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HEALTH DIVISION REPORT FOR  
MONTH ENDING OCTOBER 31, 1951

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CARBIDE AND CARBON CHEMICALS COMPANY  
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Report Number ORNL - 1226

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Series A.

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HEALTH DIVISION

REPORT FOR THE MONTH ENDING OCTOBER 31, 1951

J. S. Felton, M. D.

DATE ISSUED

~~MAR 10 1952~~

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OAK RIDGE NATIONAL LABORATORY  
operated by  
CARBIDE AND CARBON CHEMICALS COMPANY  
A Division of Union Carbide and Carbon Corporation  
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- 20 Robert J. Hasterlik, M. D., Medical Director, Argonne National Laboratory.
- 21 Charles L. Dunham, Jr., M. D., Chief, Medical Branch, Division of Biology and Medicine, AEC, Washington.
- 22 T. L. Shipman, M. D., Medical Director, Los Alamos.
- 23 Merrill Eisenbud, Director, Health and Safety Division, New York Directed Operations.
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DISTRIBUTION OF EFFORT FOR THE MONTH OF OCTOBER 1951

<u>Personnel</u>	<u>Monthly</u>	<u>Weekly</u>	<u>Hourly</u>
Physicians	2	0	0
Nurses	1	6	0
Medical Technician	0	4	0
X-ray Technician	0	1	0
Office Personnel	0	8	0
Custodial Personnel	<u>0</u>	<u>0</u>	<u>3</u>
	3	19	3

Number of technical personnel added: 3  
Number of technical personnel terminated: 0

ALLOCATION OF TIME

<u>Physicians</u>			
Administrative	1/3	0	0
Physical Examination	2/3	0	0
Dispensary Service	2/3	0	0
Health Education	1/3	0	0
<u>Nurses</u>			
Supervision	1/2	0	0
Dispensary Shift Nursing	1/2	6	0
<u>Medical Technicians</u>			
General Laboratory	0	2	0
Blood Studies	0	1 1/2	0
Urinalysis	0	1/2	0
<u>X-ray Technician</u>			
	0	1	0
<u>Office Personnel</u>			
	0	8	0
<u>Custodial Personnel</u>			
	<u>0</u>	<u>0</u>	<u>3</u>
	3	19	3

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STATISTICAL SUMMARY

Severity Rate . . . . . 4.1 days lost per illness absence  
 Disability Rate . . . . . 16.6 days lost per 1000 days scheduled.  
 Frequency Rate . . . . . 4.9 illness absences per 1000 days scheduled.

Number of patients  
 Employee . . . . . 2808  
 Non-employee  
 A E.C. . . . . 27  
 American Cyanamide . . . . . 29  
 du Pont (Savannah) . . . . . 32  
 Foster-Wheeler . . . . . 4  
 Phillips Petroleum . . . . . 8  
 Other . . . . . 38  
 Total . . . . . 138  
 Prospective employees . . . . . 11  
 Total patients . . . . . 2957

Number of patients seen at X-10 Dispensary . . . . . 2682  
 Number of patients seen at Y-12 Dispensary . . . . . 275  
 Total patients . . . . . 2957

Number of visits  
 Employee  
 X-10 Dispensary . . . . . 5451  
 Y-12 Dispensary . . . . . 488  
 Total . . . . . 5939  
 Non-employee  
 A.E.C. . . . . 29  
 American Cyanamide . . . . . 45  
 du Pont (Savannah) . . . . . 96  
 Foster-Wheeler . . . . . 5  
 Phillips Petroleum . . . . . 10  
 Other . . . . . 100  
 Total . . . . . 285  
 Total visits . . . . . 6224

Number of procedures  
 Performed at X-10 . . . . . 6893  
 Performed at Y-12 . . . . . 499  
 Preliminary procedures . . . . . 65  
 Total procedures . . . . . 7457

Number of Employees at the Laboratory . . . . . 3014

STATISTICAL SUMMARY (continued from page 4)

