

**NOES QUESTIONNAIRE ITEM NO. 12
Workers in Non-Administrative Areas**

Intent

The intent of this question was to determine the number of employees in the surveyed facility working in those locations where production or service work is conducted.

This item was displayed on the questionnaire as:

12. Of this total number, how many are normally in the work areas as opposed to the administrative or other areas?

Notes

"Work area" was defined as that location or locations where the production or service activities of the surveyed facility take place.

Personnel located in the work area as a consequence of their job were included in this response even if their tasks did not relate directly to the product(s) or service(s) of the facility.

Personnel normally employed outside the work area, such as administrative or clerical staff, were excluded.

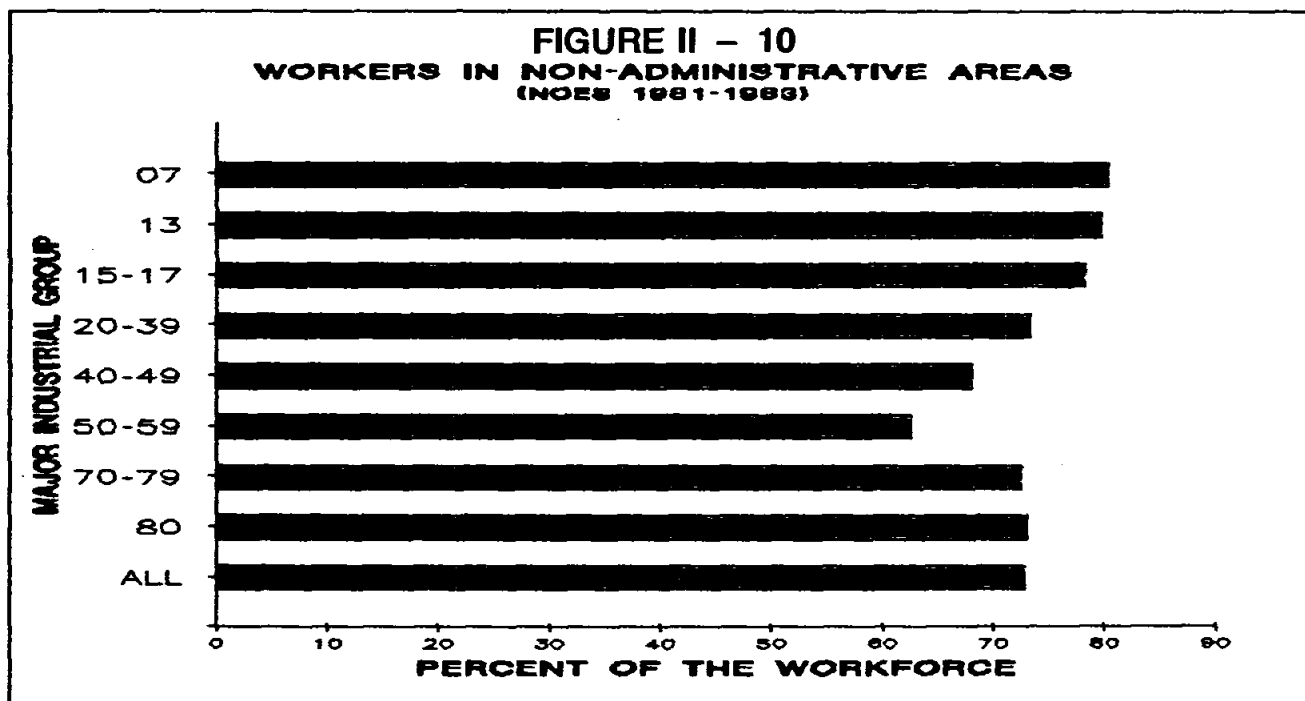
Analysis

One analysis of the responses to question 12 is presented.

Response 12 - Number of employees in work area

The estimated number and proportion of workers whose normal employment is in the production or service areas of their place of employment are displayed in Figures II-10 and II-11, and Tables II-7 and II-8.

Figure II-10	Workers in non-administrative areas (by major industrial group)
Figure II-11	Workers in non-administrative areas (by 2-digit SIC)
Table II-7	Estimated number and percent of workers in non-administrative areas by industry and plant size (by major industrial group)
Table II-8	Estimated number and percent of workers in non-administrative areas by industry and plant size (by 2-digit SIC)



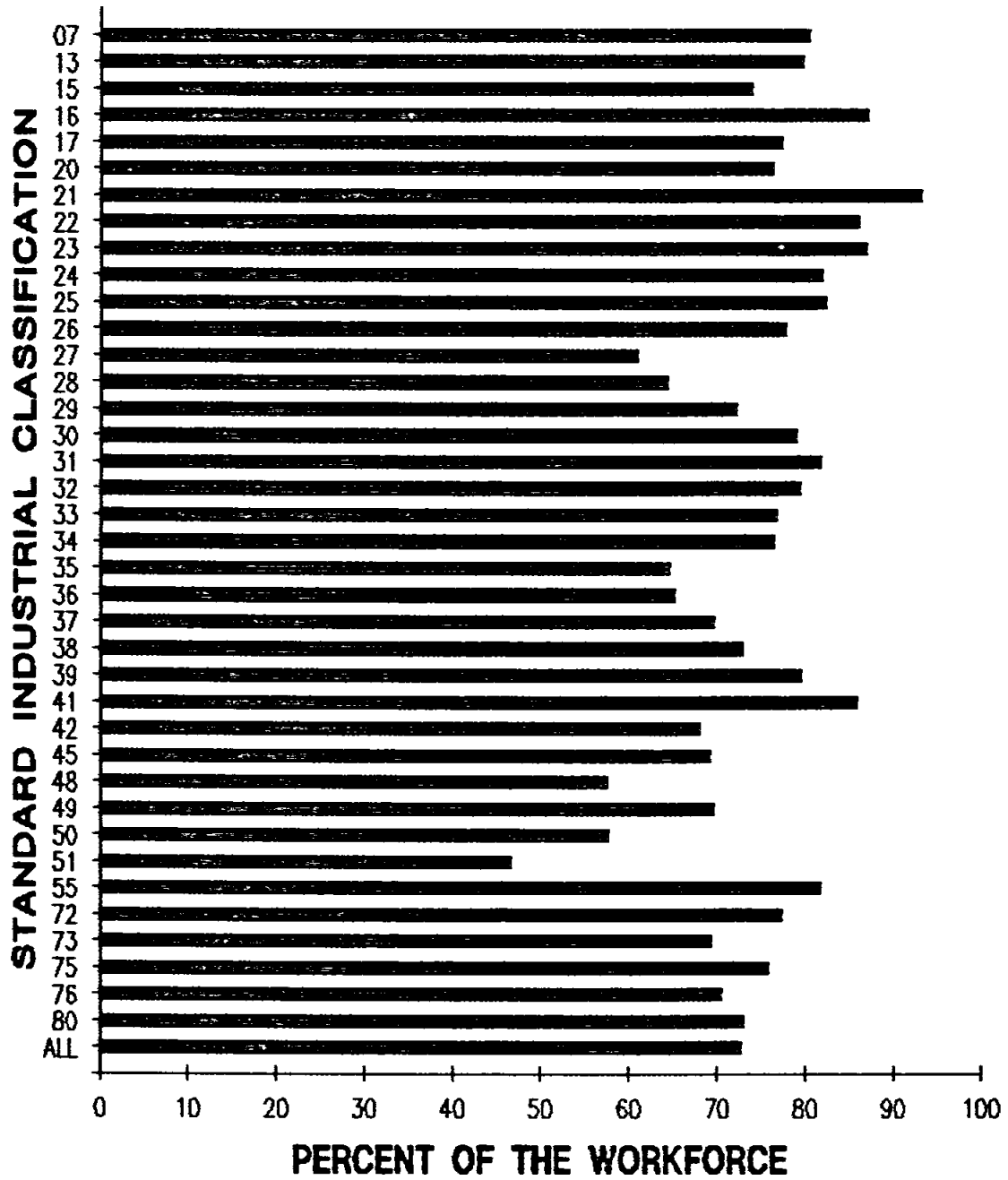
NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. II-7

