1109) 48.6%	916* (388) 9.5%	33518* (10924) 8.1%	210370* (65717) 50.8%	80751* (29177) 19.5%
15	744* (398) 2.8%	10141 (1179) 38.8%	2061* (567) 7.9%	109064* (69300) 12.2%	340093 (57042) 38.0%	108366* (29076) 12.1%
16	1312* (552) 10.5%	4508 (1044) 36.0%	2017* (630) 16.1%	124531* (39423) 21.0%	153181* (48115) 25.8%	104519* (46739) 17.6%
17	1643* (547) 2.7%	19066 (1945) 31.8%	3501* (1115) 5.8%	98503* (32662) 6.2%	635821 (68408) 40.2%	110077* (30044) 7.0%
20	580* (238) 3.8%	4753 (626) 31.3%	1518* (490) 10.0%	178876* (66077) 11.5%	730781 (96402) 47.0%	268927* (75515) 17.3%
21	3* (4) 3.0%	43* (34) 39.5%	37* (45) 33.7%	25744* (28069) 22.6%	56325* (44772) 49.4%	5254* (9815) 4.6%
22	278* (97) 5.8%	1307* (339) 27.1%	349* (137) 7.2%	104081* (41483) 14.6%	247992 (36650) 34.7%	108917* (62191) 15.3%
23	30* (30) .2%	1380* (378) 8.7%	194* (55) 1.2%	6724* (6697) .5%	307107 (66321) 24.7%	60899* (32825) 4.9%
24	192* (120) 1.6%	3521 (612) 29.4%	597* (250) 5.0%	29690* (18580) 5.1%	257688* (66302) 44.5%	83736* (34997) 14.4%
25	163* (116) 3.1%	862 (180) 16.1%	169* (158) 3.2%	54507* (25063) 10.5%	218592* (68799) 42.2%	18553* (16632) 3.6%
26	228* (161) 3.9%	1818 (333) 30.8%	529* (184) 9.0%	103898* (62762) 16.6%	243066* (68101) 38.8%	101526* (38449) 16.2%
27	87* (44) .4%	2205 (356) 10.9%	290* (132) 1.4%	24261* (19555) 2.0%	350567 (73656) 29.6%	49003* (23109) 4.1%
28	679* (215) 8.8%	3130 (419) 40.6%	687* (206) 8.9%	180836* (73095) 19.7%	409637 (82729) 44.6%	155210* (54813) 16.9%
29	31* (31) 2.2%	157* (96) 11.2%	328* (203) 23.3%	34219* (54628) 15.4%	55262* (35434) 24.9%	72773* (35971) 32.8%
30	569* (415) 6.7%	3390 (741) 40.0%	1323* (401) 15.6%	97115* (29262) 12.9%	289849 (63885) 38.5%	222713* (68143) 29.6%
31	...	483* (211) 31.7%	80* (49) 5.3%	...	78529* (21931) 44.6%	11838* (11187) 10.1%
32	218* (102) 2.2%	3614 (786) 36.2%	1110* (304) 11.1%	72347* (34844) 12.6%	302706 (51249) 52.6%	74244* (30529) 12.9%
33	909* (269) 15.3%	2842 (623) 47.9%	676* (236) 11.4%	464999 (56900) 43.4%	324810 (75768) 30.3%	223001* (68684) 20.8%

SIC CODE	PLANTS			WORKERS		
	ASSESSED PENALTIES	NO VIOLATIONS	UNPENALIZED VIOLATIONS	ASSESSED PENALTIES	NO VIOLATIONS	UNPENALIZED VIOLATIONS
34	1991* (676) 9.1%	9034 (806) 41.1%	2352 (484) 10.7%	309017* (86239) 20.6%	589849 (72515) 39.3%	256645 (45549) 17.1%
35	1107* (342) 4.1%	10254 (1058) 38.2%	2699 (590) 10.1%	440769 (75406) 18.5%	790656 (71711) 33.2%	449478 (64409) 18.9%
36	580 (136) 5.5%	3446 (595) 32.6%	1343* (386) 12.7%	332519 (47644) 16.9%	710846 (114361) 36.2%	401531* (101016) 20.4%
37	271* (83) 4.8%	2143 (361) 38.4%	566* (169) 10.1%	774468 (188089) 41.2%	593891 (104912) 31.6%	340404* (118093) 18.1%
38	233* (115) 5.7%	1415 (342) 34.8%	303* (131) 7.5%	145725* (90194) 19.2%	239778* (64689) 31.6%	81398* (60617) 10.7%
39	71* (71) .9%	1887* (898) 24.5%	268* (298) 3.5%	8386* (15189) 1.6%	269772* (140354) 51.4%	67578* (69657) 12.9%
41	...	756* (389) 15.3%	...	...	23864* (13056) 12.05	...
42	35* (25) .2%	4531 (995) 21.0%	1110* (498) 5.1%	14544* (9398) 1.8%	243615 (46901) 29.7%	92234* (43002) 11.2%
45	124* (119) 3.1%	972* (447) 24.4%	200* (129) 5.0%	61313* (49859) 13.6%	164800* (65785) 36.5%	54796* (34543) 12.1%
48	467* (309) 3.0%	1758* (771) 11.2%	1296* (820) 8.3%	36235* (23012) 5.4%	126363* (59190) 18.8%	73786* (39568) 11.0%
49	713* (437) 7.0%	4747* (1325) 46.3%	1691* (792) 16.5%	102230* (50376) 12.1%	454994* (146109) 54.1%	192777* (73614) 22.9%
50	824* (391) 2.6%	9515 (1787) 29.6%	1148* (490) 3.6%	65087* (25750) 7.1%	331720 (79590) 36.3%	61577* (28739) 6.7%
51	...	3026* (1188) 32.4%	719* (727) 7.7%	...	94021* (46064) 44.3%	10170* (7986) 4.8%
55	...	3503* (1314) 17.9%	535* (362) 2.7%	...	75925* (26567) 18.6%	10596* (10949) 2.6%
72	...	2287* (834) 10.7%	165* (121) .8%	...	83676* (34215) 17.7%	13169* (9104) 2.8%
73	113* (113) .6%	5003* (1359) 27.2%	201* (118) 1.1%	17846* (17018) 1.6%	392832* (98449) 35.7%	59484* (19243) 5.4%
75	...	7840 (1678) 29.9%	1150* (935) 4.4%	...	122791 (26850) 29.1%	18152* (15986) 4.3%
76	444* (467) 4.5%	2335* (985) 23.6%	629* (514) 6.4%	6409* (5673) 3.2%	45625* (18927) 22.5%	24729* (18405) 12.1%
80	100* (42) 1.4%	3378 (437) 47.8%	232* (85) 3.3%	199411* (80168) 5.5%	2205092 (309678) 60.3%	318075* (112164) 8.7%
ALL	15057 (1518) 3.0%	147510 (6117) 29.2%	32990 (3030) 6.5%	4270415 (312964) 12.8%	12832300 (626804) 38.6%	4392886 (350904) 13.2%

*Standard error >25% of the estimate. The estimate may be unreliable.
...No facilities observed.

FIGURE IV - 106
PROPORTION OF WORKERS IN PLANTS BY CATEGORY OF ECONOMIC
PENALTY FOR FAILURE TO USE PROTECTIVE DEVICES PROPERLY
(NOES 1981-1983)

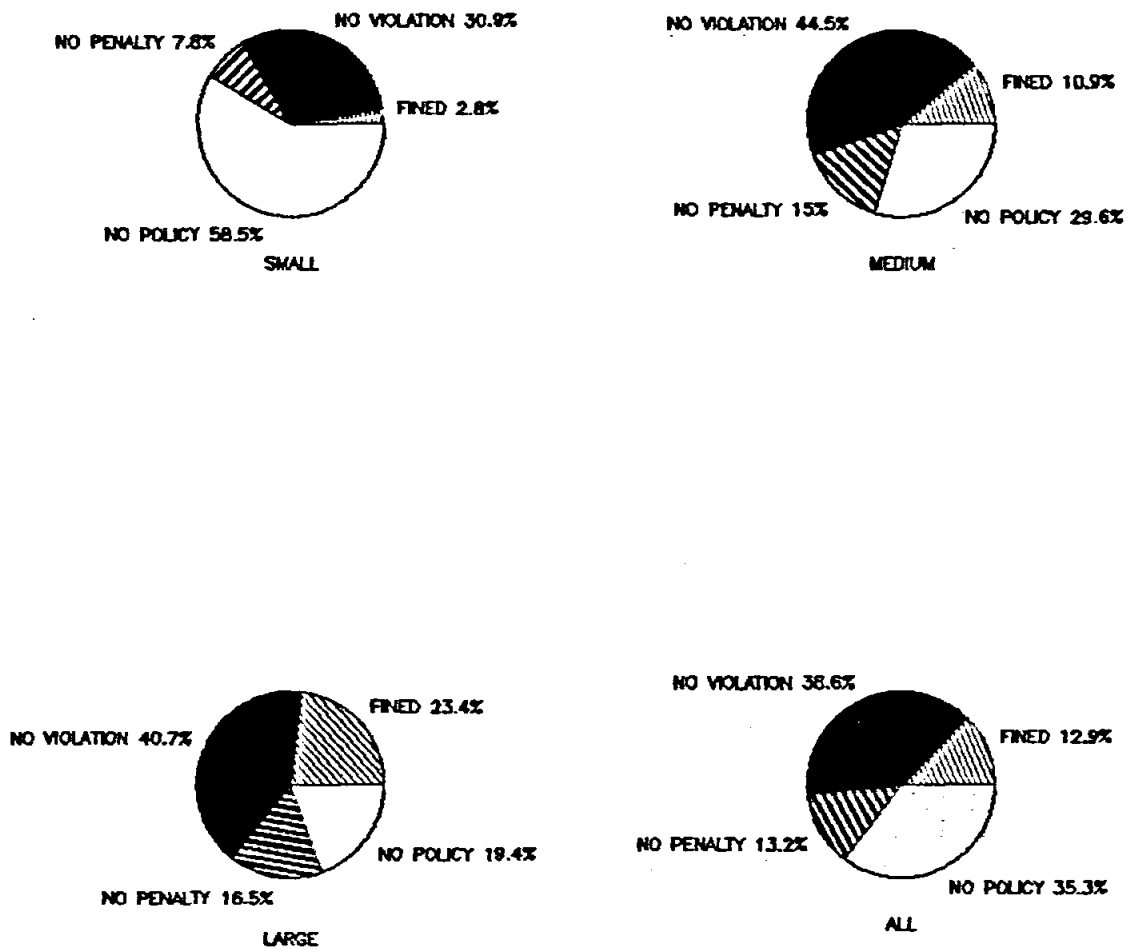
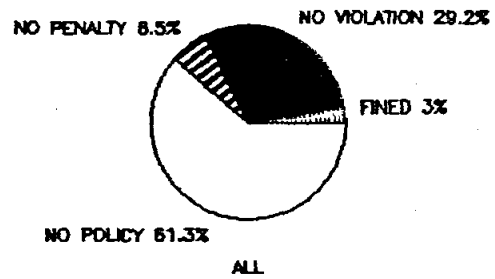
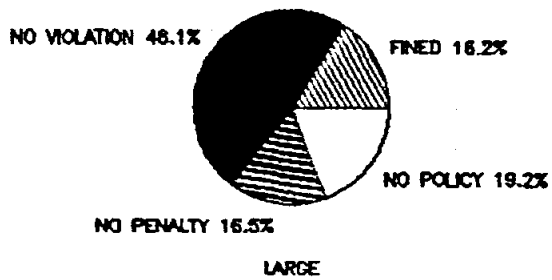
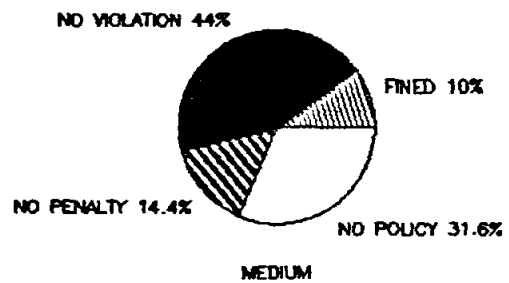
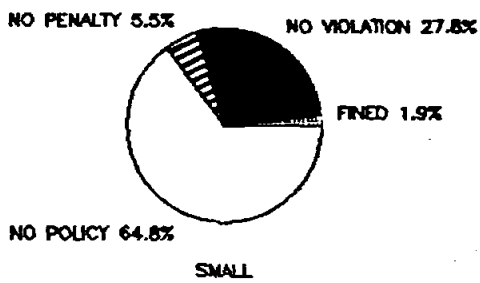


FIGURE IV - 107
PROPORTION OF PLANTS BY CATEGORY OF ECONOMIC
PENALTY FOR FAILURE TO USE PROTECTIVE DEVICES PROPERLY
(NOES 1981-1983)



NOES QUESTIONNAIRE ITEM NO. 53
Existence of a Program to Regularly Conduct Safety Inspections

Intent

The intent of this question was to determine if regular or periodic safety inspections of the facility were conducted.

This item was displayed on the questionnaire as:

53. Do you have a program under which you regularly or periodically conduct safety inspections of this facility?

- 1 Yes
- 2 No (Skip to Question 56)

Notes

A "regular or periodic safety inspection" refers to programs established by facility management which provide inspections on a planned or predictable basis.

Regular or periodic safety inspections performed by consultants, insurance carrier specialists, or other non-government outside sources at the request of facility management meet the criteria for an affirmative response.

Safety inspections conducted by a government agency, precipitated by an accident, or which are conducted as isolated one-time events would result in a negative response to this question.

Analysis

One analysis of the responses to question 53 is presented.

Response 53.1 - Regular or periodic safety inspections conducted

The estimates of the plants which conduct regular or periodic safety inspection of the facility, and workers in those plants (by number and proportion of the total) are displayed in Figures IV-108, IV-109, IV-110, IV-111, IV-112, and IV-113, and Tables IV-71 and IV-72.