Percent Employees visiting Dispensary . . . . .	93.2
Number of Visits per Employee . . . . .	2.0
Percent of Visitors Visiting Dispensary . . . . .	32.0
Number of Visits per Visitor . . . . .	.6
Number of Illness Absences per Employee . . . . .	.1
Ratio of Occupational to Non-occupational Procedures . . . . .	.1 : 1.8
Ratio of Non-occupational to Occupational Injuries, first visit . . . . .	.1 : 1.4
Ratio of Non-occupational to Occupational Injuries, all visits . . . . .	.1 : 2.6
Ratio of Occupational to Non-occupational Illnesses, first visit . . . . .	.1 : 1027
Ratio of Occupational to Non-occupational Illnesses, all visits . . . . .	.1 : 741.5
Ratio of Occupational to Non-occupational Absences . . . . .	.1 : 55
Ratio of Occupational to Non-occupational Days Lost . . . . .	.1 : 383



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	No. of <u>procedures</u>
Occupational vision section procedures:	
Spectacles issued, plano	47
Spectacles ordered, prescription	36
Spectacles issued, prescription	28
Orthorater examination	147
Partial replacement	13
Adjustment or repair	14
Advisory service	15
Total	300
X-ray examination:	
X-ray examination, non-occupational condition	15
X-ray examination, occupational condition	2505
Total	2520
Special study interview	4
Psychodiagnostic test	5
Consultation, non-occupational condition	164
Consultation, occupational condition	8
Consultation without patient, non-occupational	65
Consultation without patient, occupational	6
Home visit	0
Pre-marital serodiagnostic test	3
Immunization	823
Diagnostic procedure for an outside physician	54
Clinical photograph	3
Dispensary visit, patient not seen	17
GRAND TOTAL	7457

^ The figure on page 6 represents the number of clinical laboratory visits. More than one laboratory procedure may be performed on one visit. The following is a breakdown of the procedures performed:

Bacteriological culture	1
Bacteriological smear	3
Basal Metabolism	4
Blood alcohol	1
Blood glucose	3
Complete blood count	242
Feces - Parasitological	1
Hematocrit	1
Kahn - presumptive	141
Kahn - standard	3
Kahn - titer	3
Red blood count	15
Rh factor	95
Sedimentation rate	25
Typing - blood	95
Urinalysis	255
Vital capacity	5
White blood count and differential	14
Hemaglobin	36
Total	942

DISPOSITION FOLLOWING DISPENSARY VISITS

Return to regular work	6685
Return to modified or part-time work	290
Death	2
Remain off work	371
Granted leave	0
Died in plant	0
Rejected	0
Accepted conditionally	3
Accepted	83
Sent to hospital or physicians office	23
	7457

ATTENDANT

Psychiatrist	2
First aid attendant	0
First aid attendant and nurse	0
First aid attendant, nurse and doctor	0
Nurse	2974
Nurse and doctor	225
Doctor	733
Doctor and first aid attendant	0
Technician	3523
	7457

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TIME LOSS DUE TO ILLNESS ABSENCE

	<u>No. of Absences</u>	<u>No of Days Lost</u>
Less than 1 day	24	0
1 day	121	121
2 days	43	86
3 days	24	72
4 days	16	64
5 days	11	55
6 days	7	42
7 days	2	14
8 days	5	40
10 days	6	60
11 days	3	33
12 days	3	36
13 days	1	13
14 days	3	42
15 days	1	15
16 days	1	16
20 days	1	20
22 days	1	22
30 days	1	30
35 days	2	70
41 days	1	41
45 days	1	45
55 days	1	55
66 days	1	66
95 days	1	95
	281	1153

NUMBER OF DIAGNOSES FOR ALL VISITS

No. of Diagnoses

INJURIES

Non-occupational:

Superficial injuries (abrasions, blisters, insect bites, scratches)	60
Lacerations	51
Contusions	24
Sprains and strains	35
Foreign bodies	5
Burns (thermal, chemical and radiant)	14
Fractures	8
Head Injury	6
Miscellaneous	2
Amputations	1
Total	206

Occupational:

Superficial injuries (abrasions, blisters insect bites, scratches)	95
Lacerations	161
Contusions	48
Strains and sprains	37
Foreign bodies	23
Burns (thermal, chemical and radiant)	83
Fractures	20
Head injury	30
Miscellaneous	4
Total	501

TOTAL DIAGNOSES OF INJURY

707

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No. of diagnoses

ILLNESSES

Non-occupational:

Respiratory		807
Digestive		260
Circulatory		128
Diseases of blood and blood-forming organs		13
Genito-urinary		86
Bones and joints		182
Diseases of skin		121
Dermatitis		12
Diseases of eye		112
Diseases of ear		63
Allergic, endocrine, metabolic and nutritional		100
Infectious diseases		122
Psychoneurotic disorders		8
Common benign tumors		4
Symptoms and ill-defined conditions		126
Diseases of thyroid gland		78
Total		2222

Occupational:

Genito-urinary		1
Dermatitis:		
Due to chemicals	3	
Other	2	
Total		5
Total		6

TOTAL DIAGNOSES OF ILLNESS

No abnormal findings		21
Absence for general medical examination		2
Skin immunity and sensitization test		1
Prophylactic inoculation and vaccination		38
Follow-up examination for tuberculosis, not needing further medical care		1
Follow-up examination after operation, injury or disease other than tuberculosis		34
Normal pregnancy		1
Medical and surgical aftercare		53
Immunizations		885

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	<u>No. of Diagnoses</u>
Impairment due to other and Unspecified accidents and poisonings except war	1
Loss due to other and ill-defined diseases	1
Loss due to other and unspecified accidents and poisonings except war	4
Congenital malformations	23
Operations as cause of absences	31
Deliveries and complications of pregnancy	2
Neoplasms	14
 Total	 1112
 TOTAL DIAGNOSES	 <u>4047</u>
 Special services <u>not</u> involving diagnoses	 3779
 GRAND TOTAL	 <u><u>7826</u></u>

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ABSENCES AND TIME LOST BY GENERAL DIAGNOSIS GROUPS

	<u>No. of Absences</u>	<u>Days Lost</u>
<u>ILLNESSES</u>		
Respiratory	127	330
Digestive	47	61
Circulatory	5	106
Genito-urinary	31	47
Bones and joints	10	34
Diseases of the skin	2	14
Diseases of the eye	1	5
Allergic, endocrine and metabolic diseases	5	20
Infectious diseases	2	15
Symptoms and ill-defined conditions	13	55
 <u>INJURIES</u>		
Lacerations	2	6
Contusions	1	0
Strains and sprains	3	4
Fractures	5	76
Head injury	1	5
Absence for general medical examination	2	2
Follow-up examination after operation injury or disease other than tuberculosis	2	49
Medical and surgical aftercare	1	6
Congenital malformations	1	66
Operations as cause of absences	18	236
Complications of pregnancy	1	15
Neoplasm	1	1
 Total	 281	 1153

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NUMBER OF VISITS BY PERSONAL, OCCUPATIONAL AND GROUP CHARACTERISTICS

	<u>No. of Visits</u>	<u>No. of Employees</u>	<u>Average</u>
TOTAL	5939	3014	2.0
<u>SEX</u>			
Female	1037	505	2.1
Male	4902	2509	2.0
<u>OCCUPATION</u>			
Life scientist	60	62	1.0
Physical scientist	891	518	1.7
Engineer	631	430	1.5
Technical assistant	871	419	2.1
Administrative and managerial personnel	288	154	1.9
Clerical	673	349	1.9
Laborer	254	117	2.2
Maintenance	139	56	2.5
Protective	465	165	2.8
Craftsman	1369	603	2.3
Chemical operator	206	87	2.4
Equipment operator	92	54	1.7
<u>RACE</u>			
White	5593	2848	2.0
Colored	346	165	2.1
Oriental	0	1	
<u>MARITAL STATUS</u>			
Married	4765	2431	2.0
Single	1031	521	2.0
Widowed	56	37	1.5
Divorced	87	25	3.5
<u>HEALTH STATUS*</u>			
H-1	1133	589	1.9
H-2	4330	2185	2.0
H-3	453	230	2.0
H-4	1	1	1.0
H-5	22	9	2.4

\*H-1 Physically qualified for any position.

H-2 Physically qualified for any position, but has minor defects.

H-3 Physically qualified for special employment only, with restrictions.

H-4 Physically unqualified for position applied for.

H-5 Temporary employees, who are not given a complete physical examination.