ESTIMATED NUMBER AND PERCENT OF WORKERS IN NON-ADMINISTRATIVE AREAS BY INDUSTRY AND PLANT SIZE

MAJOR GROUP	PLANT SIZE			ALL
	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	
07	82460* (24504) 79.5%	6729* (6413) 96.0%	...	89189* (23190) 80.6%
13	158241* (39952) 75.7%	142602* (47384) 82.0%	29998* (33734) 95.6%	330841* (91202) 79.9%
15-17	1599480 (25109) 76.2%	602947 (92666) 81.8%	209118* (95174) 88.6%	2411545 (116199) 78.5%
20-39	3502076 (39557) 75.9%	4850656 (319643) 76.0%	5801742 (166695) 70.2%	14154473 (383537) 73.5%
40-49	962377 (74066) 67.1%	845024 (155918) 73.3%	350152 (78482) 61.0%	2157553 (197211) 68.3%
50-59	701309 (60163) 62.4%	260823* (76355) 63.8%	...	962132 (100032) 62.8%
70-79	1038362 (59178) 74.5%	354350 (50570) 76.3%	203703* (79030) 60.0%	1596415 (100102) 72.7%
80	75709 (18843) 74.5%	413929 (62989) 77.4%	2189972 (258913) 72.5%	2679610 (261562) 73.2%
ALL	8120013 (131736) 73.3%	7477059 (386924) 75.8%	8784685 (342672) 70.5%	24381758 (544786) 73.0%

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

FIGURE II - 11
WORKERS IN NON-ADMINISTRATIVE AREAS
 (NOES 1981-1983)



ESTIMATED NUMBER AND PERCENT OF WORKERS IN NON-ADMINISTRATIVE AREAS BY INDUSTRY AND PLANT SIZE

SIC CODE	PLANT SIZE			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	ALL
07	82460* (24504) 79.5%	6729* (6413) 96.0%	...	89189* (23190) 80.6%
13	158241* (39952) 75.7%	142602* (47384) 82.0%	29998* (33734) 95.6%	330841* (91202) 79.9%
15	407642 (32985) 72.4%	140780 (32766) 71.0%	116410* (69509) 86.4%	664833 (77837) 74.2%
16	235993 (39340) 83.1%	189268 (40625) 91.1%	92708* (49639) 91.6%	517969 (77674) 87.3%
17	955844 (26841) 76.4%	272899 (65484) 82.4%	...	1228744 (64748) 77.6%
20	288261 (8222) 74.2%	516059 (83131) 76.6%	383947 (85446) 78.1%	1188267 (97089) 76.5%
21	1519* (2267) 81.4%	...	104880* (62569) 93.5%	106399* (62989) 93.3%
22	91074 (5245) 85.9%	292948 (23113) 84.4%	231300* (88623) 88.6%	615322 (84348) 86.2%
23	371496 (9897) 87.6%	545483 (29664) 89.4%	165257* (65322) 79.3%	1082236 (72913) 87.1%
24	242103 (20529) 79.7%	153807 (20569) 83.8%	79820* (45136) 86.4%	475730 (65211) 82.1%
25	110544 (16215) 79.5%	221023 (34399) 86.2%	96972* (51166) 78.8%	428539 (64362) 82.6%
26	108158 (13917) 78.6%	220683 (41083) 78.4%	159260* (50944) 77.0%	488101 (71122) 78.0%
27	318843 (14170) 66.7%	229404 (37750) 63.6%	176460* (55470) 51.0%	724707 (77227) 61.2%
28	117849 (3948) 65.2%	150352 (20017) 57.6%	323858 (80883) 68.0%	592059 (86668) 64.5%
29	31501* (14085) 76.9%	50613* (18069) 80.0%	78401* (53178) 66.7%	160516* (63173) 72.4%
30	176305 (20885) 78.4%	247073* (73863) 83.9%	172147* (57585) 73.7%	595525 (93492) 79.1%
31	21909* (6217) 88.0%	111646* (30428) 82.4%	10645* (13596) 68.0%	144200 (32727) 81.9%
32	182821 (14167) 77.1%	172990 (26245) 82.8%	102171* (40668) 79.2%	457983 (37652) 79.6%
33	109749 (8029) 79.3%	241630 (22222) 77.7%	473345 (71891) 76.2%	824725 (73658) 77.0%

SIC CODE	PLANT SIZE			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (>500)	ALL
34	432905 (9393) 78.0%	455291 (20202) 76.3%	263581* (84529) 75.1%	1151777 (91597) 76.7%
35	438319 (10315) 72.2%	417447 (14362) 63.1%	689116 (94890) 61.9%	1544883 (91361) 64.9%
36	166702 (10622) 72.3%	388694 (8498) 70.3%	732446 (117695) 61.9%	1287842 (120062) 65.5%
37	97702 (12654) 76.9%	178947 (22670) 74.8%	1035101 (149542) 68.4%	1311750 (141154) 69.8%
38	70108 (9607) 67.0%	136627 (16713) 70.3%	348373* (111262) 75.7%	555108 (118704) 73.1%
39	124209 (10758) 74.9%	119937* (224895) 80.3%	174659* (107295) 83.4%	418805* (215201) 79.8%
41	98161 (22191) 83.4%	73267* (32070) 89.9%	...	171428* (43346) 86.1%
42	338451 (37995) 69.4%	164778* (42323) 63.7%	57829* (40452) 77.3%	561058 (60050) 68.3%
45	57935* (15414) 74.8%	86827* (59122) 79.4%	168168* (42468) 63.6%	312931 (66269) 69.4%
48	243339 (48901) 57.2%	114647* (29312) 65.0%	29519* (21464) 42.1%	387505 (57853) 57.7%
49	182420 (44543) 67.7%	324738* (121068) 76.3%	80883* (49144) 55.2%	588041* (149419) 69.9%
50	361294 (47968) 57.3%	167366 (41628) 59.1%	...	528659 (72022) 57.9%
51	92776* (26920) 50.1%	6635* (6635) 24.6%	...	99410* (29126) 46.9%
55	247240 (44887) 80.0%	86823* (70498) 88.1%	...	334063* (94278) 82.0%
72	297651 (40802) 78.3%	65226* (20602) 79.3%	3668* (5196) 34.4%	366545 (47441) 77.5%
73	306433 (39332) 72.7%	259640 (40957) 74.2%	200035* (77164) 60.8%	766108 (83441) 69.6%
75	312809 (47210) 75.7%	7650* (7782) 92.9%	...	320459 (47595) 76.0%
76	121468 (18714) 68.1%	21834* (17442) 89.7%	...	143302 (29668) 70.7%
80	75709 (18843) 74.5%	413929 (62989) 77.4%	2189972 (258913) 72.5%	2679610 (261562) 73.2%
ALL	8077942 (83845) 73.3%	7410677 (121679) 75.8%	8777809 (385619) 70.4%	24266427 (444855) 73.0%

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

**NOES QUESTIONNAIRE ITEM NO. 13
Labor Unions in the Workplace**

Intent

The intent of this question was to determine the prevalence of labor unions in the facilities included in the survey population.