- Figure IV-108 Workers in plants which periodically conduct safety inspections
(by major industrial group)
- Figure IV-109 Workers in plants which periodically conduct safety inspections
(by 2-digit SIC)
- Figure IV-110 Plants which periodically conduct safety inspections
(by major industrial group)
- Figure IV-111 Plants which periodically conduct safety inspections
(by 2-digit SIC)
- Figure IV-112 Workers in plants which have periodic safety inspections by plant size

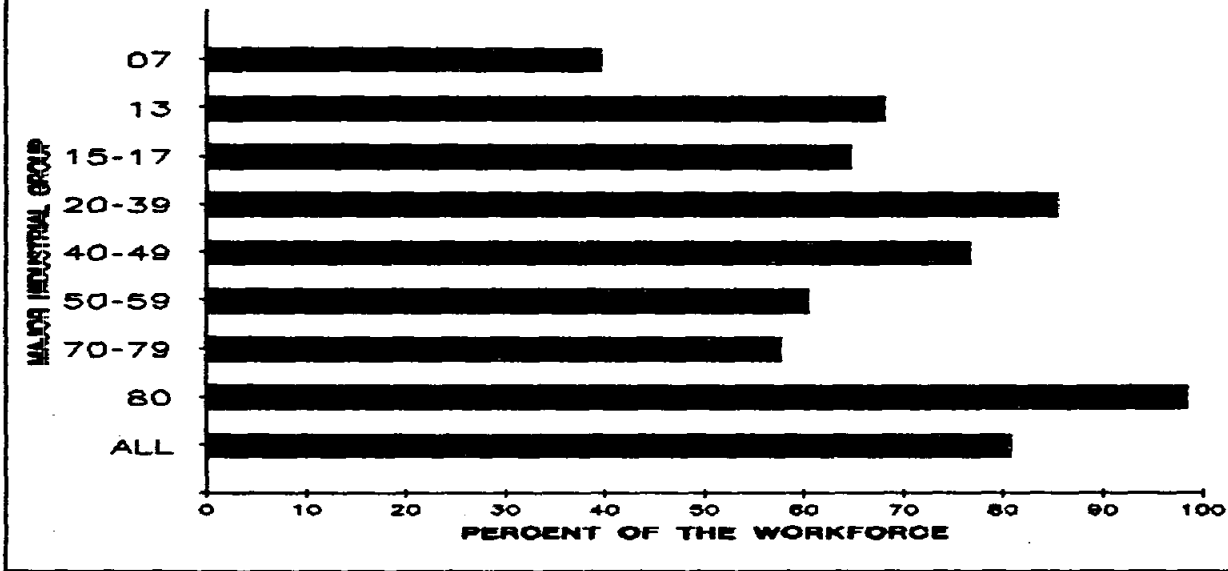
Figure IV-113
Table IV-71

Plants which regularly conduct safety inspections
Number and percent of plants and employees in plants
which periodically conduct safety inspections of the
facility (by major industrial group)

Table IV-72

Number and percent of plants and employees in plants
which periodically conduct safety inspections of the
facility (by 2-digit SIC)

FIGURE IV - 108
WORKERS IN PLANTS WHICH PERIODICALLY
CONDUCT SAFETY INSPECTIONS
(NOES 1981-1983)



NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. IV-71

NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH PERIODICALLY CONDUCT SAFETY INSPECTIONS OF THE FACILITY

MAJOR GROUP	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	TOTAL
07	1867* (863) 33.6%	...	...	1867* (863) 33.1%	44128* (22107) 42.6%	...	...	44128* (22107) 39.9%
13	4437* (1460) 51.6%	715* (276) 70.2%	46* (52) 100.0%	5198* (1517) 53.8%	116482* (38382) 55.7%	135216* (51999) 77.7%	31383* (35291) 100.0%	283081* (80867) 68.3%
15-17	45090 (2272) 47.8%	3359 (427) 81.0%	220* (128) 90.8%	48668 (2186) 49.3%	1157145 (46216) 55.1%	617996 (91994) 83.8%	217943* (92867) 92.3%	1993084 (122952) 64.9%
20-39	80171 (2740) 52.3%	27462 (1593) 86.5%	6092 (163) 97.2%	113725 (3224) 59.5%	2755069 (67179) 59.7%	5651482 (333718) 88.6%	8074367 (261536) 97.7%	16480918 (503758) 85.6%
40-49	25374 (1920) 47.7%	4920 (829) 84.2%	468* (134) 100.0%	30763 (2112) 51.7%	844177 (80444) 58.9%	1012223 (193466) 87.8%	573743 (106392) 100.0%	2430143 (234965) 76.9%
50-59	28192 (2777) 48.3%	1952* (563) 73.4%	...	30143 (2799) 49.4%	636146 (69547) 56.6%	294884* (83379) 72.1%	...	931029 (110607) 60.7%
70-79	32074 (2614) 43.9%	1554 (284) 66.2%	308* (148) 87.0%	33936 (2667) 44.7%	652067 (68362) 46.8%	325960 (57745) 70.2%	293484* (119908) 86.4%	1271511 (135297) 57.9%
80	1636* (597) 57.6%	2047 (254) 94.5%	2061 (304) 100.0%	5745 (660) 81.3%	67180* (19225) 66.1%	515989 (76637) 96.5%	3022676 (359103) 100.0%	3605845 (351421) 98.6%
ALL	218841 (5842) 48.7%	42009 (1986) 84.0%	9195 (421) 97.4%	270045 (6170) 53.1%	6272392 (157993) 56.6%	8553750 (419671) 86.8%	12213596 (482621) 98.0%	27039739 (696535) 80.9%

*Standard error >25% of the estimate. The estimate may be unreliable.
 ...No facilities observed.

FIGURE IV - 109
WORKERS IN PLANTS WHICH PERIODICALLY
CONDUCT SAFETY INSPECTIONS
 (NOES 1981-1983)

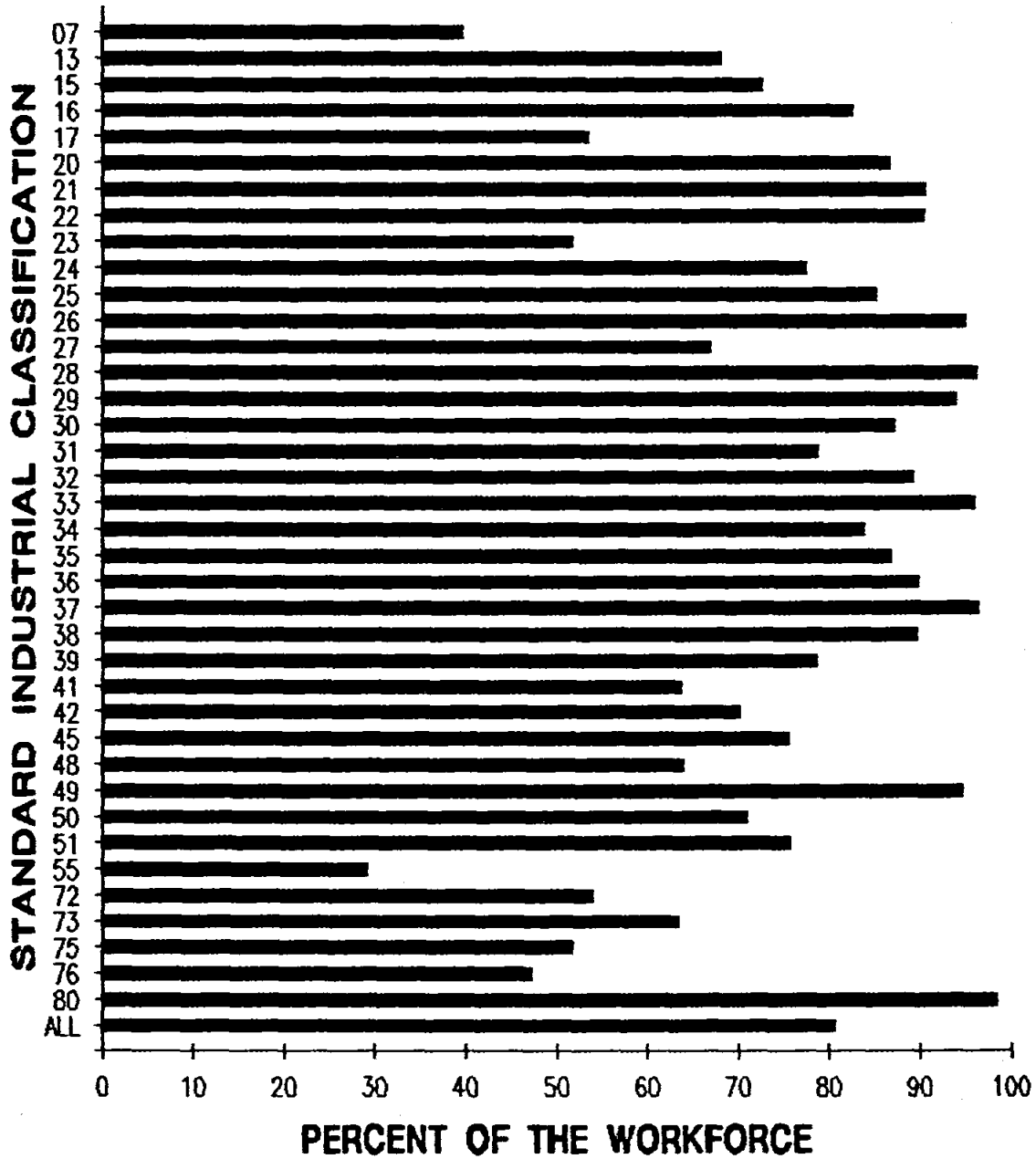


FIGURE IV - 110
PLANTS WHICH PERIODICALLY CONDUCT
SAFETY INSPECTIONS
(NOES 1981-1983)

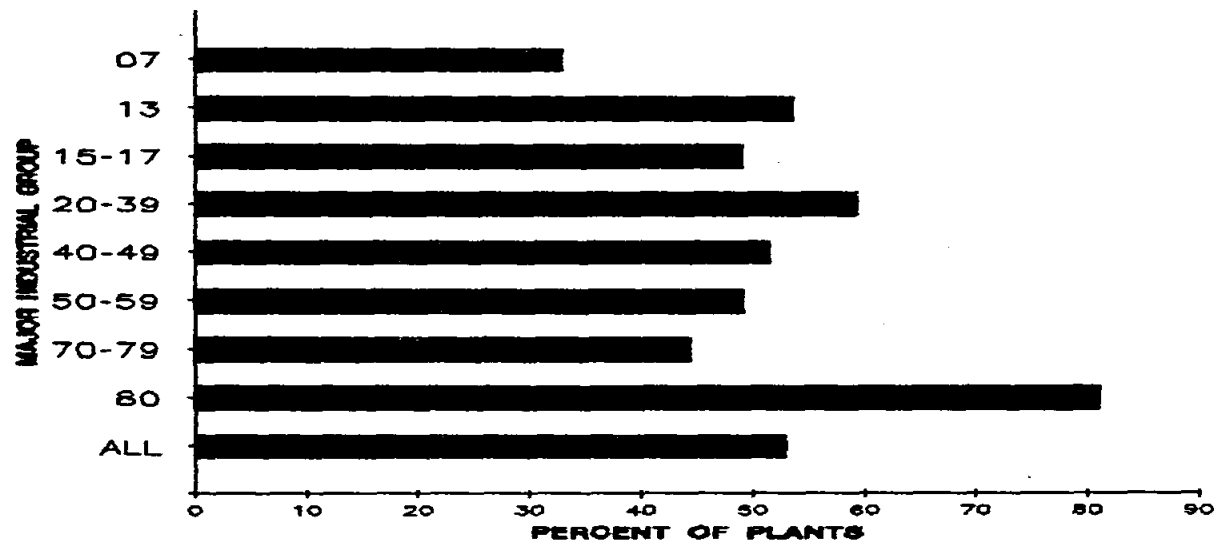
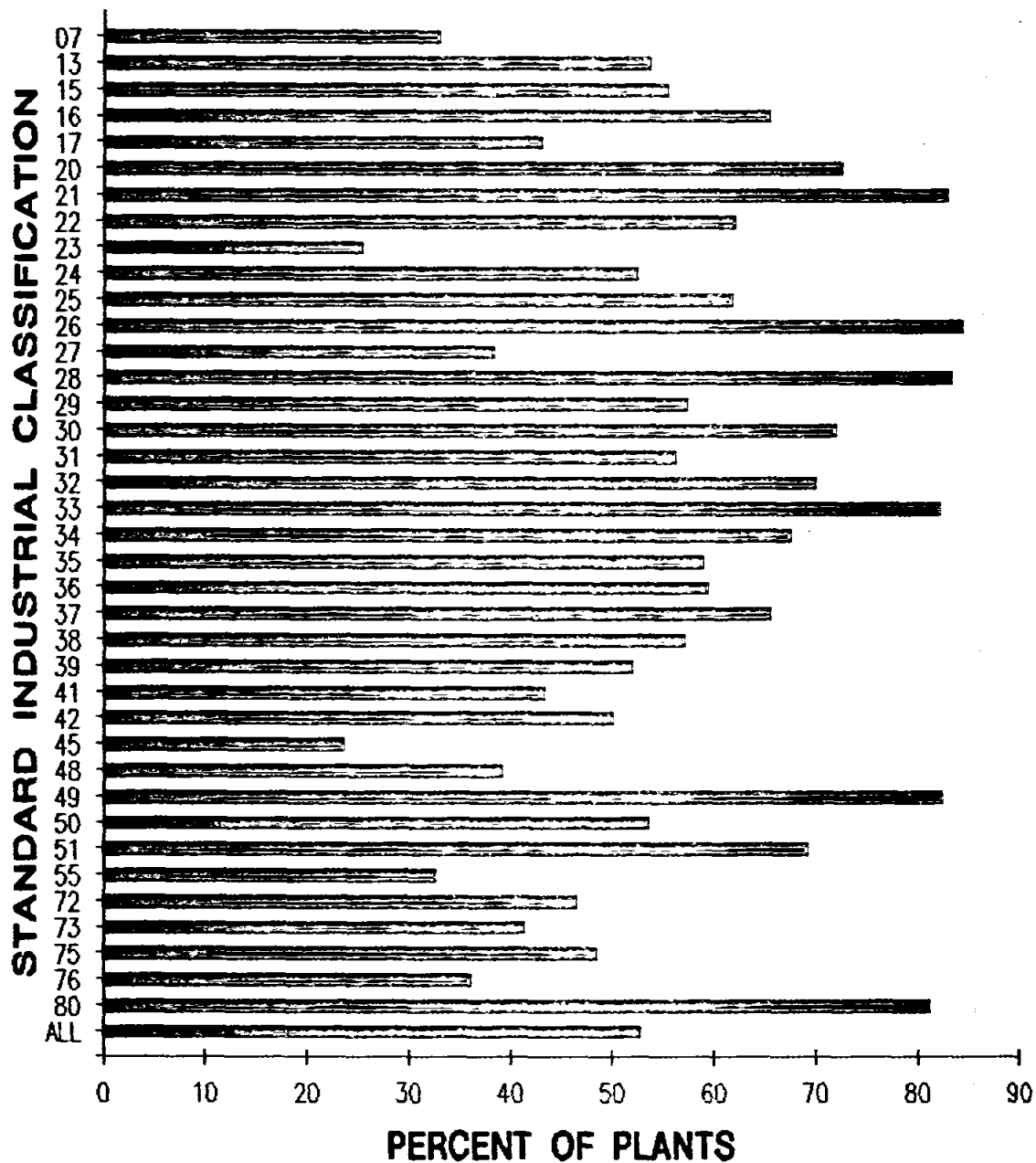


FIGURE IV - 111
PLANTS WHICH REGULARLY CONDUCT
SAFETY INSPECTIONS
 (NOES 1981-1983)



NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH PERIODICALLY CONDUCT SAFETY INSPECTIONS OF THE FACILITY

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
07	1867* (863) 33.6%	...	...	1867* (863) 33.1%	44128* (22107) 42.6%	...	...	44128* (22107) 39.9%
13	4437* (1460) 51.6%	715* (276) 70.2%	46* (52) 100.0%	5198* (1517) 53.8%	116482* (38382) 55.7%	135216* (51999) 77.7%	31383* (35291) 100.0%	283081* (80867) 68.3%
15	13301 (1046) 53.4%	1107 (197) 100.0%	112* (97) 83.3%	14521 (1076) 55.5%	337546 (29236) 60.0%	198218 (38188) 100.0%	116685* (68268) 86.6%	652450 (87683) 72.8%
16	7124 (1102) 63.1%	975 (191) 87.2%	107* (67) 100.0%	8206 (1124) 65.6%	198753 (37738) 70.0%	190463 (43829) 91.7%	101258* (53561) 100.0%	490473 (85774) 82.7%
17	24665 (2021) 42.4%	1276* (325) 66.5%	...	25941 (1908) 43.2%	620846 (38429) 49.6%	229315* (63409) 69.3%	...	850161 (53957) 53.7%
20	7540 (771) 66.1%	2982 (485) 92.7%	533 (110) 95.4%	11055 (867) 72.8%	270775 (24691) 69.7%	641475 (110039) 95.2%	436908 (82784) 88.8%	1349158 (109020) 86.8%
21	30* (43) 100.0%	...	60* (38) 76.1%	90* (50) 83.0%	1866* (2685) 100.0%	...	101476* (68062) 90.5%	103342* (67354) 90.7%
22	1156* (382) 39.4%	1544 (151) 97.2%	299* (80) 99.9%	2998 (383) 62.2%	45137* (11460) 42.6%	340764 (28104) 98.2%	261093* (94186) 100.0%	646994 (90659) 90.6%
23	2192* (575) 17.5%	1632 (193) 52.6%	242* (93) 100.0%	4067 (626) 25.6%	91109 (20816) 21.5%	346948 (38984) 56.9%	208437* (79559) 100.0%	646494 (91851) 52.0%
24	5027 (594) 46.9%	1148 (128) 100.0%	104* (74) 100.0%	6279 (606) 52.5%	173718 (26778) 57.2%	183585 (22297) 100.0%	92355* (52501) 100.0%	449658 (75444) 77.6%
25	2193 (472) 52.7%	999 (171) 94.1%	119* (75) 99.6%	3310 (511) 61.9%	76639 (17465) 55.1%	243298 (41624) 94.9%	122998* (62394) 100.0%	442935 (80734) 85.4%
26	3298 (626) 80.2%	1469 (221) 93.6%	214* (73) 100.0%	4982 (645) 84.5%	119626 (15845) 86.9%	268704 (47434) 95.5%	206864* (65220) 100.0%	595194 (87641) 95.1%
27	5974 (871) 33.0%	1601 (169) 85.5%	253* (106) 80.0%	7827 (874) 38.5%	219696 (26469) 45.9%	305346 (46614) 84.6%	270475* (77746) 78.2%	795516 (103090) 67.1%
28	4893 (584) 79.3%	1160 (93) 100.0%	380 (63) 100.0%	6433 (562) 83.4%	148984 (10495) 82.4%	260831 (27986) 100.0%	476341 (101388) 100.0%	886156 (105468) 96.5%
29	414* (252) 41.0%	293* (125) 100.0%	101* (42) 100.0%	809* (310) 57.5%	27919* (16421) 68.1%	63255* (21394) 100.0%	117545* (70259) 100.0%	208719* (81884) 94.1%
30	4605 (681) 68.6%	1281* (384) 83.3%	224* (73) 99.9%	6110 (887) 72.1%	166127 (19528) 73.8%	258619* (81293) 87.8%	233647* (72848) 100.0%	658393 (104414) 87.4%
31	359* (201) 38.5%	474 (115) 83.3%	25* (24) 100.0%	858* (268) 56.3%	12383* (5865) 49.8%	111078* (30063) 82.0%	15664* (16901) 100.0%	139125* (36979) 79.0%
32	5815 (781) 66.1%	1008 (141) 99.6%	184* (71) 99.9%	7007 (800) 70.1%	177844 (16168) 75.0%	207551 (30631) 99.3%	128993* (49687) 100.0%	514388 (48881) 89.4%
33	3160 (430) 76.4%	1386 (152) 94.4%	337 (62) 100.0%	4883 (447) 82.2%	119299 (13192) 86.2%	289943 (36404) 93.2%	621499 (82456) 100.0%	1030741 (88789) 96.2%

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
34	11800 (772) 63.7%	2739 (167) 87.7%	323 (79) 93.4%	14862 (839) 67.6%	387799 (16675) 69.9%	539092 (32355) 90.3%	336688* (100855) 95.9%	1263579 (111476) 84.1%
35	11905 (1096) 52.6%	3162 (121) 92.9%	784 (79) 100.0%	15851 (1093) 59.1%	353112 (28429) 58.2%	602208 (15404) 91.1%	1112933 (147534) 100.0%	2068253 (154038) 86.9%
36	3364 (737) 47.3%	2196 (122) 81.8%	740 (159) 94.1%	6300 (814) 59.6%	136178 (22891) 59.1%	486834 (17781) 88.1%	1146676 (186573) 97.0%	1769688 (193171) 90.0%
37	2203* (617) 55.5%	1044 (111) 87.8%	416 (92) 99.9%	3663 (659) 65.7%	78753* (20209) 62.0%	223643 (28220) 93.5%	1514008 (247233) 100.0%	1816404 (240062) 96.6%
38	1063* (403) 39.5%	847 (96) 88.5%	416* (139) 99.9%	2325 (472) 57.2%	54024* (13936) 51.6%	168042 (26176) 86.4%	460397* (129998) 100.0%	682464 (142600) 89.9%
39	3179 (633) 48.5%	497* (906) 62.2%	338* (216) 100.0%	4014* (1113) 52.2%	94083 (17340) 56.7%	110265* (206269) 73.8%	209369* (120490) 100.0%	413717* (188896) 78.8%
41	1819* (606) 41.1%	329* (126) 64.5%	...	2147* (620) 43.6%	68737* (24902) 58.4%	58610* (32330) 71.9%	...	127347* (39518) 63.9%
42	9491 (1452) 47.4%	1269 (302) 85.7%	82* (54) 99.5%	10842 (1491) 50.2%	282546 (45708) 57.9%	219852 (51588) 84.9%	74830* (49333) 100.0%	577228 (66331) 70.3%
45	606* (277) 18.7%	194* (194) 32.8%	147* (57) 100.0%	947* (347) 23.8%	22150* (10528) 28.6%	55275* (55275) 50.6%	264255* (77656) 100.0%	341679* (87550) 75.7%
48	5258 (1294) 35.8%	853 (174) 94.6%	34* (21) 99.0%	6145 (1309) 39.3%	197155* (66514) 46.3%	164076 (37437) 93.1%	70083* (43687) 100.0%	431315 (89792) 64.2%
49	6417 (1566) 78.1%	1862* (567) 100.0%	173* (99) 99.8%	8452 (1777) 82.5%	225639 (54673) 83.8%	425470* (151076) 100.0%	146565* (65566) 100.0%	797673 (185062) 94.8%
50	15540 (1840) 51.2%	1715* (479) 95.2%	...	17254 (1948) 53.7%	382721 (54934) 60.7%	267871* (78283) 94.6%	...	650592 (104732) 71.2%
51	6251 (1067) 68.6%	237* (237) 100.0%	...	6488 (1202) 69.4%	133794 (30113) 72.3%	27013* (27013) 100.0%	...	160806* (49527) 75.8%
55	6400* (1765) 33.8%	...	...	6400* (1765) 32.7%	119631* (42384) 38.7%	...	...	119631* (42384) 29.3%
72	9579 (1392) 46.4%	361* (140) 53.5%	13* (19) 100.0%	9954 (1441) 46.7%	199232 (34060) 52.4%	46568* (18900) 56.6%	10670* (15114) 100.0%	256471 (47860) 54.2%
73	6328 (892) 38.2%	1011 (184) 67.9%	295* (139) 86.4%	7633 (875) 41.5%	169639 (34709) 40.3%	246813 (45291) 70.6%	282814* (113492) 86.0%	699265 (105613) 63.6%
75	12702 (2190) 48.5%	59* (60) 99.7%	...	12761 (2208) 48.6%	211141 (36778) 51.1%	8238* (8380) 100.0%	...	219379 (39143) 52.0%
76	3464* (1080) 35.5%	123* (94) 100.0%	...	3588* (1110) 36.3%	72055* (19586) 40.4%	24341* (19716) 100.0%	...	96396* (31399) 47.5%
80	1636* (597) 57.6%	2047 (254) 94.5%	2061 (304) 100.0%	5745 (660) 81.3%	67180* (19225) 66.1%	515989 (76637) 96.5%	3022676 (359103) 100.0%	3605845 (351421) 98.6%
ALL	217057 (6826) 48.6%	41644 (1022) 84.0%	9179 (398) 97.4%	267880 (7033) 53.0%	6224442 (150908) 56.5%	8480416 (178392) 86.8%	12204591 (503025) 98.0%	26909449 (530961) 80.9%

*Standard error >25% of the estimate. The estimate may be unreliable.
 ...No facilities observed.

FIGURE IV - 112
WORKERS IN PLANTS WHICH HAVE PERIODIC
SAFETY INSPECTIONS BY PLANT SIZE
(NOES 1981-1983)

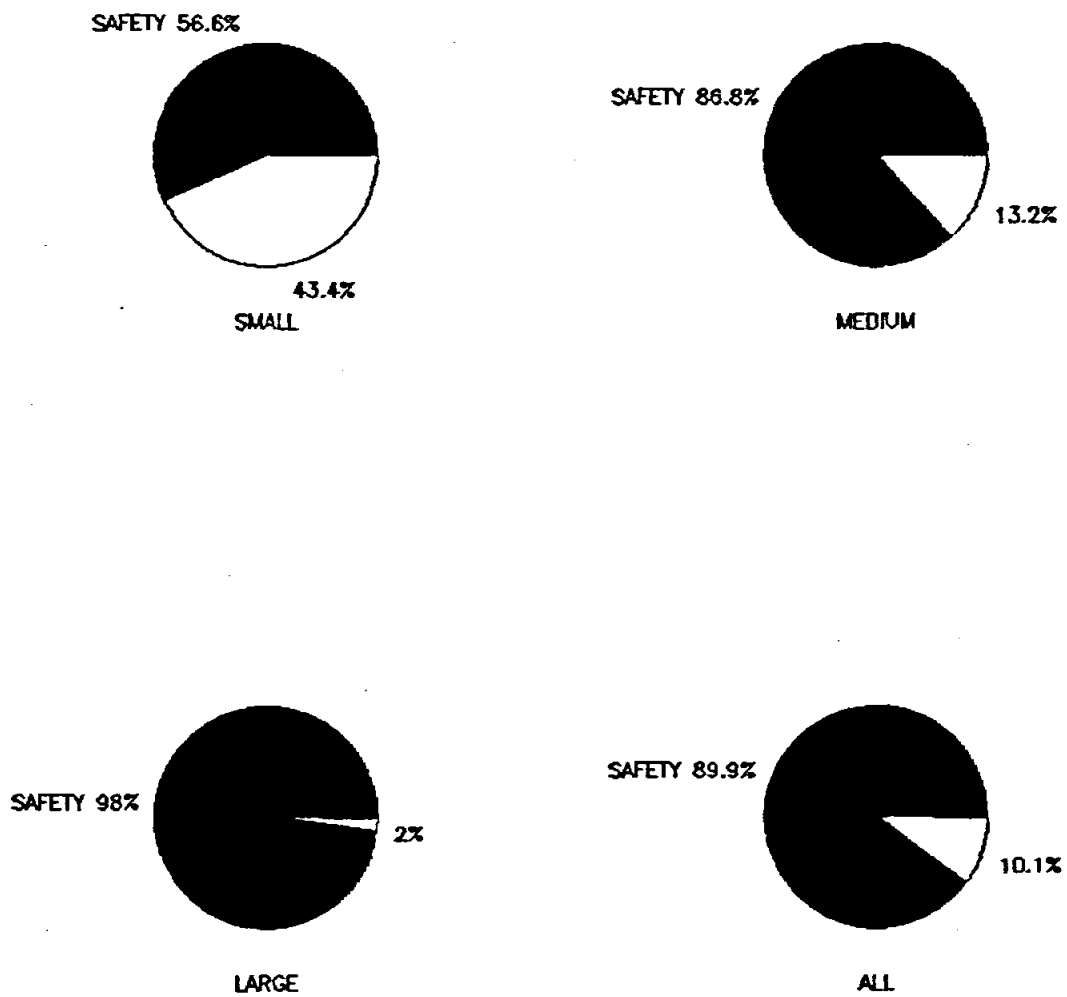
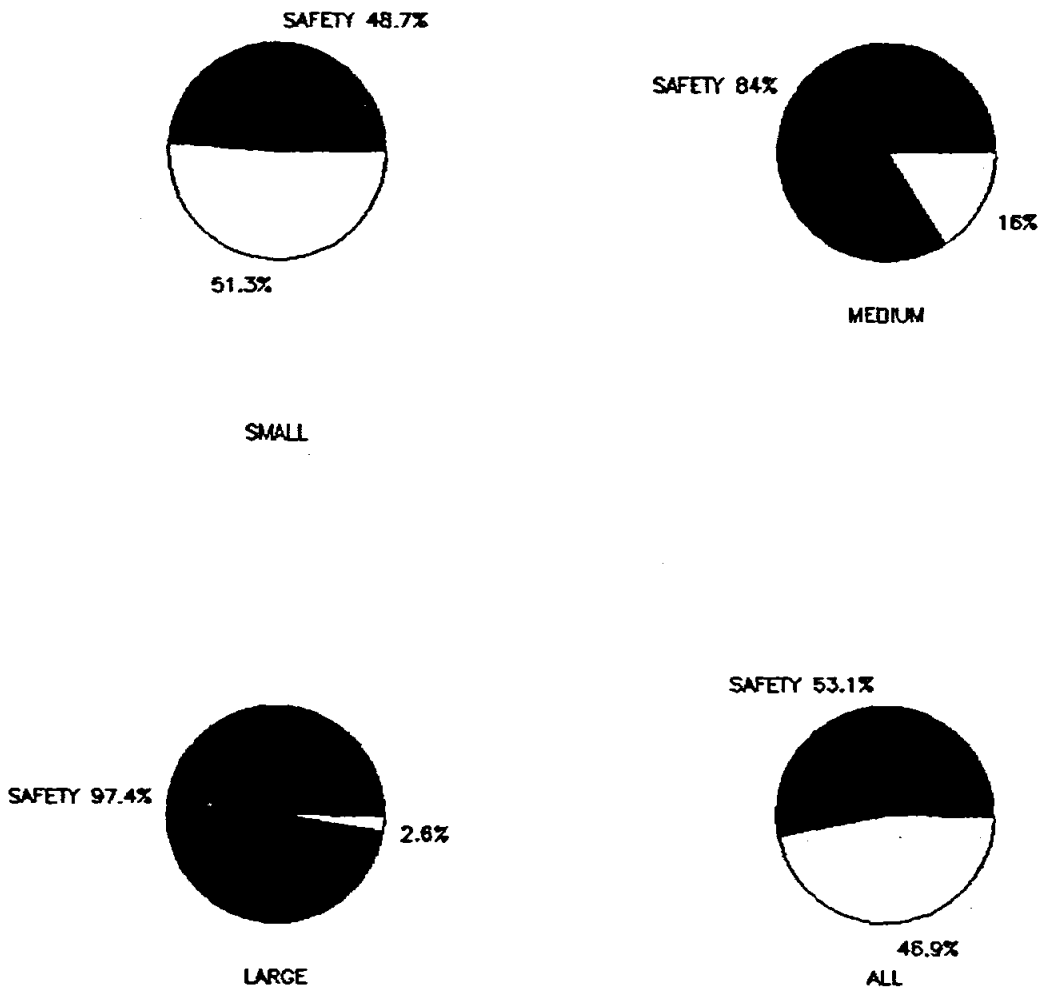


FIGURE IV - 113
PLANTS WHICH REGULARLY CONDUCT
SAFETY INSPECTIONS
(NOES 1981-1983)



NOES QUESTIONNAIRE ITEM NO. 54
Written Reports Required for Safety Inspections

Intent

The intent of this question was to determine whether all safety inspections of the facility resulted in a written report of the findings.

This item was displayed on the questionnaire as:

54. Are written results of these safety inspections required?

- 1 Yes
- 2 No

Notes

This question was asked only of those respondents who indicated that safety inspections were regularly conducted.

Written reports were considered to be reports arising from inspection of a facility, whether positive or negative in nature. They need not have been formal, and would have included handwritten or transcribed oral reports.