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	<u>No. of Visits</u>	<u>No. of Employees</u>	<u>Average</u>
<u>DIVISION</u>			
Operations	195	95	2.1
Physics	172	94	1.8
Chemistry	225	110	2.0
Reactor Experimental Engineering	92	86	1.1
Biology	102	109	.9
Metallurgy	266	137	1.9
Reactor Projects		0	
Education Relations and Training	141	68	2.1
Health Physics	261	109	2.4
Engineering and Maintenance	2074	963	2.2
Industrial Relations	378	152	2.5
Health	39	25	1.6
General Office	219	143	1.5
Laboratory Protection	489	179	2.7
Directors	74	40	1.9
Analytical Chemistry	358	174	2.1
Math Panel	41	22	1.9
Chemical Technology	274	131	2.1
Information and Reports	139	67	2.1
Materials Chemistry	89	59	1.5
Research Director	141	73	1.9
Electromagnetic Research	25	50	.5
Isotope Research and Production	43	61	.7
ANP	96	65	1.5
Assistant Research Director	6	2	3.0
<u>AGE GROUP</u>			
18 to 19 years	42	29	1.4
20 to 29 years	2001	978	2.0
30 to 39 years	2301	1223	1.9
40 to 49 years	1155	571	2.0
50 to 59 years	375	191	2.0
60 to 69 years	65	22	3.0
<u>SHIFT</u>			
Straight days	5047	2688	1.9
Rotating shifts	800	290	2.8
Straight shift	92	36	2.6
<u>PAYROLL</u>			
Hourly	2459	1055	2.3
Weekly	1566	804	1.9
Monthly	1914	1155	1.7

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TIME LOST BY PERSONAL, OCCUPATIONAL AND GROUP CHARACTERISTICS

	<u>Days Lost</u>	<u>Scheduled Days</u>	<u>Percent Time Lost</u>
TOTAL	1153	69322	1.7
<u>SEX</u>			
Male	764	57707	1.3
Female	389	11615	3.3
<u>OCCUPATION</u>			
Life scientist	16	1426	1.1
Physical scientist	101	11914	.8
Engineer	131	9890	1.3
Technical assistant	239	9637	2.5
Administrative and managerial personnel	50	3542	1.4
Clerical personnel	165	8027	2.1
Laborer	59	2691	2.2
Maintenance personnel	74	1288	5.7
Protective personnel	95	3795	2.5
Craftsman	207	13869	1.5
Chemical operator	1	2001	
Equipment operator	15	1242	1.2
<u>RACE</u>			
White	1077	65504	1.6
Colored	76	3795	2.0
Oriental		23	
<u>MARITAL STATUS</u>			
Married	890	55913	1.6
Single	233	11983	1.9
Widowed	18	851	2.1
Divorced	12	575	2.1
<u>HEALTH STATUS*</u>			
H-1	186	13547	1.4
H-2	905	50255	1.8
H-3	59	5290	1.1
H-4		23	
H-5	3	207	1.4

\*H-1 Qualified for any position.

H-2 Qualified for any position, but has minor defects.

H-3 Physically qualified for special employment only, with restrictions.

H-4 Physically unqualified for position applied for.

H-5 Temporary employees who are not given complete physical examinations.

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	<u>Days Lost</u>	<u>Scheduled Days</u>	<u>Percent Time Lost</u>
<u>DIVISION</u>			
Operations	19	2185	.9
Physics	13	2162	.6
Chemistry	112	2530	4.4
Reactor Experimental Engineering	19	1978	1.0
Biology	48	2507	1.9
Metallurgy	20	3151	.6
Reactor Projects		0	
Education Relations and Training	1	1564	.1
Health Physics	28	2507	1.1
Engineering and Maintenance	361	22149	1.6
Industrial Relations	104	3496	3.0
Health	2	575	.3
General Office	16	3289	.5
Laboratory Protection	101	4117	2.5
Director	6	920	.7
Analytical Chemistry	109	4002	2.7
Math Panel	15	506	3.0
Chemical Technology	8	3013	.3
Information and Reports	27	1541	1.8
Materials Chemistry	4	1357	.3
Research Director	18	1679	1.1
Electromagnetic Research	24	1150	2.1
Isotope Research and Production	52	1403	3.7
ANP	46	1495	3.1
Assistant Research Director		46	
<u>AGE GROUP</u>			
18 to 19 years	5	667	.7
20 to 29 years	318	22494	1.4
30 to 39 years	370	28129	1.3
40 to 49 years	329	13133	2.5
50 to 59 years	112	4393	2.5
60 to 69 years	19	506	3.8
<u>SHIFT</u>			
Straight days	1000	61824	1.6
Rotating shifts	100	6670	1.5
Straight shift	53	828	6.4
<u>PAYROLL</u>			
Hourly	436	24265	1.8
Weekly	487	18492	2.6
Monthly	230	26565	.9