This item was displayed on the questionnaire as:

13. Are there any labor unions operating in this facility?

1 No

2 Yes; list complete union names and acronyms (initials)

<u>Union Names</u>	<u>Acronym</u>
_____	-----
_____	-----
_____	-----
_____	-----
_____	-----
_____	-----
_____	-----

Notes

A union is any organization in which any of the facility's employees participate as members, which exists for the purpose of negotiating with the employer concerning grievances, wages, working hours, and conditions.

Any organization whose purpose is as defined above which existed in a surveyed facility resulted in a "yes" response and a listing of appropriate organizational names and acronyms.

The existence of organizations such as credit unions, fraternal associations, or social groups composed of facility employees whose purpose was not as defined above did not constitute a positive response, and they were not listed.

Analysis

One analysis of the responses to question 13 is presented.

Response 13.2 - Unions operating in industrial facilities

The estimates of the number and percent of plants, and workers in those plants, where at least one labor union is actively representing some or all of the facility workers are displayed in Figures II-12, II-13, II-14, II-15, II-16, II-17, II-18, II-19, II-20, and II-21, and Tables II-9 and II-10.

Figure II-12	Number of plants with a union (by major industrial group)
Figure II-13	Number of plants with a union (by 2-digit SIC)
Figure II-14	Number of workers with a union on-site (by major industrial group)
Figure II-15	Number of workers with a union on-site (by 2-digit SIC)
Figure II-16	Plants with a union (by major industrial group)
Figure II-17	Plants with a union (by 2-digit SIC)
Figure II-18	Workers with a union on-site (by major industrial group)
Figure II-19	Workers with a union on-site (by 2-digit SIC)
Figure II-20	Proportion of plants with a union on-site
Figure II-21	Workers with an in-plant union by plant size
Table II-9	Number and percent of plants and employees in plants which have union representation at the plant site (by major industrial group)
Table II-10	Number and percent of plants and employees in plants which have union representation at the plant site (by 2-digit SIC)

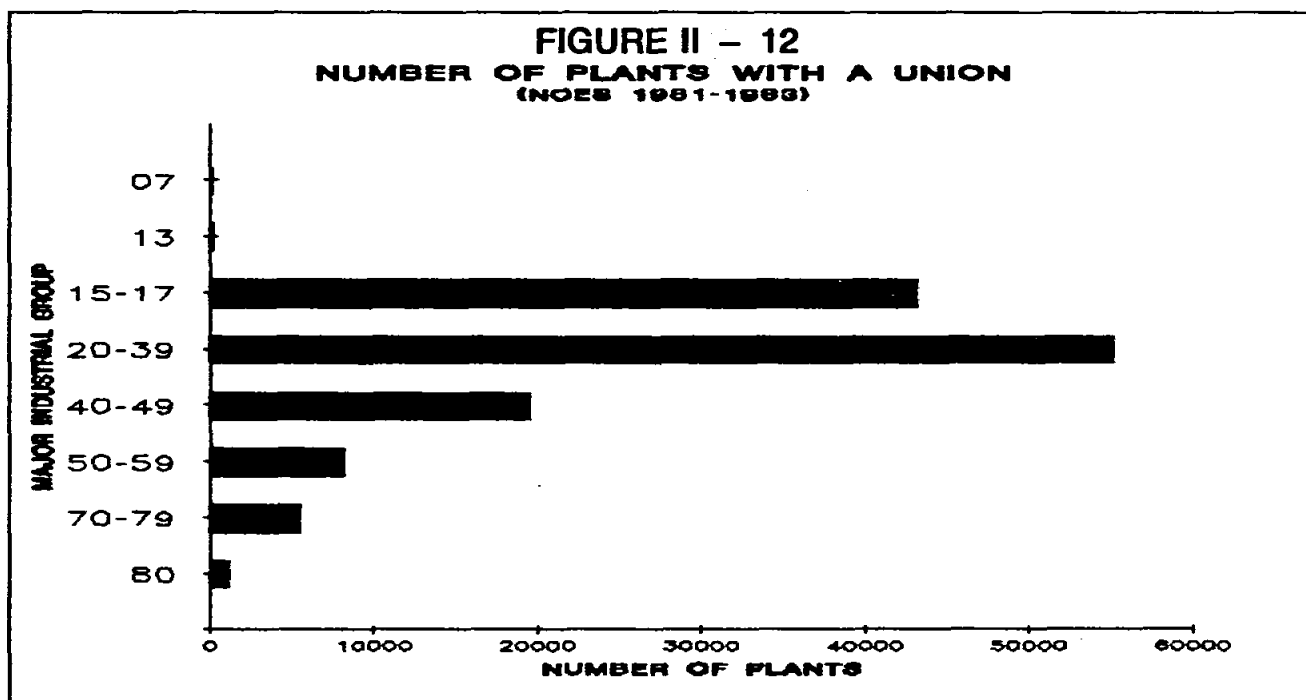
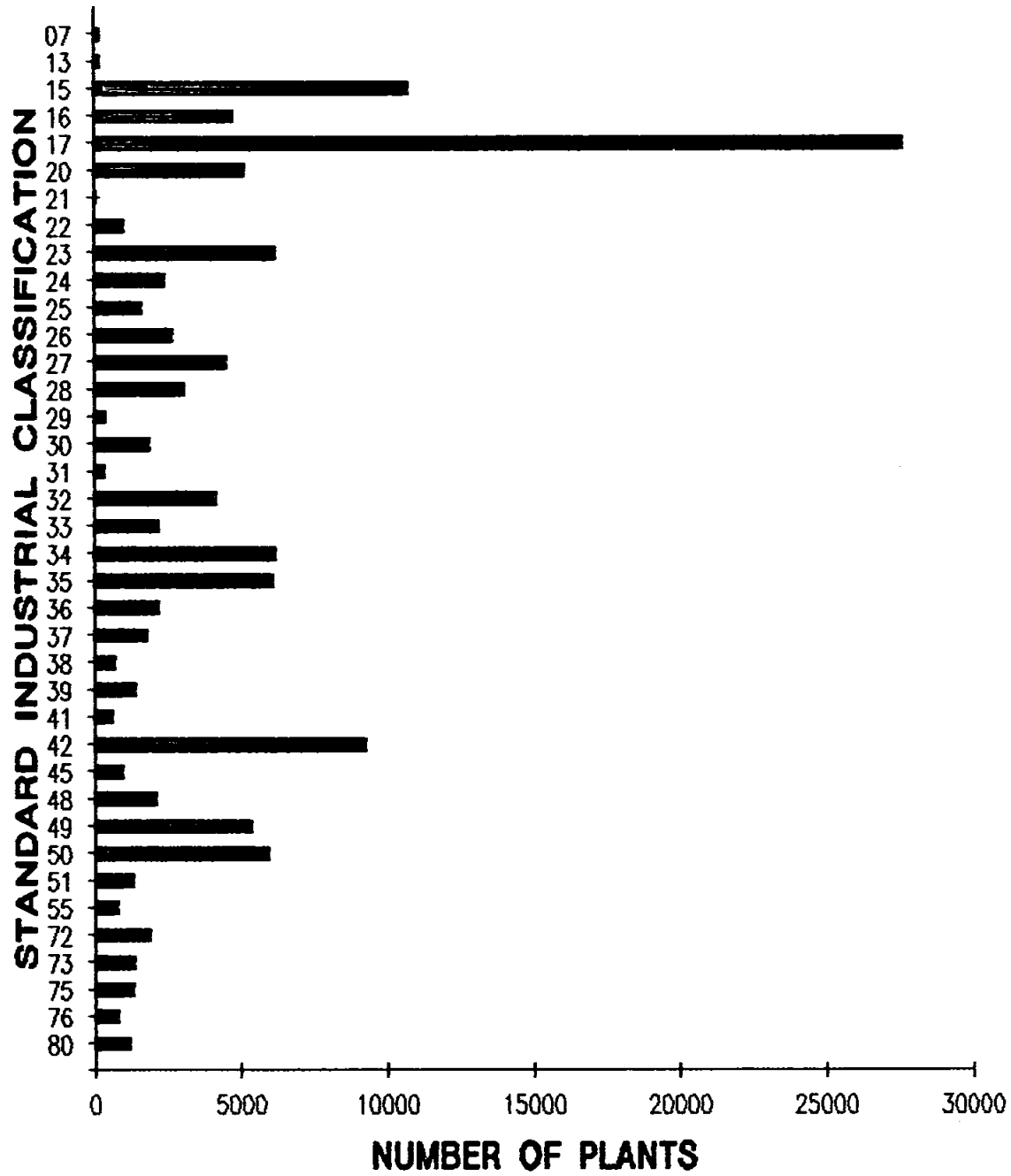