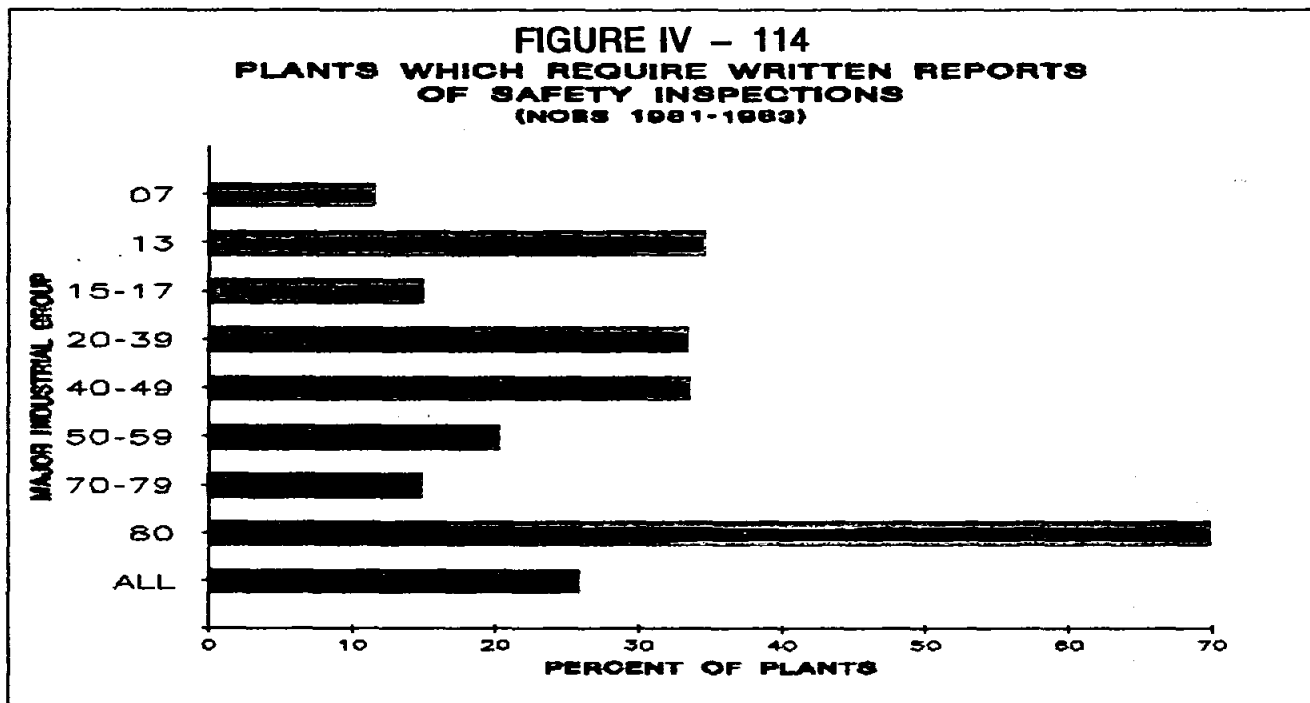
Analysis

One analysis of the responses to question 54 is presented.

Response 54.1 - Written reports of safety inspections required

The estimates of the plants which require written reports of all safety inspections within the facility, and workers in those plants (by number and proportion of the total) are displayed in Figures IV-114, IV-115, IV-116, IV-117, and Tables IV-73 and IV-74.

Figure IV-114	Plants which require written reports of safety inspections (by major industrial group)
Figure IV-115	Plants which require written reports of safety inspections (by 2-digit SIC)
Figure IV-116	Workers in plants which require written reports of safety inspection by plant size
Figure IV-117	Plants which require written reports of safety inspections
Table IV-73	Number and percent of plants and employees in plants which require written reports of safety inspections (by major industrial group)
Table IV-74	Number and percent of plants and employees in plants which require written reports of safety inspections (by 2-digit SIC)



NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. IV-73

NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH REQUIRE WRITTEN REPORTS OF SAFETY INSPECTIONS

MAJOR GROUP	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
07	662* (312) 11.9%	...	...	662* (312) 11.7%	27445* (15220) 26.5%	...	...	27445* (15220) 24.8%
13	2692* (1003) 31.3%	625* (280) 61.3%	46* (52) 100.0%	3363* (1106) 34.8%	72306* (21995) 34.6%	118123* (54160) 67.9%	31383* (35291) 100.0%	221811* (75087) 53.5%
15-17	13012 (1376) 13.8%	1748* (467) 42.2%	110* (60) 45.3%	14870 (1332) 15.1%	445534 (43012) 21.2%	354518* (102394) 48.1%	124983* (42459) 52.9%	925035 (84213) 30.1%
20-39	36002 (2881) 23.5%	22649 (1522) 71.3%	5474 (182) 87.3%	64125 (3196) 33.5%	1550569 (78535) 33.6%	4781567 (300461) 74.9%	7458528 (250869) 90.2%	13790665 (467020) 71.6%
40-49	16085 (1748) 30.3%	3559 (781) 60.9%	338* (104) 72.2%	19982 (2050) 33.6%	622509 (75630) 43.4%	786496 (194577) 68.2%	423692 (84368) 73.8%	1832697 (238890) 58.0%
50-59	11165 (2460) 19.1%	1316* (375) 49.5%	...	12481 (2401) 20.4%	298877 (62319) 26.6%	182183* (50475) 44.6%	...	481061 (77265) 31.4%
70-79	10271 (1904) 14.0%	876 (197) 37.3%	241* (135) 68.2%	11389 (1975) 15.0%	275708 (54635) 19.8%	205096 (45098) 44.2%	238671* (117405) 70.3%	719474 (130309) 32.7%
80	1029* (434) 36.3%	1889 (253) 87.2%	2020 (273) 98.0%	4938 (588) 69.9%	50189* (16239) 49.4%	456277 (73910) 85.4%	2985058 (340832) 98.8%	3491524 (340406) 95.4%
ALL	90918 (4921) 20.2%	32661 (1862) 65.3%	8229 (378) 87.2%	131809 (5247) 25.9%	3343138 (146920) 30.2%	6884259 (389357) 69.8%	11262315 (450613) 90.3%	21489712 (653425) 64.3%

*Standard error >25% of the estimate. The estimate may be unreliable.
...No facilities observed.

NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. IV-74

NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH REQUIRE WRITTEN REPORTS OF SAFETY INSPECTIONS

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	TOTAL
07	662* (312) 11.9%	...	...	662* (312) 11.7%	27445* (15220) 26.5%	...	...	27445* (15220) 24.8%
13	2692* (1003) 31.3%	625* (280) 61.3%	46* (52) 100.0%	3363* (1106) 34.8%	72306* (21995) 34.6%	118123* (54160) 67.9%	31383* (35291) 100.0%	221811* (75087) 53.5%
15	3794 (847) 15.2%	444* (182) 40.1%	54* (25) 39.7%	4292 (857) 16.4%	126463 (22702) 22.5%	69833* (28159) 35.2%	77206* (21590) 57.3%	273502 (46370) 30.5%
16	2517 (622) 22.3%	674* (180) 60.2%	56* (56) 52.4%	3247 (606) 26.0%	88668* (24622) 31.2%	145283* (44379) 69.9%	47776* (37015) 47.2%	281727 (56497) 47.5%
17	6701 (1084) 11.5%	630* (243) 32.8%	...	7331 (1029) 12.2%	230403 (36163) 18.4%	139403* (59010) 42.1%	...	369806 (55216) 23.4%
20	3190 (515) 27.9%	2721 (487) 84.6%	533 (110) 95.4%	6443 (663) 42.4%	145803 (22301) 37.5%	577996 (106719) 85.8%	436908 (82784) 88.8%	1160707 (114953) 74.7%
21	30* (43) 100.0%	...	17* (28) 21.6%	47* (47) 43.5%	1866* (2685) 100.0%	...	45151* (41947) 40.3%	47017* (41262) 41.2%
22	522* (134) 17.8%	1259 (133) 79.3%	296* (81) 98.9%	2076 (180) 43.1%	27699* (9667) 26.1%	286058 (30146) 82.4%	258826* (95559) 99.1%	572583 (94754) 80.2%
23	1084* (308) 8.7%	1078 (153) 34.7%	242* (93) 100.0%	2404 (345) 15.2%	42721* (12551) 10.1%	243932 (39039) 40.0%	208437* (79559) 100.0%	495091 (93885) 39.9%
24	2071 (348) 19.3%	1035 (148) 90.2%	104* (74) 100.0%	3210 (411) 26.8%	98689 (21079) 32.5%	167462 (28043) 91.2%	92355* (52501) 100.0%	358506 (77127) 61.9%
25	629* (234) 15.1%	791 (166) 74.5%	119* (75) 99.6%	1538 (289) 28.8%	19474* (7393) 14.0%	198539 (42485) 77.4%	122998* (62394) 100.0%	341011 (80684) 65.8%
26	1408 (314) 34.2%	1256 (280) 80.0%	214* (73) 100.0%	2878 (386) 48.8%	76448 (13184) 55.5%	235079 (52054) 83.5%	206864* (65220) 100.0%	518391 (88715) 82.8%
27	1999 (474) 11.0%	1078 (229) 57.6%	224* (89) 70.9%	3301 (580) 16.3%	102127* (26321) 21.4%	219335* (56204) 60.8%	254883* (73153) 73.7%	576344 (112335) 48.6%
28	2717 (540) 44.0%	1125 (81) 96.9%	368 (58) 96.9%	4209 (545) 54.6%	103926 (12500) 57.5%	250021 (25692) 95.9%	450302 (97051) 94.5%	804248 (98231) 87.6%
29	318* (203) 31.4%	259* (122) 88.3%	101* (42) 100.0%	677* (258) 48.2%	24252* (15059) 59.2%	52186* (19475) 82.5%	117545* (70259) 100.0%	193983* (81170) 87.5%
30	2385* (624) 35.5%	1094* (357) 71.1%	224* (73) 99.9%	3703 (823) 43.7%	88840 (20495) 39.5%	222932* (80385) 75.7%	233647* (72848) 100.0%	545419 (108786) 72.4%
31	273* (201) 29.3%	372* (129) 65.3%	22* (20) 87.3%	667* (280) 43.7%	7775* (5242) 31.2%	90859* (32958) 67.1%	11650* (10428) 74.4%	110284* (37765) 62.7%
32	2933 (607) 33.3%	893 (152) 88.2%	184* (71) 99.9%	4010 (632) 40.1%	105683 (19074) 44.6%	191633 (33593) 91.7%	128993* (49687) 100.0%	426309 (49041) 74.1%
33	1606 (272) 38.8%	1204 (175) 82.0%	327 (60) 97.1%	3137 (328) 52.8%	80564 (15712) 58.2%	264577 (40933) 85.1%	614374 (79969) 98.9%	959515 (90662) 89.6%

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
34	6356 (927) 34.3%	2189 (203) 70.1%	323 (79) 93.4%	8868 (971) 40.3%	245665 (24625) 44.3%	464484 (35283) 77.8%	336688* (100855) 95.9%	1046837 (106907) 69.7%
35	4002 (868) 17.7%	2760 (257) 81.1%	720 (79) 91.8%	7482 (895) 27.9%	186888 (28440) 30.8%	539794 (32338) 81.6%	1052352 (143641) 94.6%	1779034 (154908) 74.7%
36	1652* (623) 23.3%	1742 (162) 64.9%	679 (136) 86.3%	4073 (648) 38.5%	72093* (23159) 31.3%	409310 (33071) 74.1%	1078296 (171570) 91.2%	1559700 (156197) 79.3%
37	1349* (460) 33.9%	806 (167) 67.7%	335 (70) 80.5%	2489 (523) 44.6%	54270* (20241) 42.7%	181617 (39811) 75.9%	1313865 (210465) 86.8%	1549752 (208014) 82.4%
38	404* (151) 15.0%	552 (108) 57.7%	416* (139) 99.9%	1372 (274) 33.8%	28262* (10045) 27.0%	87394 (19039) 45.0%	460397* (129998) 100.0%	576054 (136633) 75.9%
39	1076* (507) 16.4%	437* (844) 54.7%	26* (19) 7.7%	1539* (1002) 20.0%	37522* (9902) 22.6%	98359* (196241) 65.8%	33998* (22428) 16.2%	169879* (194888) 32.4%
41	1120* (448) 25.4%	...	...	1120* (448) 22.7%	51164* (22333) 43.5%	...	...	51164* (22333) 25.7%
42	5580 (1081) 27.9%	1074* (276) 72.5%	35* (21) 43.3%	6690 (1044) 31.0%	198687 (42483) 40.7%	188289* (48689) 72.7%	44236* (34127) 59.1%	431212 (53746) 52.5%
45	239* (184) 7.4%	194* (194) 32.8%	110* (52) 75.1%	543* (267) 13.6%	16093* (11185) 20.8%	55275* (55275) 50.6%	195862* (58739) 74.1%	267229* (74531) 59.2%
48	2720* (1033) 18.5%	487* (229) 54.0%	19* (16) 56.8%	3227* (1037) 20.6%	116985* (51089) 27.5%	97634* (38714) 55.4%	37029* (29526) 52.8%	251648* (78521) 37.4%
49	4807* (1381) 58.5%	1523* (541) 81.8%	173* (99) 99.8%	6502* (1631) 63.4%	201247* (53549) 74.7%	381698* (149615) 89.7%	146565* (65566) 100.0%	729510 (181915) 86.7%
50	5979 (1427) 19.7%	1316* (375) 73.0%	...	7295 (1475) 22.7%	165338* (42130) 26.2%	182183* (50475) 64.3%	...	347522 (66656) 38.0%
51	2358* (809) 25.9%	...	...	2358* (809) 25.2%	62620* (22540) 33.8%	...	...	62620* (22540) 29.5%
55	2828* (1255) 14.9%	...	...	2828* (1255) 14.5%	70918* (35446) 22.9%	...	...	70918* (35446) 17.4%
72	3078* (1157) 14.9%	150* (88) 22.3%	...	3228* (1174) 15.1%	87450* (27973) 23.0%	18070* (10480) 22.0%	...	105519* (29715) 22.3%
73	2889 (588) 17.4%	689 (149) 46.3%	241* (135) 70.8%	3820 (642) 20.8%	97893* (33472) 23.2%	174354 (38036) 49.9%	238671* (117405) 72.6%	510918 (114097) 46.4%
75	3078* (1124) 11.8%	...	...	3078* (1124) 11.7%	56213* (17513) 13.6%	...	...	56213* (17513) 13.3%
76	1227* (649) 12.6%	36* (45) 29.4%	...	1263* (658) 12.8%	34152* (15392) 19.1%	12672* (15755) 52.1%	...	46824* (23058) 23.1%
80	1029* (434) 36.3%	1889 (253) 87.2%	2020 (273) 98.0%	4938 (588) 69.9%	50189* (16239) 49.4%	456277 (73910) 85.4%	2985058 (340832) 98.8%	3491524 (340406) 95.4%
ALL	89300 (4927) 20.0%	32406 (1119) 65.4%	8229 (431) 87.3%	129935 (5070) 25.7%	3304805 (127017) 30.0%	6829748 (198625) 69.9%	11262315 (486499) 90.4%	21396868 (484330) 64.3%

*Standard error >25% of the estimate. The estimate may be unreliable.
...No facilities observed.