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EMPLOYEES WITH ONE OR MORE ILLNESS ABSENCE BY PERSONAL, OCCUPATIONAL  
AND GROUP CHARACTERISTICS

	<u>Absentees</u>	<u>No. of Employees</u>	<u>Percent Absentees</u>
TOTAL	261	3014	8.7
<u>SEX</u>			
Male	150	2509	5.9
Female	111	505	21.9
<u>OCCUPATION</u>			
Life scientist	2	62	3.2
Physical scientist	23	518	4.4
Engineer	32	430	7.4
Technical assistant	65	419	15.5
Administrative and managerial personnel	10	154	6.5
Clerical personnel	73	349	20.9
Laborer	4	117	3.4
Maintenance personnel	5	56	8.9
Protective personnel	11	165	6.7
Craftsman	31	603	5.1
Chemical operator	1	87	1.1
Equipment operator	4	54	7.4
<u>RACE</u>			
White	252	2848	8.8
Colored	9	165	5.5
Oriental		1	
<u>MARITAL STATUS</u>			
Married	182	2431	7.5
Single	67	521	12.9
Widowed	6	37	16.2
Divorced	6	25	24.0
<u>HEALTH STATUS*</u>			
H-1	38	589	6.5
H-2	186	2185	8.5
H-3	36	230	15.7
H-4		1	
H-5	1	9	11.1

\*H-1 Physically qualified for any position.

H-2 Physically qualified for any position, but has minor defect.

H-3 Physically qualified for special employment only, with restrictions.

H-4 Physically unqualified for position applied for.

H-5 Temporary employees who are not given complete physical examinations.