FIGURE II - 13
NUMBER OF PLANTS WITH A UNION
 (NOES 1981-1983)



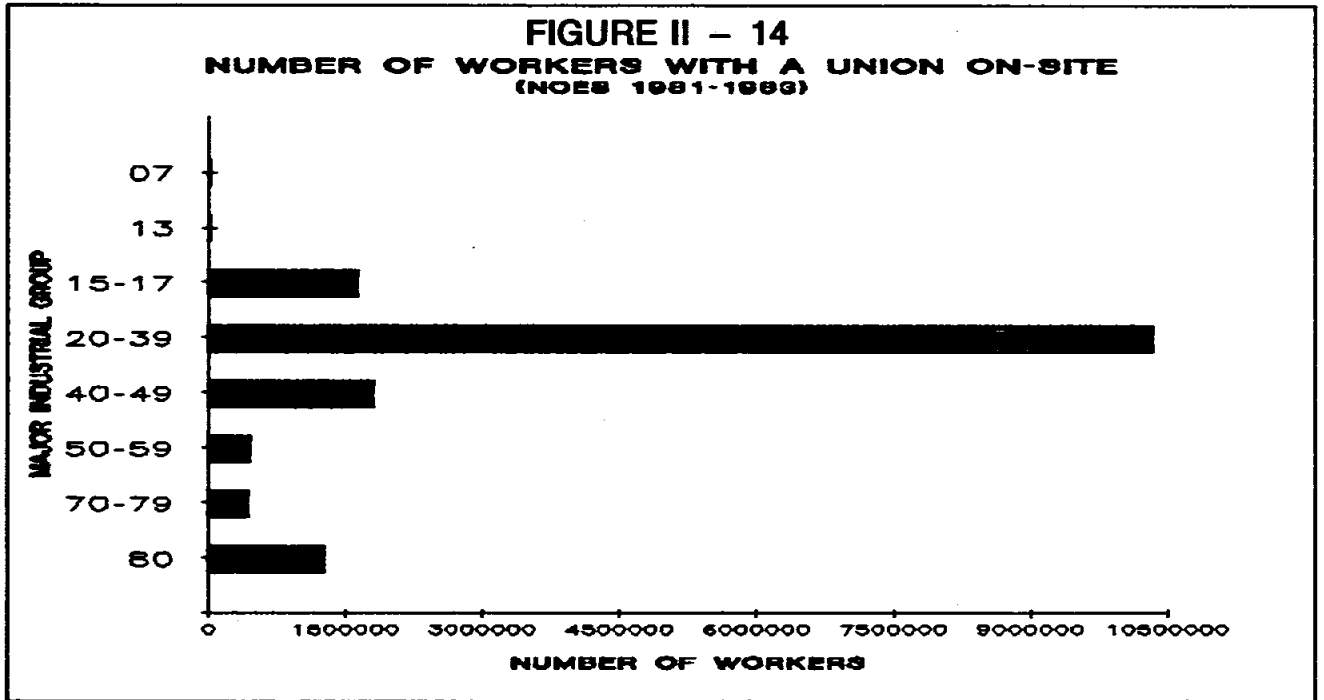


FIGURE II - 15
NUMBER OF WORKERS WITH A UNION ON-SITE
 (NOES 1981-1983)

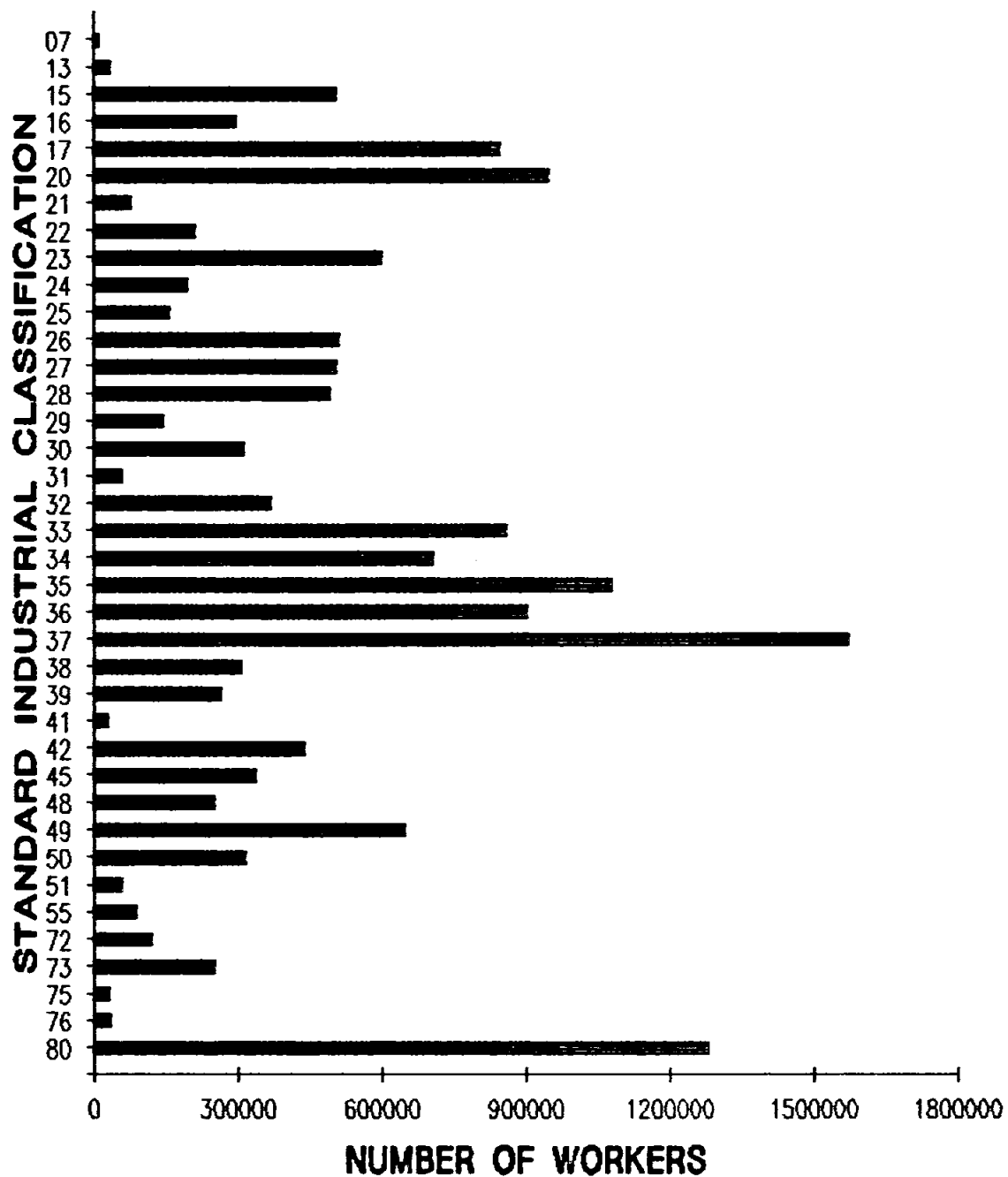


FIGURE II - 16
PLANTS WITH A UNION
(NOES 1981-1989)