FIGURE IV - 115
PLANTS WHICH REQUIRE WRITTEN REPORTS
OF SAFETY INSPECTIONS
(NOES 1981-1983)

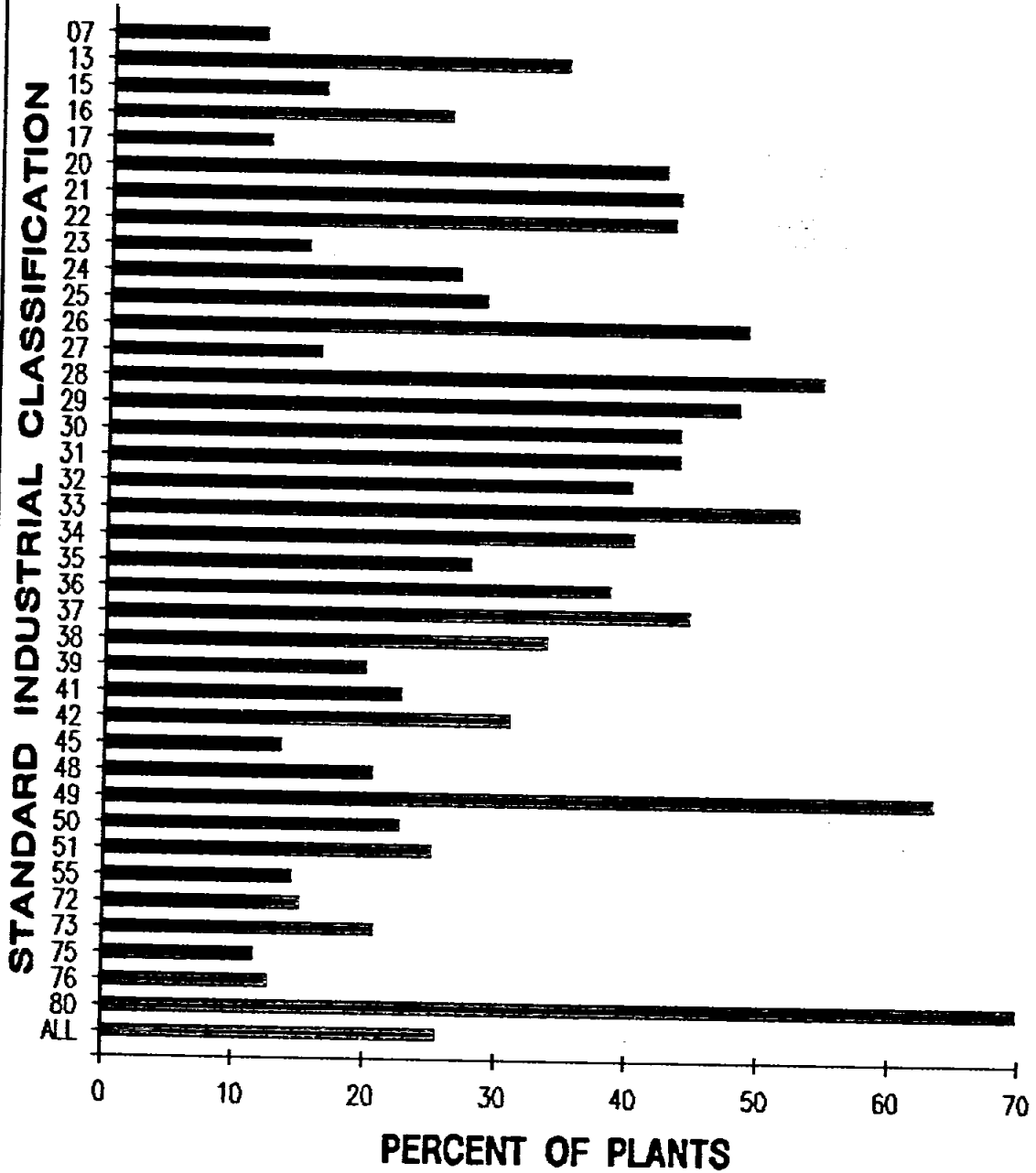


FIGURE IV - 116
WORKERS IN PLANTS WHICH REQUIRE WRITTEN
REPORTS OF SAFETY INSPECTIONS BY PLANT SIZE
(NOES 1981-1983)

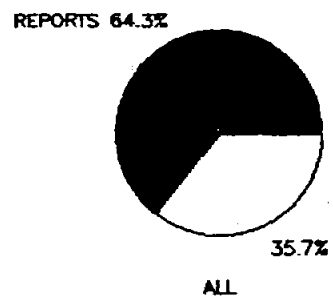
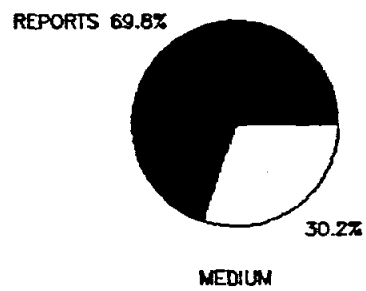
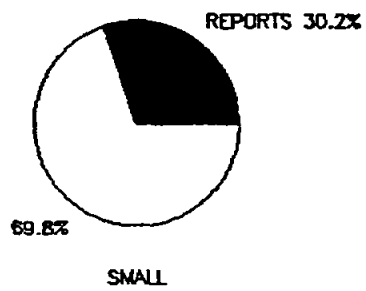
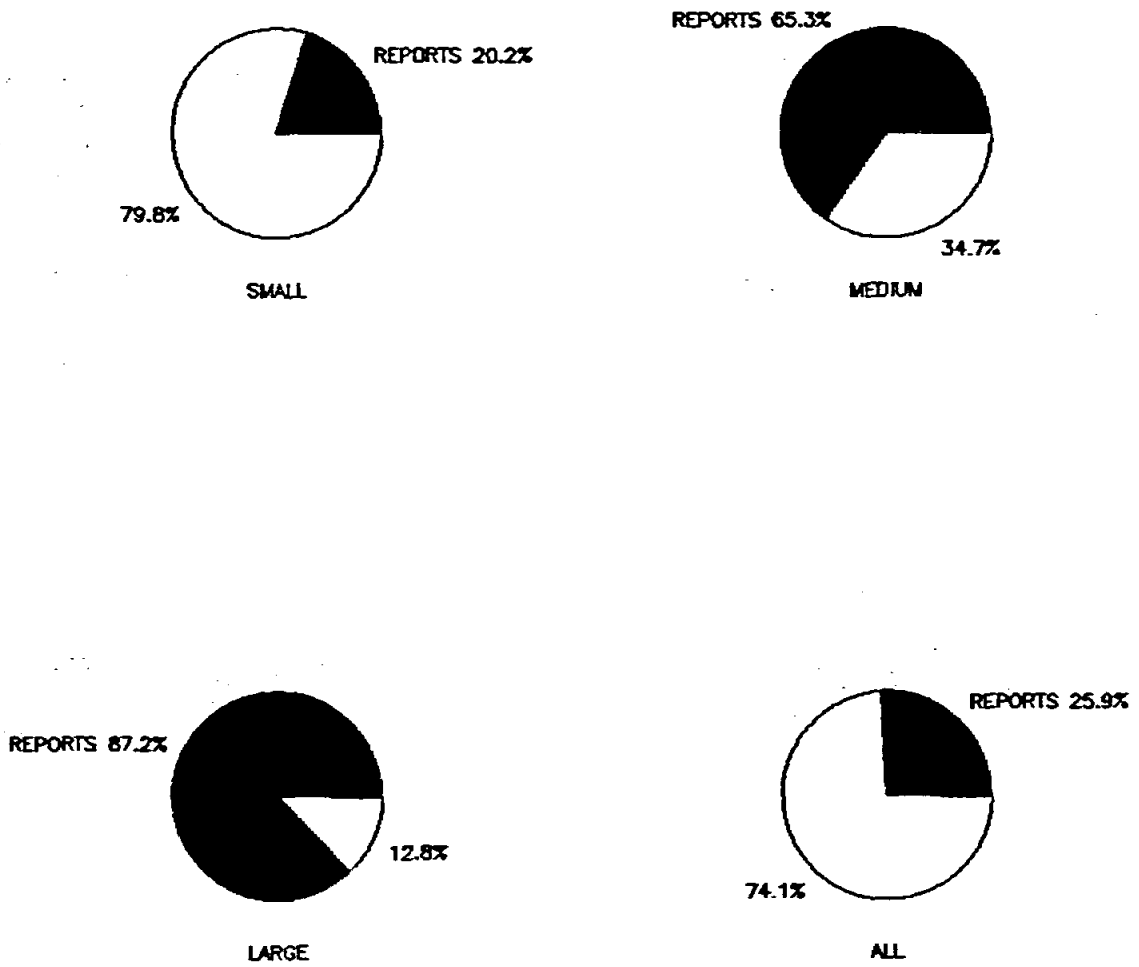


FIGURE IV - 117
PLANTS WHICH REQUIRE WRITTEN
REPORTS OF SAFETY INSPECTIONS
(NOES 1981-1983)



NOES QUESTIONNAIRE ITEM NO. 55
Results of Safety Inspections Routinely Made Available to Workers

Intent

The intent of this question was to determine whether affected employees are routinely provided with the results of safety inspections.

This item was displayed on the questionnaire as:

55. Are the results of the safety inspections posted or otherwise made routinely available to affected employees?

- 1 Yes
2 No

Notes

"Routinely available" safety inspections results were considered to be those reports provided to affected employees as a normal practice established by management policy. These reports can be written or oral or displayed in areas commonly used by workers, as long as they convey the results of a safety inspection.

An "affected employee" was a worker whose occupational environment was included in a safety inspection.

Posting government inspections or any other inspection not initiated by management did not meet the intent of this question.

Analysis

One analysis of the responses to question 55 is presented.

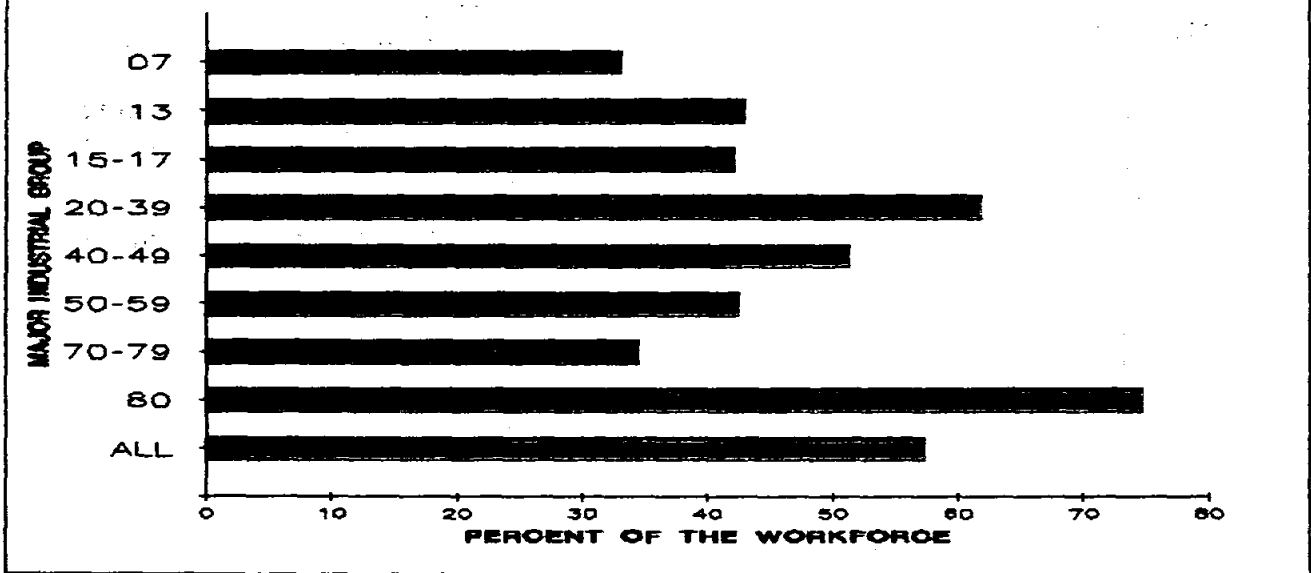
Response 55.1 - Safety inspection reports made available to workers

The estimates of the plants which routinely make safety inspection reports available to their employees, and workers in those plants (by number and proportion of the total) are displayed in Figures IV-118, IV-119, IV-120, IV-121, IV-122, and IV-123, and Tables IV-75 and IV-76.

- | | |
|---------------|--|
| Figure IV-118 | Workers in plants which make safety inspection reports available to employees
(by major industrial group) |
| Figure IV-119 | Workers in plants which make safety inspection reports available to employees
(by 2-digit SIC) |
| Figure IV-120 | Plants which make safety inspection reports available to employees
(by major industrial group) |
| Figure IV-121 | Plants which make safety inspection reports available to employees
(by 2-digit SIC) |

Figure IV-122	Workers in plants which provide safety inspection reports to employees by plant size
Figure IV-123	Plants which provide safety inspection reports to employees
Table IV-75	Number and percent of plants and employees in plants which make reports of safety inspections available to workers (by major industrial group)
Table IV-76	Number and percent of plants and employees in plants which make reports of safety inspections available to workers (by 2-digit SIC)

FIGURE IV - 118
WORKERS IN PLANTS WHICH MAKE SAFETY
INSPECTION REPORTS AVAILABLE TO EMPLOYEES
(NOES 1981-1983)



NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. IV-75

NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH
 MAKE REPORTS OF SAFETY INSPECTIONS AVAILABLE TO WORKERS

MAJOR GROUP	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
07	1325* (679) 23.8%	...	...	1325* (679) 23.5%	36891* (21268) 35.6%	...	...	36891* (21268) 33.3%
13	3375* (1217) 39.3%	294* (119) 28.9%	46* (52) 100.0%	3716* (1229) 38.5%	87713* (27544) 42.0%	59260* (25998) 34.1%	31383* (35291) 100.0%	178355* (55391) 43.1%
15-17	26408 (1683) 28.0%	2440 (429) 58.9%	133* (117) 54.8%	28980 (1658) 29.4%	707905 (50065) 33.7%	462618 (92666) 62.8%	127627* (81082) 54.1%	1298151 (117189) 42.3%
20-39	47243 (2872) 30.8%	19612 (1428) 61.8%	4898 (309) 78.1%	71753 (3387) 37.5%	1678217 (64790) 36.4%	4030695 (302258) 63.2%	6216075 (358587) 75.2%	11924988 (411764) 61.9%
40-49	16126 (1343) 30.3%	3226 (711) 55.2%	345* (108) 73.8%	19697 (1556) 33.1%	579816 (57858) 40.4%	652221* (164789) 56.6%	392804 (80071) 68.5%	1624841 (193144) 51.4%
50-59	18359 (2629) 31.4%	1385* (488) 52.1%	...	19745 (2701) 32.3%	441008 (63610) 39.2%	211541* (72794) 51.7%	...	652548 (101343) 42.6%
70-79	19285 (2566) 26.4%	846 (199) 36.1%	238* (133) 67.3%	20370 (2594) 26.9%	374732 (59748) 26.9%	172142 (41938) 37.1%	214220* (112578) 63.1%	761093 (126445) 34.6%
80	934* (412) 32.9%	1544 (199) 71.3%	1621 (225) 78.7%	4099 (536) 58.0%	43461* (15095) 42.8%	373498 (55203) 69.9%	2318379 (271015) 76.7%	2735338 (276811) 74.8%
ALL	133057 (5338) 29.6%	29347 (1749) 58.7%	7281 (438) 77.1%	169685 (5738) 33.4%	3949742 (138227) 35.6%	5961975 (371326) 60.5%	9300488 (478475) 74.6%	19212205 (571832) 57.5%

*Standard error >25% of the estimate. The estimate may be unreliable.
 ...No facilities observed.