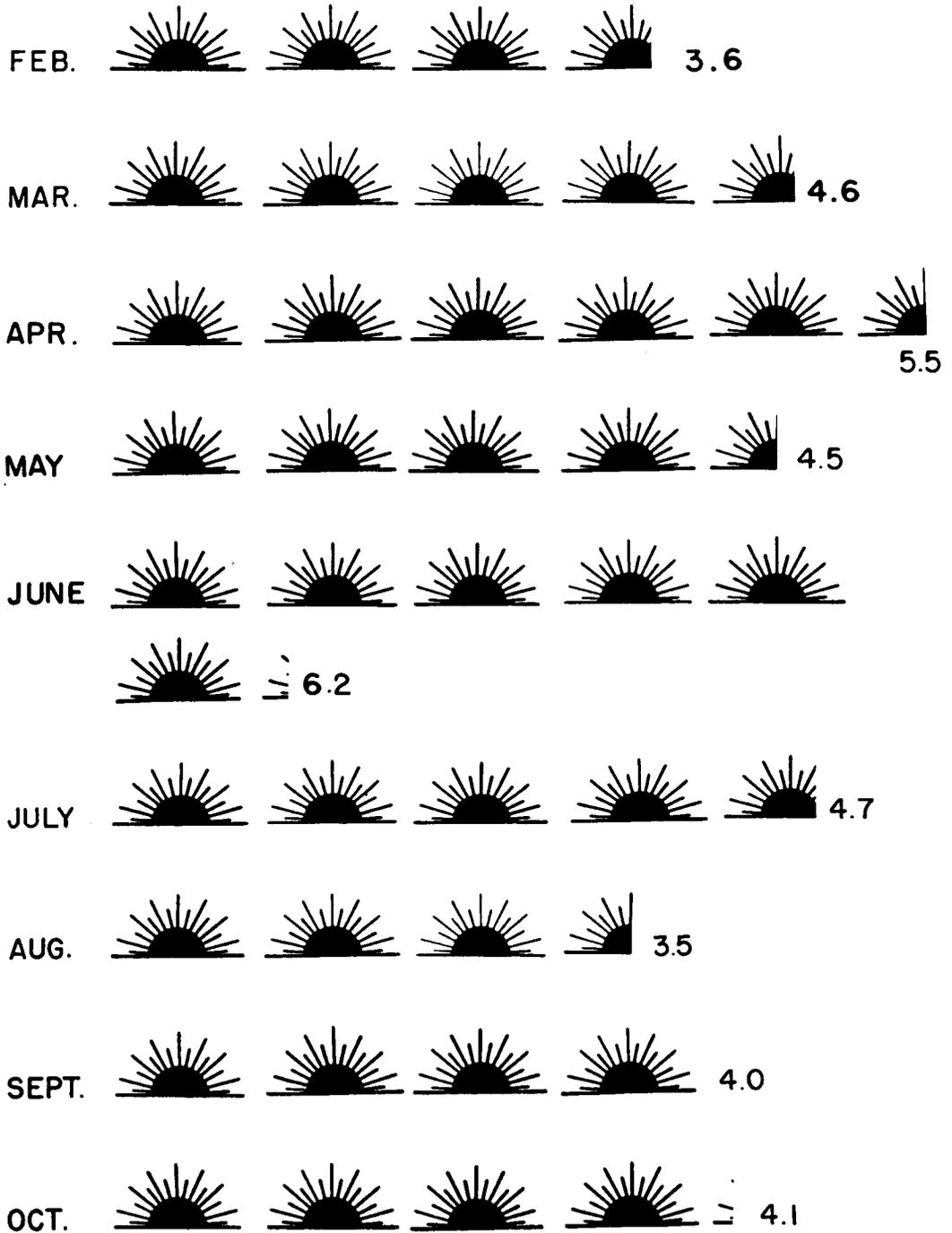
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	<u>Absentees</u>	<u>No. of Employees</u>	<u>Percent Employees</u>
<u>DIVISION</u>			
Operations	6	95	6.3
Physics	8	94	8.5
Chemistry	8	110	7.3
Reactor Experimental Engineering	11	86	12.8
Biology	10	109	9.2
Metallurgy	7	137	5.1
Reactor Projects		0	
Education Relations and Training	1	68	1.5
Health Physics	16	109	14.7
Engineering and Maintenance	61	963	6.3
Industrial Relations	17	152	11.2
Health	1	25	4.0
General Office	11	143	7.7
Laboratory Protection	14	179	7.8
Directors	5	40	12.5
Analytical Chemistry	34	174	19.5
Math Panel	1	22	4.5
Chemical Technology	6	131	4.6
Information and Reports	16	67	23.9
Materials Chemistry	4	59	6.8
Research Director	9	73	12.3
Electromagnetic Research	5	50	10.0
Isotope Research and Production	5	61	8.2
ANP	5	65	7.7
Assistant Research Director		2	
<u>AGE GROUP</u>			
18 to 19 years	4	29	13.8
20 to 29 years	119	978	12.2
30 to 39 years	80	1223	6.5
40 to 49 years	42	571	7.4
50 to 59 years	12	191	6.3
60 to 69 years	4	22	18.2
<u>SHIFT</u>			
Straight days	240	2688	8.9
Rotating shifts	18	290	6.2
Straight shift	3	36	8.3
<u>PAYROLL</u>			
Hourly	54	1055	5.1
Weekly	148	804	18.4
Monthly	59	1155	5.1