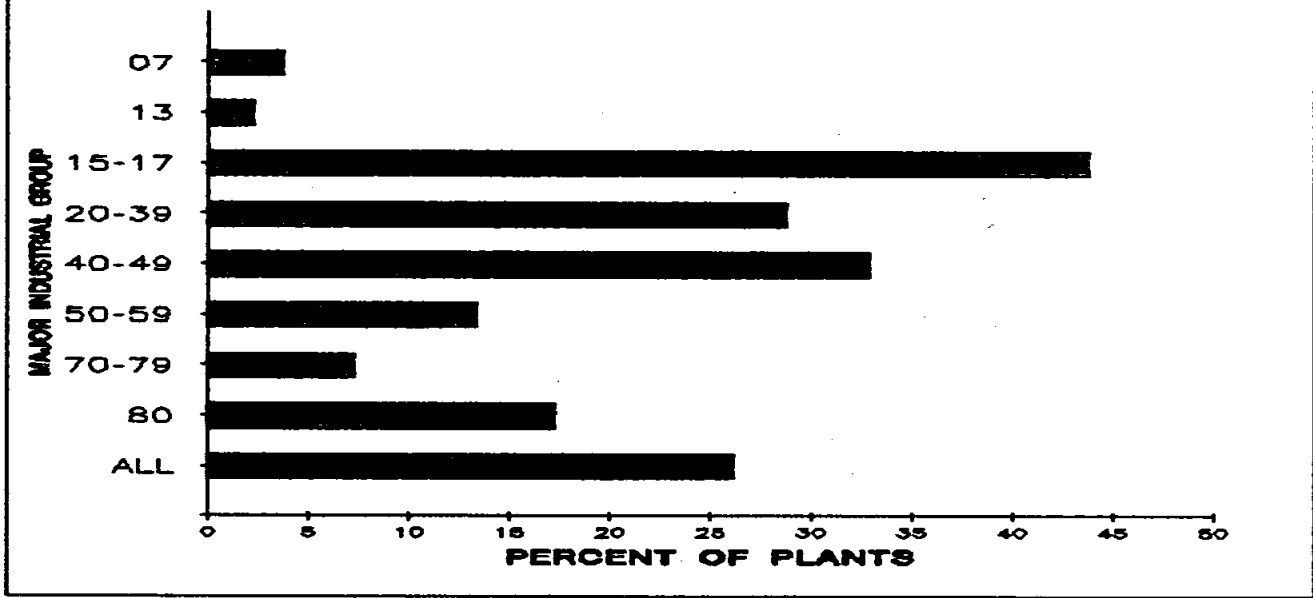
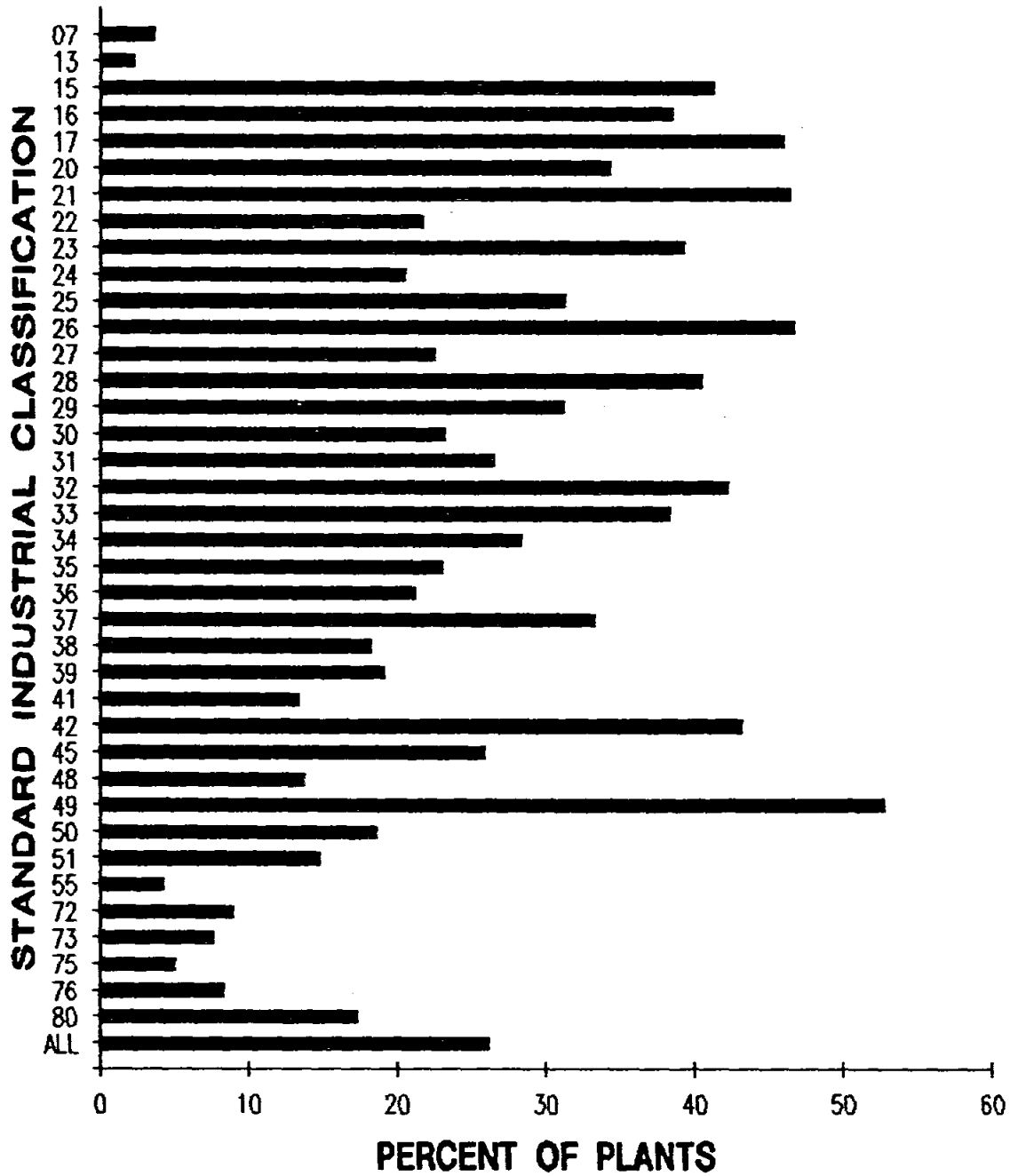
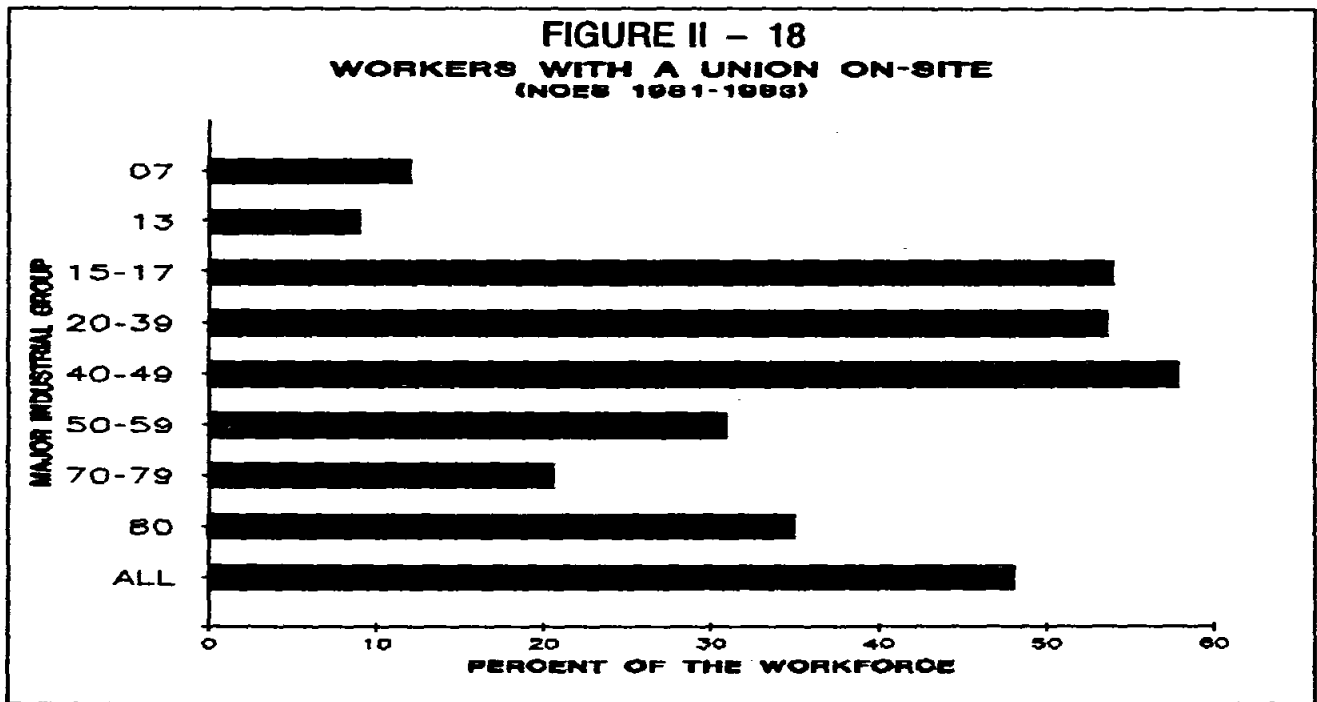