FIGURE IV - 119
WORKERS IN PLANTS WHICH MAKE SAFETY
INSPECTION REPORTS AVAILABLE TO EMPLOYEES
(NOES 1981-1983)

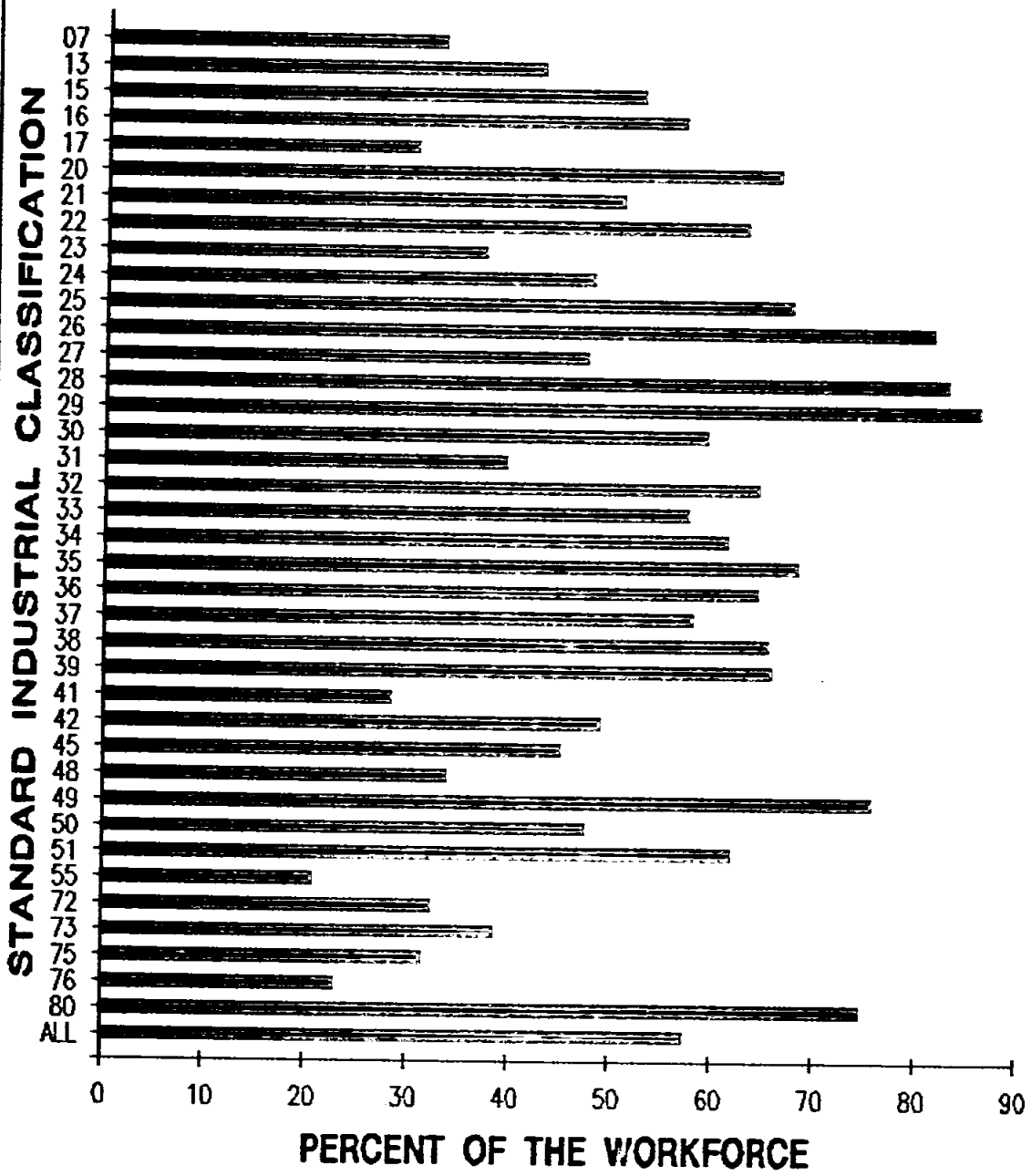
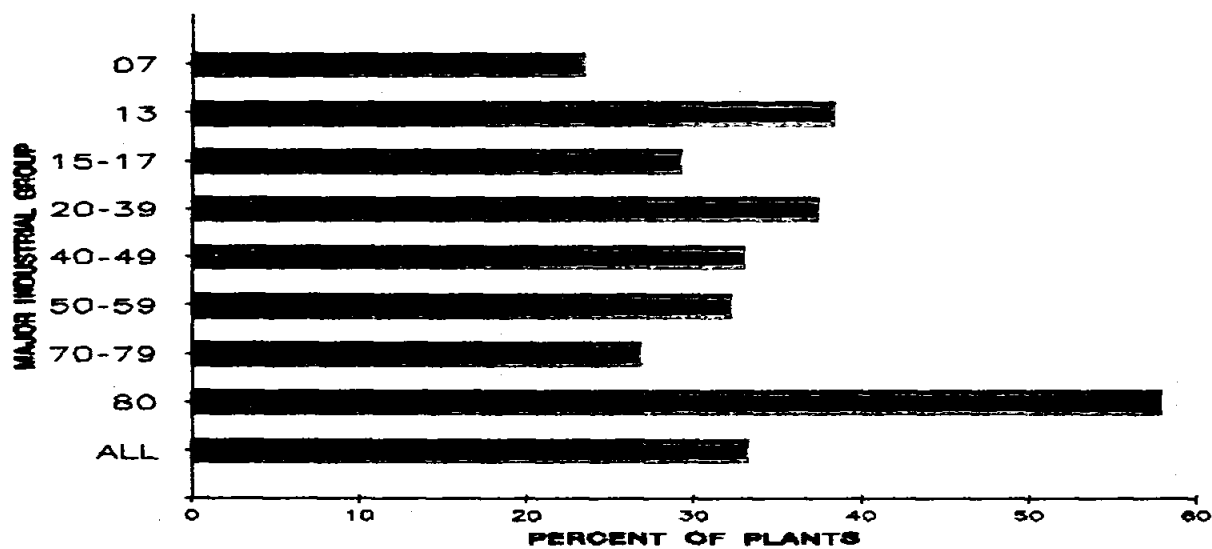


FIGURE IV - 120
PLANTS WHICH MAKE SAFETY INSPECTION
REPORTS AVAILABLE TO EMPLOYEES
(NOES 1981-1983)



NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH MAKE REPORTS OF SAFETY INSPECTIONS AVAILABLE TO WORKERS

SIC CODE	PLANTS			TOTAL	EMPLOYEES			TOTAL
	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)		SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	
07	1325* (679) 23.8%	...	...	1325* (679) 23.5%	36891* (21268) 35.6%	...	...	36891* (21268) 33.3%
13	3375* (1217) 39.3%	294* (119) 28.9%	46* (52) 100.0%	3716* (1229) 38.5%	87713* (27544) 42.0%	59260* (25998) 34.1%	31383* (35291) 100.0%	178355* (55391) 43.1%
15	8784 (1112) 35.3%	861 (210) 77.8%	94* (97) 69.6%	9739 (1163) 37.2%	237005 (27067) 42.1%	145209* (37613) 73.3%	91821* (67997) 68.1%	474035 (81578) 52.9%
16	4362 (848) 38.7%	819 (183) 73.2%	39* (48) 36.2%	5220 (867) 41.7%	132456 (30846) 46.6%	169917* (42609) 81.8%	35806* (31376) 35.4%	338180 (67597) 57.0%
17	13261 (1353) 22.8%	759* (273) 39.6%	...	14021 (1376) 23.3%	338443 (38783) 27.0%	147492* (58802) 44.5%	...	485935 (75976) 30.7%
20	4506 (596) 39.5%	2241 (375) 69.7%	464* (133) 83.0%	7210 (642) 47.5%	171301 (23593) 44.1%	476807 (83219) 70.8%	381457* (99665) 77.6%	1029565 (108792) 66.3%
21	30* (43) 100.0%	...	43* (34) 54.5%	73* (51) 67.3%	1866* (2685) 100.0%	...	56325* (44772) 50.2%	58191* (44417) 51.0%
22	475* (189) 16.2%	929 (130) 58.5%	257* (78) 85.9%	1661 (231) 34.5%	20309* (7913) 19.2%	209444 (32771) 60.3%	221651* (74573) 84.9%	451403 (76770) 63.2%
23	1181* (380) 9.4%	1026 (188) 33.1%	242* (93) 100.0%	2449 (424) 15.4%	37903* (17234) 8.9%	218275 (38524) 35.8%	208437* (79559) 100.0%	464615 (84340) 37.4%
24	2461 (474) 23.0%	653 (144) 56.9%	104* (74) 100.0%	3218 (517) 26.9%	84492 (16370) 27.8%	102184 (19521) 55.7%	92355* (52501) 100.0%	279031 (60746) 48.1%
25	1081* (410) 26.0%	748 (181) 70.4%	119* (75) 99.6%	1947* (501) 36.4%	38293* (17739) 27.5%	189044 (46539) 73.7%	122998* (62394) 100.0%	350335* (91539) 67.6%
26	2168* (677) 52.7%	1233 (220) 78.6%	205* (70) 95.6%	3606 (740) 61.2%	82452 (18690) 59.9%	232447 (50360) 82.6%	196027* (60369) 94.8%	510925 (88584) 81.6%
27	3541 (631) 19.5%	1297 (178) 69.2%	189* (86) 59.7%	5027 (659) 24.8%	139337 (26106) 29.1%	243427 (48816) 67.4%	181768* (68733) 52.6%	564532 (95522) 47.6%
28	3692 (582) 59.8%	1002 (113) 86.3%	339 (69) 89.3%	5033 (632) 65.3%	107320 (11432) 59.4%	229923 (30110) 88.2%	424859* (108411) 89.2%	762103 (119377) 83.0%
29	345* (232) 34.2%	259* (122) 88.3%	101* (42) 100.0%	705* (286) 50.2%	21404* (13620) 52.2%	52186* (19475) 82.5%	117545* (70259) 100.0%	191134* (80273) 86.2%
30	2411* (638) 35.9%	922* (300) 60.0%	147* (72) 65.7%	3480 (816) 41.1%	83192 (18666) 37.0%	179263* (56134) 60.9%	185926* (77041) 79.6%	448381 (82852) 59.5%
31	135* (80) 14.5%	199* (100) 35.0%	22* (20) 87.3%	356* (135) 23.4%	6795* (4435) 27.3%	51205* (26957) 37.8%	11650* (10428) 74.4%	69650* (31310) 39.6%
32	3496 (643) 39.7%	763 (159) 75.4%	144* (60) 78.0%	4402 (699) 44.0%	115037 (18379) 48.5%	159196 (34409) 76.2%	96654* (43227) 74.9%	370886 (53692) 64.5%
33	1890 (391) 45.7%	923 (200) 62.9%	229 (51) 68.0%	3042 (482) 51.2%	78566 (14641) 56.7%	197993 (34732) 63.6%	340660 (64535) 54.8%	617219 (62815) 57.6%

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
34	6751 (916) 36.5%	1974 (203) 63.2%	271* (73) 78.3%	8996 (878) 40.9%	236840 (21342) 42.7%	398699 (40030) 66.8%	288572* (83930) 82.2%	924111 (101385) 61.5%
35	7042 (913) 31.1%	2436 (179) 71.5%	683 (84) 87.1%	10161 (903) 37.9%	232654 (24417) 38.3%	463866 (29744) 70.2%	931342 (128677) 83.7%	1627861 (137531) 68.4%
36	2134* (749) 30.0%	1471 (177) 54.8%	460 (112) 58.5%	4065 (497) 38.4%	87759* (25082) 38.1%	343249 (33804) 62.1%	837263 (186830) 70.8%	1268271 (193930) 64.5%
37	1330* (472) 33.5%	692 (79) 58.2%	200 (45) 48.1%	2222 (497) 39.8%	53425* (21188) 42.1%	128490 (25104) 53.7%	910786 (164672) 60.2%	1092701 (177823) 58.1%
38	649* (374) 24.1%	442* (125) 46.2%	342* (121) 82.2%	1433* (415) 35.3%	31811* (11295) 30.4%	65761* (19288) 33.8%	400433* (121004) 87.0%	498004 (122479) 65.6%
39	1927* (665) 29.4%	402* (780) 50.4%	338* (216) 100.0%	2667* (1059) 34.7%	47462* (13873) 28.6%	89236* (180997) 59.7%	209369* (120490) 100.0%	346068* (166885) 66.0%
41	1532* (573) 34.7%	...	...	1532* (573) 31.1%	56913* (21941) 48.4%	...	...	56913* (21941) 28.6%
42	5774 (1055) 28.8%	943* (295) 63.6%	68* (52) 82.6%	6785 (1048) 31.4%	194272 (41081) 39.8%	155313* (47102) 60.0%	54925* (46095) 73.4%	404511 (62900) 49.2%
45	384* (200) 11.8%	75* (75) 12.8%	101* (48) 69.0%	561* (210) 14.1%	19710* (10449) 25.4%	7769* (7769) 7.1%	176638* (60475) 66.8%	204117* (58857) 45.3%
48	2386* (939) 16.2%	643* (161) 71.3%	19* (16) 56.8%	3048* (951) 19.5%	75331* (26564) 17.7%	116603* (37646) 66.1%	37029* (29526) 52.8%	228963* (58357) 34.1%
49	5317 (1299) 64.7%	1398* (520) 75.1%	124* (84) 71.8%	6840 (1526) 66.7%	201881 (50166) 74.9%	330273* (145489) 77.6%	106202* (52554) 72.5%	638355* (170199) 75.9%
50	10043 (1431) 33.1%	1148* (408) 63.7%	...	11191 (1508) 34.8%	251123 (40913) 39.8%	184528* (68295) 65.1%	...	435651 (85634) 47.7%
51	4272 (883) 46.9%	237* (237) 100.0%	...	4509 (1020) 48.2%	104659* (26973) 56.6%	27013* (27013) 100.0%	...	131672* (46207) 62.1%
55	4045* (1456) 21.4%	...	...	4045* (1456) 20.7%	85225* (35528) 27.6%	...	...	85225* (35528) 20.9%
72	5753 (1368) 27.9%	319* (135) 47.2%	...	6071 (1409) 28.5%	113126* (28654) 29.8%	41058* (18191) 49.9%	...	154184 (35378) 32.6%
73	4046 (805) 24.4%	492* (132) 33.0%	238* (133) 69.8%	4776 (808) 26.0%	93979* (27507) 22.3%	118411* (33691) 33.9%	214220* (112578) 65.1%	426610* (114200) 38.8%
75	8187* (2057) 31.3%	...	...	8187* (2057) 31.2%	133503 (31199) 32.3%	...	...	133503 (31199) 31.7%
76	1300* (643) 13.3%	36* (45) 29.4%	...	1336* (663) 13.5%	34124* (14519) 19.1%	12672* (15755) 52.1%	...	46796* (24825) 23.1%
80	934* (412) 32.9%	1544 (199) 71.3%	1621 (225) 78.7%	4099 (536) 58.0%	43461* (15095) 42.8%	373498 (55203) 69.9%	2318379 (271015) 76.7%	2735338 (276811) 74.8%
ALL	132324 (5532) 29.6%	29207 (919) 58.9%	7265 (262) 77.1%	168795 (5826) 33.4%	3918033 (138944) 35.5%	5928802 (186731) 60.7%	9291483 (447588) 74.6%	19138317 (427419) 57.5%

*Standard error >25% of the estimate. The estimate may be unreliable.
 ...No facilities observed.