# SEVERITY RATE Days Lost Per Absence

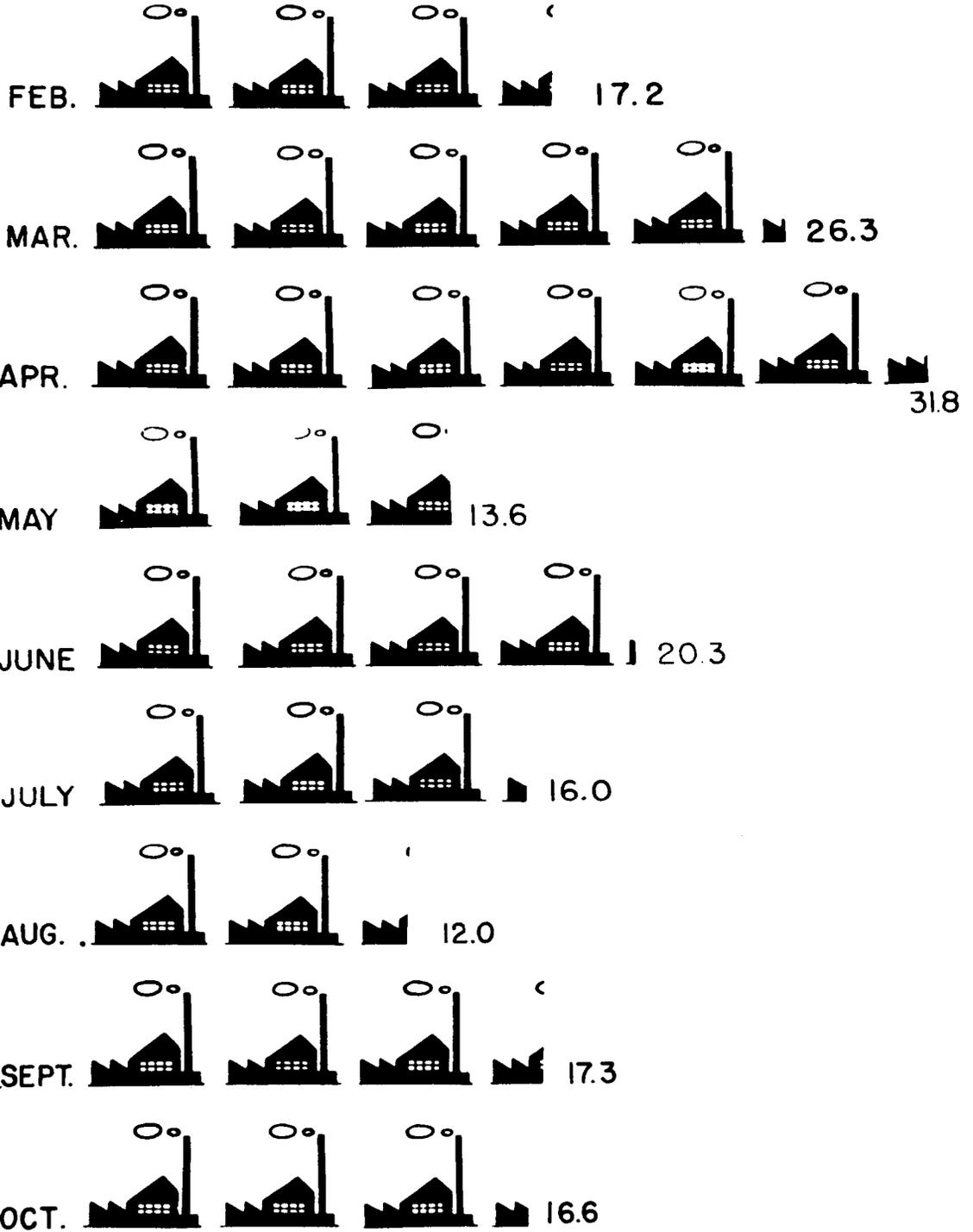
EACH SYMBOL REPRESENTS 1 DAY



# DISABILITY RATE

## Days Lost Per 1,000 Days Scheduled

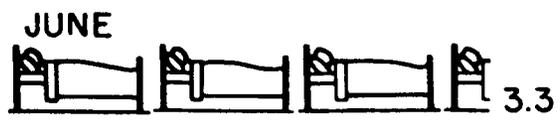
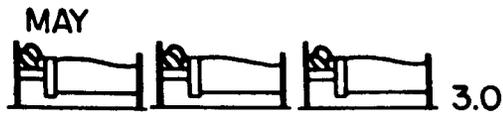
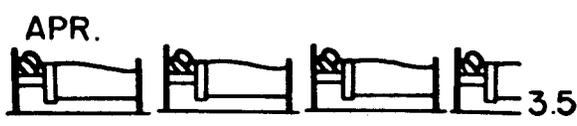
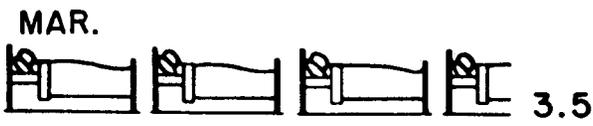
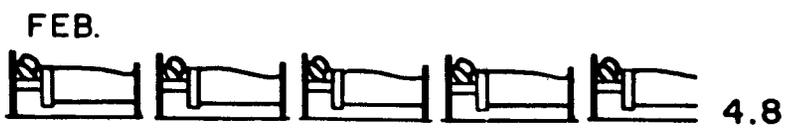
EACH SYMBOL REPRESENTS 5 DAYS



# FREQUENCY RATE

## Illness Absences Per 1,000 Days Scheduled

EACH SYMBOL REPRESENTS 1 DAY



# PERCENT OF EMPLOYEES VISITING DISPENSARY

EACH SYMBOL REPRESENTS 10%