FIGURE II - 17
PLANTS WITH A UNION
(NOES 1981-1983)





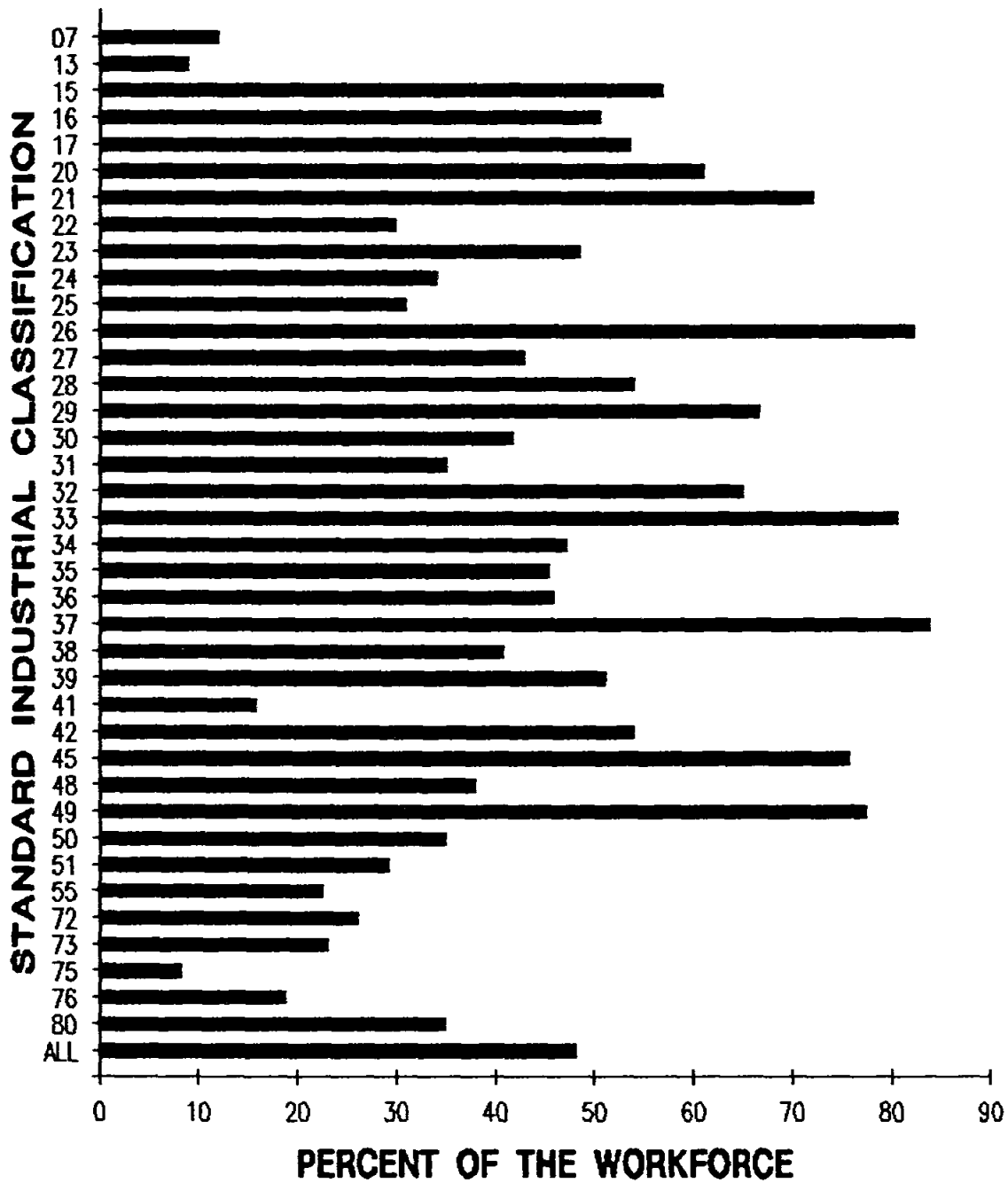
NATIONAL OCCUPATIONAL EXPOSURE SURVEY (1981-1983) TABLE NO. II-9

NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH HAVE UNION REPRESENTATION AT THE PLANT SITE

MAJOR GROUP	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
07	216* (201) 3.9%	...	...	216* (201) 3.8%	13529* (13347) 13.0%	...	...	13529* (13347) 12.2%
13	152* (178) 1.8%	80* (62) 7.8%	...	232* (134) 2.4%	10413* (11623) 5.0%	27118* (21242) 15.6%	...	37531* (14235) 9.1%
15-17	40360 (3017) 42.8%	2885 (462) 69.6%	93* (40) 38.6%	43338 (3128) 43.9%	1044520 (60107) 49.8%	510998 (84818) 69.3%	105614* (42017) 44.7%	1661133 (135848) 54.1%
20-39	35202 (1639) 23.0%	16127 (1137) 50.8%	3969 (279) 63.3%	55298 (2231) 28.9%	1414800 (69019) 30.7%	3267419 (230680) 51.2%	5671999 (285501) 68.6%	10354218 (443894) 53.8%
40-49	14904 (2223) 28.0%	4283 (795) 73.3%	436* (132) 93.2%	19623 (2202) 33.0%	474039 (61505) 33.1%	818064 (161101) 70.9%	541037 (101597) 94.3%	1833140 (193351) 58.0%
50-59	6411 (1154) 11.0%	1840* (634) 69.2%	...	8251 (1303) 13.5%	188142 (30847) 16.7%	287421* (101295) 70.3%	...	475563 (108595) 31.0%
70-79	4715 (1055) 6.4%	789* (223) 33.6%	78* (40) 22.0%	5582 (1082) 7.4%	175186 (34150) 12.6%	137930* (42132) 29.7%	141669* (64683) 41.7%	454785 (69751) 20.7%
80	316* (319) 11.1%	199* (108) 9.2%	715 (120) 34.7%	1230* (347) 17.4%	3161* (3189) 3.1%	57251* (32880) 10.7%	1224250 (221503) 40.5%	1284662 (217828) 35.1%
ALL	102277 (4399) 22.8%	26201 (1614) 52.4%	5292 (336) 56.1%	133771 (4760) 26.3%	3323791 (120833) 30.0%	5106201 (316115) 51.8%	7684569 (383205) 61.6%	16114560 (563355) 48.2%

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

FIGURE II - 19
WORKERS WITH A UNION ON-SITE
 (NOES 1981-1983)



NUMBER AND PERCENT OF PLANTS AND EMPLOYEES IN PLANTS WHICH HAVE UNION REPRESENTATION AT THE PLANT SITE

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
07	216* (201) 3.9%	...	...	216* (201) 3.8%	13529* (13347) 13.0%	...	...	13529* (13347) 12.2%
13	152* (178) 1.8%	80* (62) 7.8%	...	232* (134) 2.4%	10413* (11623) 5.0%	27118* (21242) 15.6%	...	37531* (14235) 9.1%
15	9882 (15711) 39.7%	865* (277) 78.1%	71* (30) 52.8%	10818 (1583) 41.4%	287320 (36214) 51.0%	144147* (43077) 72.7%	79098* (30307) 58.7%	510566 (72471) 57.0%