FIGURE IV - 121
PLANTS WHICH MAKE SAFETY INSPECTION
REPORTS AVAILABLE TO EMPLOYEES
 (NOES 1981-1983)

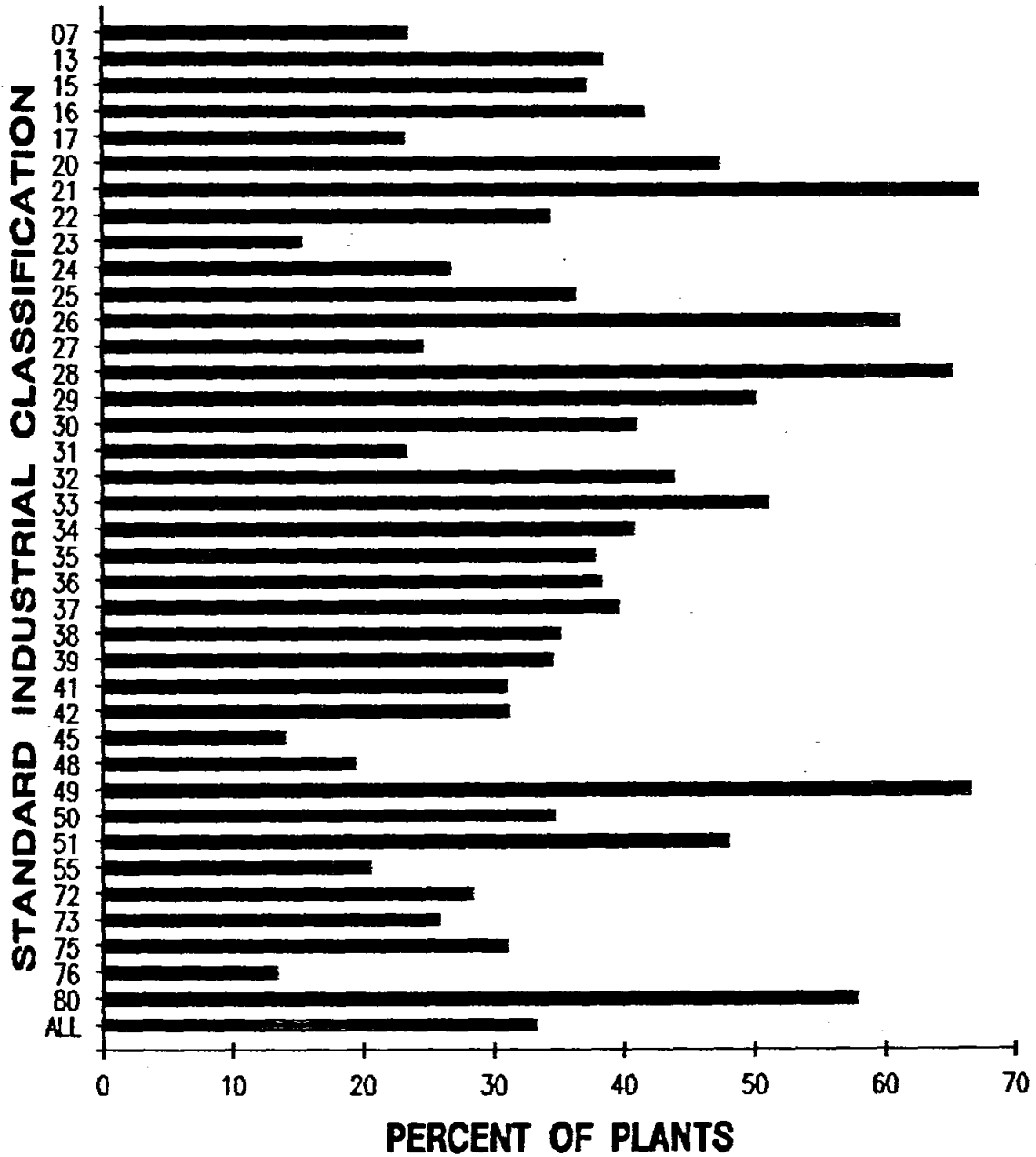


FIGURE IV - 122
WORKERS IN PLANTS WHICH PROVIDE SAFETY
INSPECTION REPORTS TO EMPLOYEES BY PLANT SIZE
(NOES 1981-1983)

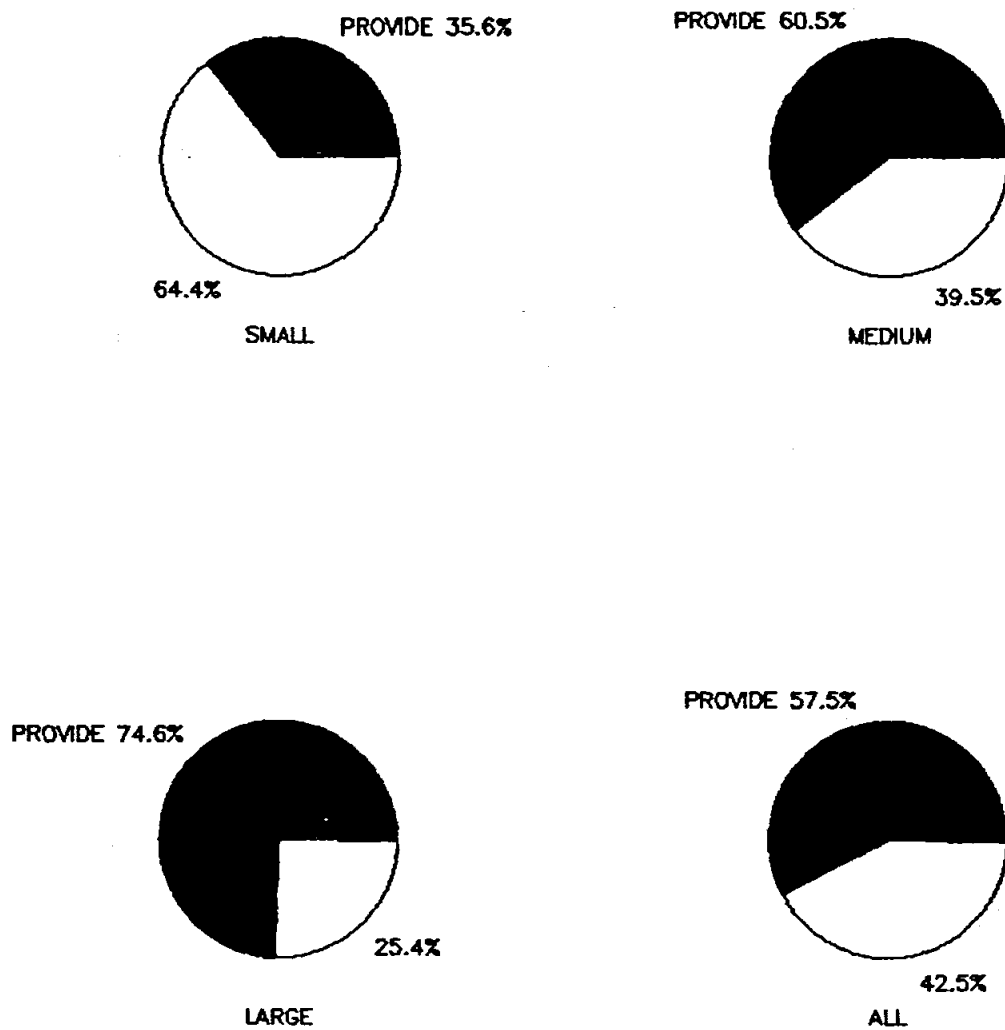
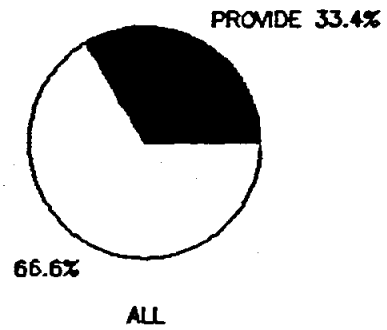
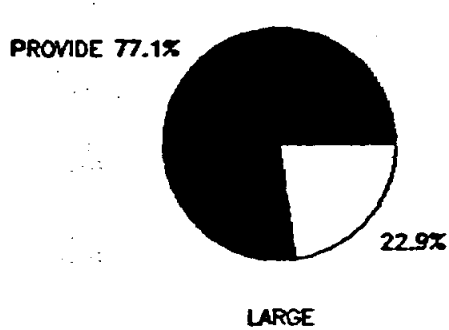
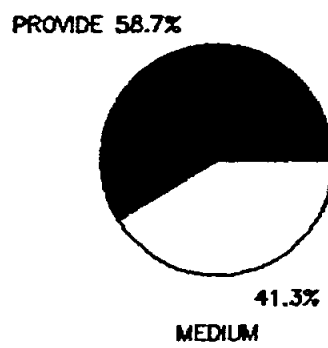
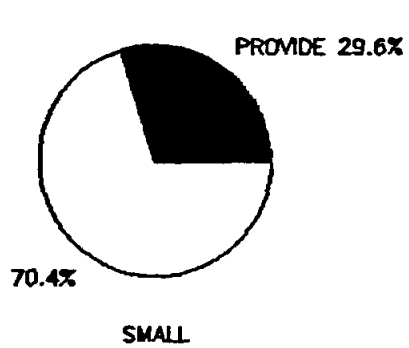


FIGURE IV - 123
PLANTS WHICH PROVIDE SAFETY INSPECTION
REPORTS TO EMPLOYEES
(NOES 1981-1983)



**NOES QUESTIONNAIRE ITEM NO. 56
Plants Which Have a Regular Preventive Maintenance Program**

Intent

The intent of this question was to determine whether the facility had a regularly scheduled preventive maintenance program.

This item was displayed on the questionnaire as:

56. Do you have a regularly scheduled preventive maintenance program?

- 1 Yes
- 2 No

Notes

A preventive maintenance program was considered to be a management-initiated process of inspection and corrective action or repair intended to precede any actual failure of the physical structure or related equipment of the facility.

A program which involved preventive inspections at intervals of three or more years did not meet the criteria for a regularly scheduled preventive maintenance program.

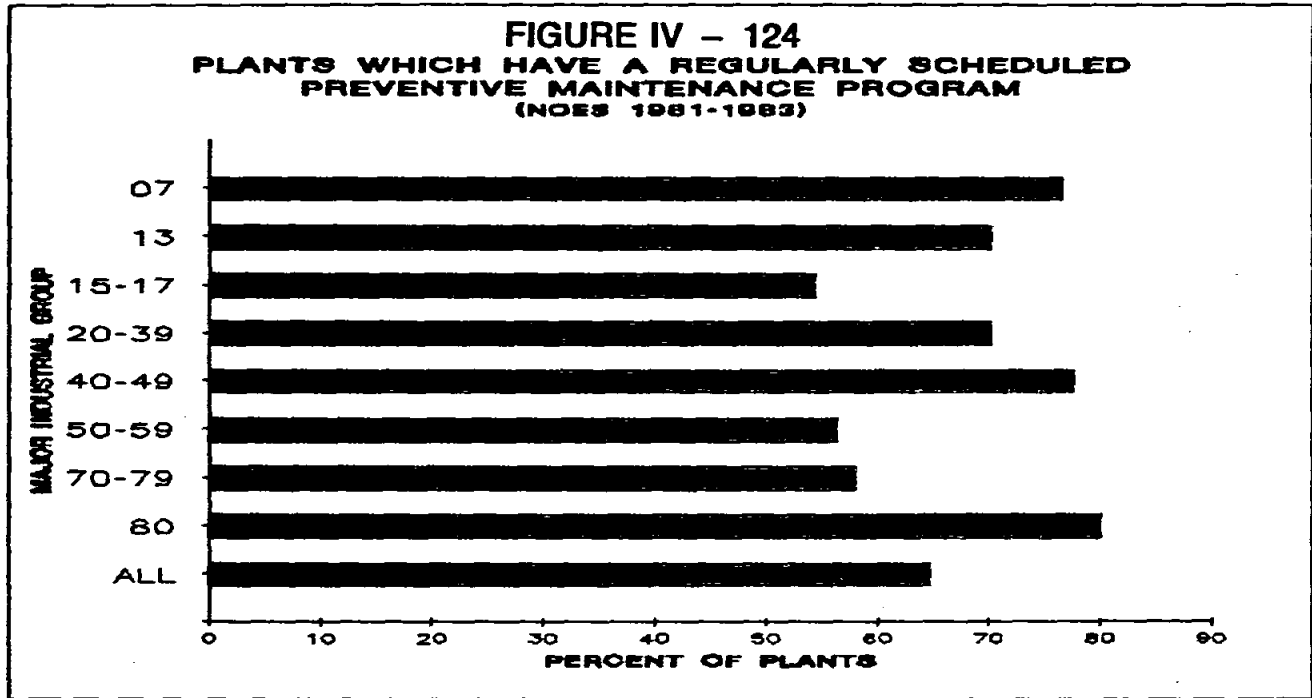
Analysis

One analysis of the responses to question 56 is presented

Response 56.1 - Existence of a regularly scheduled preventive maintenance program

The estimates of the plants which have a regularly scheduled program for the preventive inspection of the facility and its equipment, and workers in those plants (by number and proportion of the total) are displayed in Figures IV-124, IV-125, IV-126, and IV-127, and Tables IV-77 and IV-78.

Figure IV-124	Plants which have a regularly scheduled preventive maintenance program (by major industrial group)
Figure IV-125	Plants which have a regularly scheduled preventive maintenance program (by 2-digit SIC)
Figure IV-126	Workers in plants which have a preventive maintenance program by plant size
Figure IV-127	Plants which have a scheduled preventive maintenance program
Table IV-77	Number and percent of plants and employees in plants which have a regularly scheduled preventive maintenance program (by major industrial group)
Table IV-78	Number and percent of plants and employees in plants which have a regularly scheduled preventive maintenance program (by 2-digit SIC)



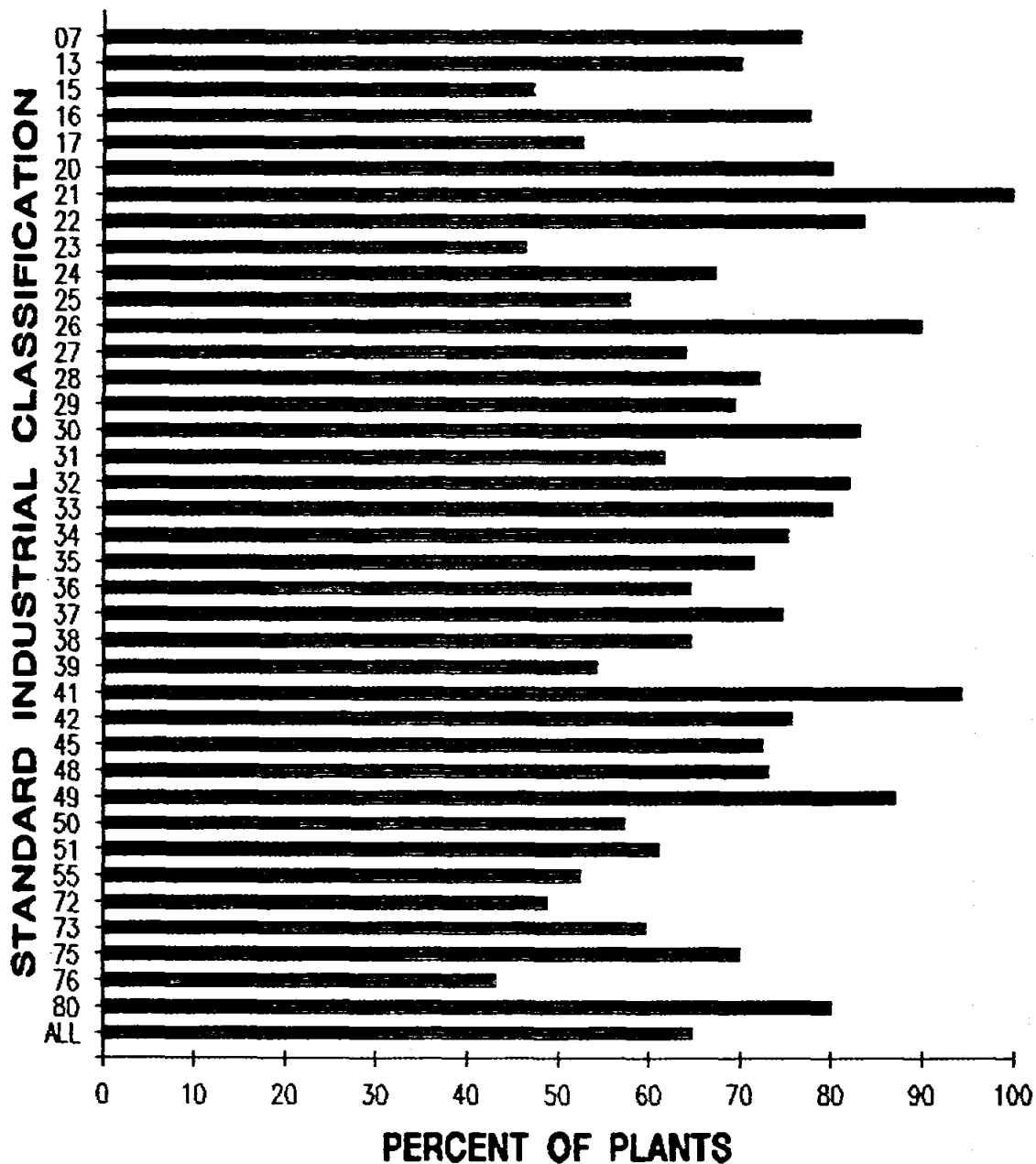
NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. IV-77

NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH
HAVE A REGULARLY SCHEDULED PREVENTIVE MAINTENANCE PROGRAM

MAJOR GROUP	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
07	4257* (1285) 76.5%	70* (67) 100.0%	...	4327* (1268) 76.8%	81088* (25991) 78.2%	7009* (6680) 100.0%	...	88097* (24752) 79.6%
13	5995 (1474) 69.7%	765* (286) 75.1%	46* (52) 100.0%	6806 (1664) 70.4%	146839 (33445) 70.3%	133042* (46661) 76.5%	31383* (35291) 100.0%	311264* (93720) 75.1%
15-17	50630 (2605) 53.7%	3086 (476) 74.4%	178* (119) 73.5%	53894 (2604) 54.6%	1238766 (57589) 59.0%	577450 (95574) 78.3%	182994* (91835) 77.5%	1999210 (134999) 65.1%
20-39	102024 (3503) 66.6%	26554 (1724) 83.6%	5825 (215) 92.9%	134403 (4134) 70.3%	3233687 (84076) 70.1%	5424547 (327931) 85.0%	7862371 (260958) 95.1%	16520605 (510735) 85.8%
40-49	40401 (2533) 76.0%	5388 (981) 92.2%	468* (134) 100.0%	46257 (3123) 77.8%	1166734 (97005) 81.4%	1073811 (216660) 93.1%	573743 (106392) 100.0%	2814288 (284905) 89.0%
50-59	32501 (2688) 55.7%	2016* (561) 75.8%	...	34518 (2684) 56.5%	720214 (65284) 64.1%	303574* (85969) 74.3%	...	1023788 (114157) 66.8%
70-79	42048 (3088) 57.5%	1830 (260) 78.0%	269* (138) 76.0%	44147 (3142) 58.2%	834403 (66288) 59.9%	359272 (51521) 77.3%	264910* (113487) 78.0%	1458586 (127398) 66.4%
80	1894* (607) 66.7%	1766 (263) 81.5%	2009 (315) 97.5%	5670 (600) 80.2%	81519 (18741) 80.2%	448227 (75551) 83.9%	2969976 (368653) 98.3%	3499721 (361883) 95.7%
ALL	279751 (6814) 62.3%	41475 (2167) 82.9%	8796 (446) 93.2%	330021 (7445) 64.9%	7503250 (174919) 67.7%	8326932 (426134) 84.5%	11885378 (487731) 95.3%	27715559 (727917) 83.0%

*Standard error >25% of the estimate. The estimate may be unreliable.
...No facilities observed.

FIGURE IV - 125
PLANTS WHICH HAVE A REGULARLY SCHEDULED
PREVENTIVE MAINTENANCE PROGRAM
(NOES 1981-1983)



NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH HAVE A REGULARLY SCHEDULED PREVENTIVE MAINTENANCE PROGRAM

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	TOTAL
07	4257* (1285) 76.5%	70* (67) 100.0%	...	4327* (1268) 76.8%	81088* (25991) 78.2%	7009* (6680) 100.0%	...	88097* (24752) 79.6%
13	5995 (1474) 69.7%	765* (286) 75.1%	46* (52) 100.0%	6806 (1664) 70.4%	146839 (33445) 70.3%	133042* (46661) 76.5%	31383* (35291) 100.0%	311264* (93720) 75.1%
15	11293 (1293) 45.3%	1019 (204) 92.1%	106* (98) 78.8%	12419 (1342) 47.5%	275694 (28615) 49.0%	182342 (40941) 92.0%	103397* (67194) 76.7%	561434 (75343) 62.7%
16	8587 (1396) 76.1%	1074 (206) 96.0%	72* (48) 66.9%	9733 (1335) 77.8%	222407 (47750) 78.3%	203272 (45391) 97.8%	79597* (46726) 78.6%	505276 (74531) 85.2%
17	30749 (2080) 52.9%	992* (352) 51.7%	...	31741 (2196) 52.9%	740664 (39922) 59.2%	191836* (73159) 57.9%	...	932500 (82691) 58.9%
20	8587 (792) 75.2%	3055 (454) 95.0%	559 (121) 100.0%	12202 (819) 80.3%	312096 (17641) 80.3%	649225 (105481) 96.4%	491775 (104930) 100.0%	1453096 (105601) 93.5%
21	30* (43) 100.0%	...	79* (56) 99.6%	109* (65) 100.0%	1866* (2685) 100.0%	...	112133* (67572) 100.0%	113999* (66861) 100.0%
22	2327 (404) 79.4%	1409 (146) 88.7%	295* (80) 98.7%	4032 (428) 83.7%	83505 (10500) 78.8%	317274 (25009) 91.4%	258387* (94273) 99.0%	659165 (89349) 92.3%
23	5340 (921) 42.7%	1890 (286) 60.9%	147* (68) 60.7%	7377 (1024) 46.5%	197458 (35392) 46.6%	395081 (53185) 64.8%	143575* (61571) 68.9%	736114 (82290) 59.3%
24	7024 (858) 65.6%	931 (160) 81.1%	104* (74) 100.0%	8059 (870) 67.4%	221071 (25041) 72.8%	137120 (26850) 74.7%	92355* (52501) 100.0%	450545 (81654) 77.7%
25	2139 (421) 51.4%	925 (186) 87.1%	30* (31) 25.2%	3094 (406) 57.9%	69291 (14436) 49.8%	225787 (50059) 88.0%	50849* (32821) 41.3%	345927 (56021) 66.7%
26	3701 (827) 90.0%	1390 (239) 88.6%	214* (73) 100.0%	5305 (851) 90.0%	116865 (22994) 84.9%	247960 (49418) 88.1%	206864* (65220) 100.0%	571690 (88906) 91.3%
27	10977 (1088) 60.6%	1762 (167) 94.1%	298* (113) 94.2%	13037 (1084) 64.2%	320652 (32071) 67.1%	334283 (44106) 92.6%	326636 (81330) 94.5%	981571 (105571) 82.8%
28	4189 (580) 67.9%	1002 (122) 86.4%	380 (63) 100.0%	5571 (589) 72.2%	123053 (12524) 68.1%	233313 (31357) 89.4%	476341 (101388) 100.0%	832707 (107885) 90.7%
29	584* (289) 57.8%	293* (125) 100.0%	101* (42) 100.0%	978* (351) 69.6%	34715* (17013) 84.7%	63255* (21394) 100.0%	117545* (70259) 100.0%	215515* (82016) 97.2%
30	5476 (921) 81.6%	1370* (362) 89.1%	208* (78) 92.7%	7053 (1036) 83.3%	181632 (22287) 80.7%	267875* (79555) 91.0%	224823* (75600) 96.2%	674331 (108965) 89.5%
31	475* (233) 51.0%	444* (115) 78.0%	25* (24) 100.0%	944* (299) 61.9%	16239* (6684) 65.2%	98972* (27608) 73.1%	15664* (16901) 100.0%	130875* (34005) 74.4%
32	7132 (1175) 81.1%	903 (162) 89.2%	184* (71) 99.9%	8219 (1215) 82.2%	211020 (17459) 89.0%	191744 (33909) 91.8%	128993* (49687) 100.0%	531757 (47222) 92.5%
33	3197 (384) 77.3%	1240 (171) 84.5%	327 (55) 97.0%	4764 (403) 80.2%	113200 (12790) 81.8%	270447 (38306) 86.9%	609910 (74715) 98.1%	993557 (83804) 92.8%

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
34	13517 (1044) 73.0%	2749 (210) 88.1%	320* (80) 92.6%	16586 (1012) 75.4%	405481 (18387) 73.1%	530089 (37150) 88.6%	332357* (99526) 94.7%	1267927 (118602) 84.4%
35	15541 (1196) 68.6%	2984 (179) 87.6%	702 (79) 89.5%	19227 (1208) 71.6%	408417 (22492) 67.3%	583932 (24164) 88.3%	1020084 (137469) 91.7%	2012433 (139335) 84.5%
36	4131 (734) 58.1%	1959 (214) 73.0%	759 (161) 96.4%	6848 (735) 64.8%	172559 (20020) 74.9%	409444 (53410) 74.1%	1155014 (191838) 97.7%	1737017 (206285) 86.4%
37	2896 (702) 72.9%	890 (182) 74.8%	395 (90) 94.9%	4181 (737) 74.9%	94585 (16672) 74.5%	199774 (39524) 83.5%	1461127 (228808) 96.5%	1755486 (220612) 93.4%
38	1533* (474) 57.0%	740 (115) 77.3%	361* (126) 86.7%	2633 (500) 64.8%	61322 (14131) 58.6%	148253 (28131) 76.3%	428568* (127647) 93.1%	638144 (146583) 84.0%
39	3227 (690) 49.2%	618* (1180) 77.5%	338* (216) 100.0%	4183* (1389) 54.4%	88661 (16518) 53.4%	120718* (231074) 80.8%	209369* (120490) 100.0%	418748* (220509) 79.8%
41	4155 (1015) 94.0%	510* (178) 100.0%	...	4665 (1077) 94.6%	113291 (25274) 96.3%	81542* (35755) 100.0%	...	194833* (48774) 97.8%
42	14905 (1935) 74.4%	1369 (291) 92.4%	82* (54) 99.5%	16356 (1957) 75.8%	383692 (51225) 78.7%	233984 (46306) 90.4%	74830* (49333) 100.0%	692506 (58300) 84.3%
45	2151* (770) 66.4%	590* (397) 99.9%	147* (57) 100.0%	2888* (838) 72.6%	57964* (20678) 74.8%	109332* (75829) 100.0%	264255* (77656) 100.0%	431551 (102028) 95.7%
48	10603 (1710) 72.1%	808 (168) 89.6%	34* (21) 99.0%	11445 (1745) 73.2%	324542 (74003) 76.2%	155308 (37668) 88.1%	70083* (43687) 100.0%	549934 (92049) 81.8%
49	7077 (1655) 86.1%	1699* (556) 91.2%	173* (99) 99.8%	8948 (1936) 87.3%	246278 (57811) 91.4%	404704* (151048) 95.1%	146565* (65566) 100.0%	797547 (190186) 94.8%
50	16697 (1860) 55.0%	1779* (483) 98.7%	...	18476 (2014) 57.5%	410330 (55669) 65.1%	276561* (82009) 97.6%	...	686891 (111770) 75.2%
51	5494 (1033) 60.3%	237* (237) 100.0%	...	5731 (1138) 61.3%	115332 (27375) 62.3%	27013* (27013) 100.0%	...	142345* (45437) 67.1%
55	10311 (2063) 54.5%	...	...	10311 (2063) 52.7%	194552 (44409) 63.0%	...	...	194552 (44409) 47.7%
72	9779 (1660) 47.4%	675* (190) 100.0%	...	10455 (1698) 49.0%	214216 (33010) 56.4%	82220* (24190) 100.0%	...	296436 (37219) 62.7%
73	9673 (1609) 58.4%	1059 (187) 71.1%	269* (138) 78.9%	11001 (1658) 59.8%	236110 (35959) 56.0%	256141 (45767) 73.2%	264910* (113487) 80.5%	757162 (124441) 68.8%
75	18355 (2921) 70.1%	59* (60) 99.7%	...	18413 (2925) 70.2%	295896 (52191) 71.6%	8238* (8380) 100.0%	...	304134 (52690) 72.2%
76	4241 (954) 43.5%	36* (45) 29.4%	...	4277 (970) 43.3%	88181 (18763) 49.4%	12672* (15755) 52.1%	...	100854* (27954) 49.7%
80	1894* (607) 66.7%	1766 (263) 81.5%	2009 (315) 97.5%	5670 (600) 80.2%	81519 (18741) 80.2%	448227 (75551) 83.9%	2969976 (368653) 98.3%	3499721 (361883) 95.7%
ALL	278241 (8225) 62.3%	41110 (1021) 83.0%	8779 (418) 93.2%	328131 (418) 64.9%	7462282 (149622) 67.7%	8253597 (163959) 84.4%	11876372 (490896) 95.3%	27592252 (567187) 83.0%

*Standard error >25% of the estimate. The estimate may be unreliable.
...No facilities observed.

FIGURE IV - 126
WORKERS IN PLANTS WHICH HAVE A PREVENTIVE
MAINTENANCE PROGRAM BY PLANT SIZE
(NOES 1981-1983)

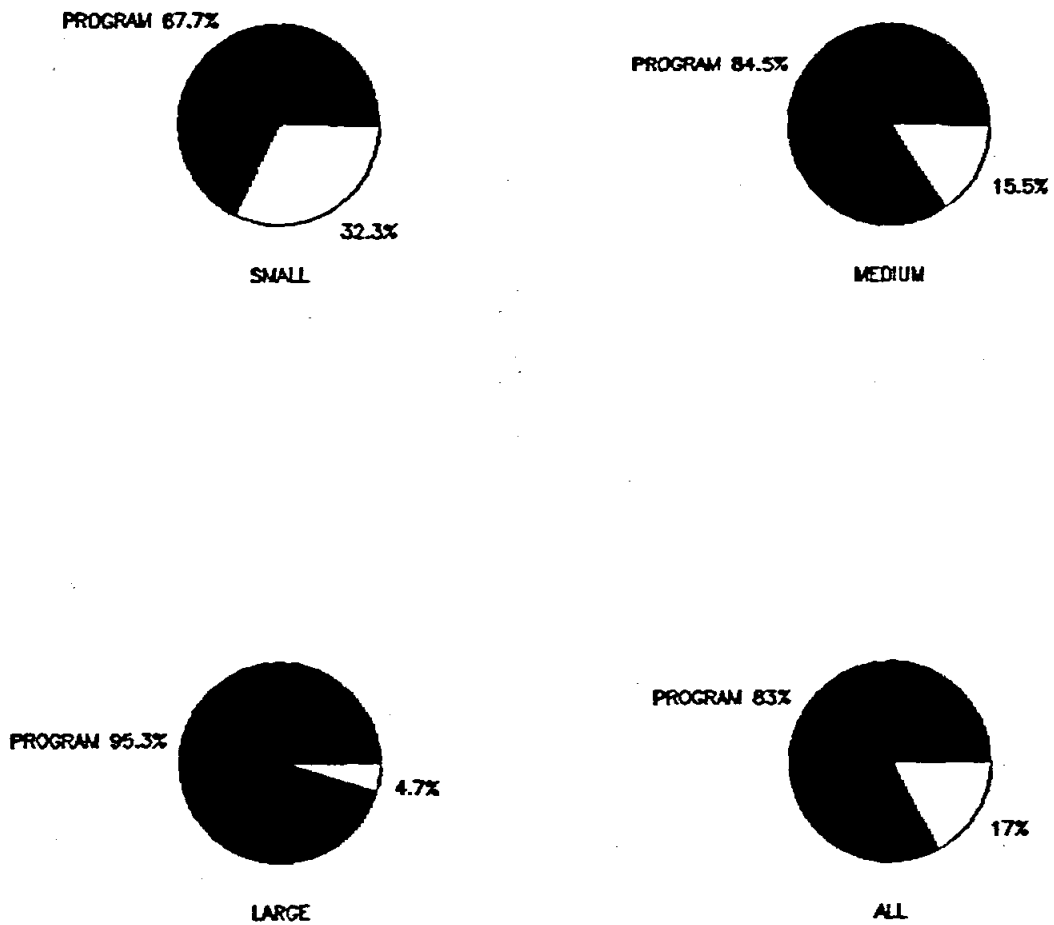


FIGURE IV - 127
PLANTS WHICH HAVE A SCHEDULED
PREVENTIVE MAINTENANCE PROGRAM
(NOES 1981-1983)