16	3955 (846) 35.1%	853 (192) 76.2%	22* (18) 20.7%	4830 (847) 38.6%	104313 (19243) 36.7%	169671* (45577) 81.7%	26516* (20596) 26.2%	300500 (58787) 50.7%
17	26522 (2220) 45.6%	1167* (304) 60.8%	...	27689 (2275) 46.1%	652887 (42599) 52.2%	197179 (45118) 59.5%	...	850066 (65070) 53.7%
20	2915 (477) 25.5%	1844 (315) 57.4%	461 (92) 82.5%	5221 (620) 34.4%	145813 (15356) 37.5%	408076 (75577) 60.6%	397818 (75081) 80.9%	951707 (98370) 61.2%
21	4* (6) 14.6%	...	46* (37) 58.6%	51* (37) 46.5%	258* (345) 13.8%	...	82069* (68223) 73.2%	82327* (68177) 72.2%
22	411 (91) 14.0%	541 (135) 34.1%	98* (65) 32.9%	1050 (214) 21.8%	33064 (7954) 31.2%	113515* (31663) 32.7%	67483* (43828) 25.8%	214062* (58651) 30.0%
23	4619 (606) 36.9%	1518 (245) 48.9%	116* (62) 48.0%	6253 (802) 39.4%	187608 (30942) 44.3%	313653 (45117) 51.4%	102401* (50494) 49.1%	603662 (94500) 48.6%
24	1829* (484) 17.1%	618* (205) 53.9%	19* (8) 18.1%	2467 (497) 20.6%	62521* (15959) 20.6%	99710* (33095) 54.3%	35767* (18789) 38.7%	197997 (43657) 34.2%
25	1193* (361) 28.7%	456* (122) 43.0%	29* (25) 24.0%	1679* (426) 31.4%	43839* (17654) 31.5%	88912* (31243) 34.7%	28020* (27305) 22.8%	160772* (45185) 31.0%
26	1283 (308) 31.2%	1261 (262) 80.4%	214* (73) 100.0%	2759 (411) 46.8%	79028 (16540) 57.4%	230016 (52032) 81.7%	206864* (65220) 100.0%	515908 (92775) 82.4%
27	3644 (760) 20.1%	739* (185) 39.4%	206* (82) 65.3%	4589 (853) 22.6%	123822 (19798) 25.9%	153295* (41162) 42.5%	232380* (68523) 67.2%	509496 (93335) 43.0%
28	2241 (454) 36.3%	738 (92) 63.6%	151* (68) 39.8%	3130 (507) 40.6%	82480 (14378) 45.6%	181905 (25979) 69.7%	232508* (103954) 48.8%	496892 (106598) 54.1%
29	190* (132) 18.8%	181* (75) 61.9%	69* (40) 68.4%	440* (134) 31.3%	6930* (4851) 16.9%	50598* (20286) 80.0%	90619* (69338) 77.1%	148147* (72151) 66.8%
30	1211* (429) 18.0%	609* (162) 39.6%	153* (78) 68.4%	1972 (471) 23.3%	55085* (15477) 24.5%	99247 (21628) 33.7%	161461* (71766) 69.1%	315792 (71736) 41.9%
31	159* (166) 17.1%	247* (78) 43.4%	...	406* (180) 26.6%	3480* (3001) 14.0%	58419* (20149) 43.1%	...	61899* (20234) 35.2%
32	3380 (549) 38.4%	669 (149) 66.1%	176* (73) 95.5%	4225 (597) 42.3%	106368 (17139) 44.9%	146981 (33633) 70.3%	120592* (49149) 93.5%	373941 (58607) 65.0%
33	960 (192) 23.2%	990 (245) 67.4%	330 (64) 98.0%	2281 (347) 38.4%	53046 (10661) 38.3%	207766 (47459) 66.8%	603141 (94780) 97.0%	863954 (98768) 80.7%

SIC CODE	PLANTS				EMPLOYEES			
	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL	SMALL (8-99)	MEDIUM (100-499)	LARGE (≥500)	TOTAL
34	4371 (744) 23.6%	1706 (237) 54.6%	167* (67) 48.3%	6244 (765) 28.4%	169208 (23665) 30.5%	321559 (44292) 53.9%	220655* (88442) 62.9%	711422 (102400) 47.3%
35	4080 (701) 18.0%	1683 (292) 49.4%	432 (79) 55.1%	6195 (813) 23.1%	143485 (25925) 23.6%	320536 (52373) 48.5%	619006 (111301) 55.6%	1083027 (125442) 45.5%
36	868* (274) 12.2%	968 (195) 36.1%	417* (112) 53.0%	2253 (328) 21.3%	34433* (11671) 14.9%	207264 (47736) 37.5%	664949 (126445) 56.2%	906647 (132505) 46.1%
37	791* (362) 19.9%	698 (104) 58.7%	374 (82) 89.9%	1863 (403) 33.4%	38821* (19852) 30.6%	132447 (27619) 55.4%	1405477 (194452) 92.8%	1576746 (203346) 83.9%
38	184* (198) 6.8%	357* (100) 37.3%	207* (94) 49.8%	748* (218) 18.4%	9088* (7681) 8.7%	70339* (23047) 36.2%	231416* (111068) 50.3%	310843* (106472) 40.9%
39	868* (286) 13.2%	303* (447) 37.9%	302* (226) 89.3%	1472* (542) 19.2%	36423* (13348) 22.0%	63182* (81774) 42.3%	169372* (127002) 80.9%	268977* (122117) 51.3%
41	571* (333) 12.9%	97* (83) 19.0%	...	668* (329) 13.5%	20311* (12867) 17.3%	11518* (9829) 14.1%	...	31829* (14709) 16.0%
42	8283 (1438) 41.4%	1024 (234) 69.1%	50* (35) 60.4%	9357 (1488) 43.3%	231012 (38401) 47.4%	170965 (35866) 66.1%	42123* (22071) 56.3%	444101 (56472) 54.1%
45	417* (244) 12.9%	471* (334) 79.9%	147* (57) 100.0%	1036* (463) 26.0%	16389* (8674) 21.1%	61827* (44248) 56.5%	264255* (77656) 100.0%	342471* (86866) 75.9%
48	1348* (760) 9.2%	772 (172) 85.6%	34* (21) 99.0%	2154* (744) 13.8%	48312* (17495) 11.3%	137966 (33494) 78.2%	70083* (43687) 100.0%	256361 (55975) 38.1%
49	3647* (1219) 44.4%	1593* (514) 85.6%	173* (99) 99.6%	5413 (1264) 52.8%	146502* (45293) 54.4%	359154* (141107) 84.4%	146565* (65566) 100.0%	652221 (155395) 77.5%
50	4932 (1071) 16.2%	1075* (299) 59.6%	...	6006 (1164) 18.7%	147654 (33536) 23.4%	173246* (56903) 61.2%	...	320900 (77536) 35.1%
51	1155* (596) 12.7%	237* (237) 100.0%	...	1392* (713) 14.9%	35297* (18668) 19.1%	27013* (27013) 100.0%	...	62310* (37178) 29.4%
55	324* (319) 1.7%	528* (475) 85.2%	...	853* (564) 4.4%	5191* (5108) 1.7%	87162* (78399) 88.4%	...	92353* (78399) 22.7%
72	1418* (570) 6.9%	530* (171) 78.6%	...	1948* (586) 9.1%	64327* (21903) 16.9%	60089* (19556) 73.1%	...	124416 (25320) 26.3%
73	1126* (503) 6.8%	222* (86) 14.9%	78* (40) 22.8%	1426* (498) 7.8%	49696* (25386) 11.8%	65169* (25180) 18.6%	141669* (64683) 43.1%	256533 (61773) 23.3%
75	1365* (619) 5.2%	...	...	1365* (619) 5.2%	35387* (14575) 8.6%	...	...	35387* (14575) 8.4%
76	806* (387) 8.3%	36* (45) 29.4%	...	842* (376) 8.5%	25776* (11949) 14.4%	12672* (15755) 52.1%	...	38448* (16374) 19.0%
80	316* (319) 11.1%	199* (108) 9.2%	715 (120) 34.7%	1230* (347) 17.4%	3161* (3189) 3.1%	57251* (32880) 10.7%	1224250 (221503) 40.5%	1284662 (217828) 35.1%
All	101640 (4398) 22.8%	25924 (1166) 52.3%	5276 (269) 56.0%	132840 (4922) 26.3%	3312278 (133371) 30.0%	5045172 (234989) 51.6%	7675563 (315478) 61.6%	16033014 (491439) 48.2%

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

FIGURE II - 20
PROPORTION OF PLANTS WITH A UNION ON-SITE
(NOES 1981-1983)

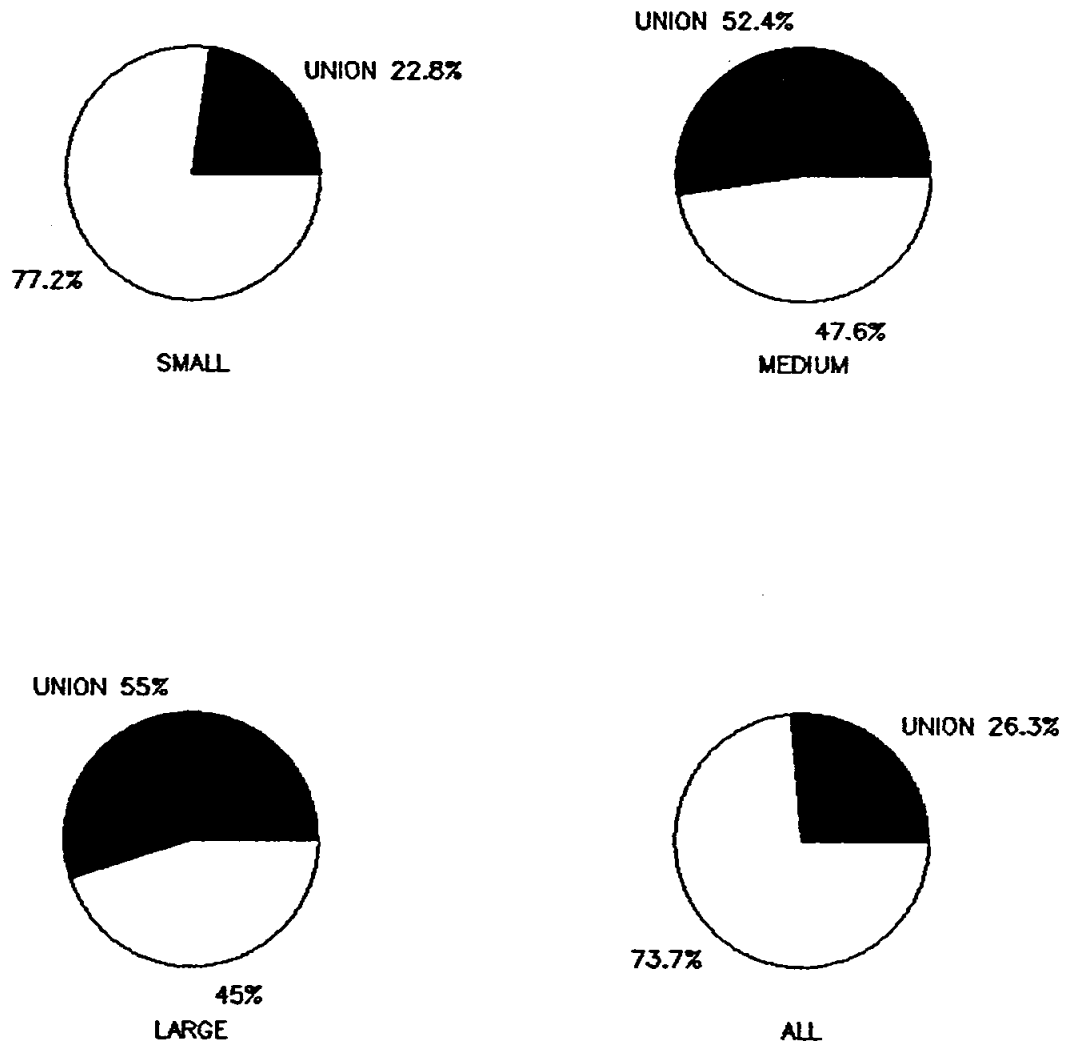


FIGURE II - 21
WORKERS WITH AN IN-PLANT UNION
BY PLANT SIZE
(NOES 1981-1983)

