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HEALTH DIVISION REPORT
FOR THE MONTH ENDING MAY 31, 1952

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CARBIDE AND CARBON CHEMICALS COMPANY
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HEALTH DIVISION

REPORT FOR THE MONTH ENDING MAY 31, 1952

J. S. Felton, M. D.

DATE ISSUED

AUG 13 1952

OAK RIDGE NATIONAL LABORATORY
Operated by
CARBIDE AND CARBON CHEMICALS COMPANY
A Division of Union Carbide and Carbon Chemicals Company
Post Office Box P
Oak Ridge, Tennessee

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- 24. C. U. Dernehl, M. D., C&CCC, Texas City, Texas.
- 25. J. S. Lyon, M. D., C&CCC, K-25, Oak Ridge, Tenn.
- 26. C. R. Sullivan, Jr., M. D., C&CCC, Y-12, Oak Ridge, Tenn.
- 27. Office of Research and Medicine, AEC, Oak Ridge, Tenn.
- 28. R. J. Hasterlik, M. D., Medical Director, Argonne National Laboratory.
- 29. C. L. Dunham, Jr., M. D., Chief, Medical Branch, Division of Biology and Medicine, AEC, Washington.
- 30. T. L. Shipman, M. D., Medical Director, Los Alamos.
- 31. Merril Eisenbud, Director, Health and Safety Division, New York Directed Operations.
- 32. W. D. Norwood, M. D., Medical Director, Hanford Engineer Works.
- 33. Robert Love, M. D., Brookhaven National Laboratory.

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May 31, 1952DISTRIBUTION OF EFFORT FOR THE MONTH

	<u>Monthly</u>	<u>Weekly</u>	<u>Hourly</u>
<u>Personnel</u>			
Physicians	2	0	0
Nurses	1	5	0
Medical Technicians	0	4	0
X-ray Technicians	0	1	0
Office Personnel	0	8	0
Custodial personnel	0	0	3

Number of technical personnel added: 0

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	5	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>			
	0	0	3
	<hr/>	<hr/>	<hr/>
	3	18	3

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STATISTICAL SUMMARY

Severity Rate * * * * * 4.1 days lost per illness absence.
 Disability Rate * * * * * 12.2 days lost per 1000 days scheduled.
 Frequency Rate * * * * * 3.0 illness absences per 1000 days scheduled.
 Visit Rate * * * * * 56.7 visits per 1000 days scheduled.

Number of patients

Employee * * * * * 1613
 Non-employee
 A.E.C. * * * * * 7
 du Pont (Savannah) * 44
 American Cyanamid * * 2
 Other * * * * * 45
 Total * * * * * 98
 Prospective employees * * * * * 13
 Total patients * * * * * 1724

Number of patients seen at X-10 Dispensary * * * 1504
 Number of patients seen at Y-12 Dispensary * * * 220
 Total patients * * * * * 1724

Number of visits

Employee
 X-10 Dispensary * * * 3274
 Y-12 Dispensary * * * 468
 Total * * * * * 3742
 Non-employee
 A.E.C. * * * * * 11
 duPont (Savannah) * * 85
 American Cyanamid * * 4
 Other * * * * * 89
 Total * * * * * 189
 Total visits * * * * * 3931

Number of procedures

Procedures performed at X-10 * * * * * 4937
 Procedures performed at Y-12 * * * * * 490
 Preliminary procedures * * * * * 78
 Total procedures * * * * * 5505

Number of employees at the Laboratory * * * * * 3145

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STATISTICAL SUMMARY (Continued from page 4)

Percent Employees visiting Dispensary	51.3
Number of Visits per Employee	1.2
Percent of Visitors Visiting Dispensary	15.2
Number of Visits per Visitor3
Number of Illness Absences per Employee1
Ratio of Occupational to Non-occupational Procedures	1: 0.4
Ratio of Non-occupational to Occupational Injuries, first visit.	1: 1.5
Ratio of Non-occupational to Occupational Injuries, all visits	1: 2.5
Ratio of Occupational to Non-occupational Illnesses, first visit	1: 380
Ratio of Occupational to Non-occupational Illnesses, all visits	1: 60
Ratio of Occupational to Non-occupational Absences	1: 24
Ratio of Occupational to Non-occupational Days Lost	1: *

* There were no days lost due to occupational injuries or illnesses during the month of May.

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PROCEDURES ACCOMPLISHED FOR THE MONTH OF MAY 1952

	<u>No. of Procedures</u>
Non-occupational injury	133
" " " , revisit	110
Non-occupational illness	760
" " " , revisit	439
Occupational injury or exposure, chemical	5
" " " " " , revisit	7
Occupational injury or exposure, chemical, a.o.q.*	1
" " " " " , revisit	0
Occupational injury or exposure, n.o.c.**	185
" " " " " , revisit	408
Occupational injury, n.o.c.**, a.o.q.*	5
" " " " " , revisit	5
Occupational injury or exposure, radiation	0
" " " " " , revisit	0
Occupational injury or exposure, radiation, a.o.q.*	0
" " " " " , revisit	0
Occupational illness, n.o.c.**	2
" " " " " , revisit	18
Absence due to illness or injury, non-occupational	191
Absence due to illness or injury, occupational	8
Physical examination, industrial hygiene	118
Physical examination, job transfer	7
Physical examination, periodic health	32
Physical examination, pre-placement	31
Physical examination, rehire	7
Physical examination, termination	57
Physical examination, other	34
Audiogram	320
Blood donation	12
Clinical laboratory procedure/	572
Electrocardiogram	292

* a.o.q. - alleged or questionable

** n.o.c. - not otherwise classified

/ see next page

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		<u>No. of Procedures</u>
Occupational vision section procedures		
Spectacles issued, plano	74	
Spectacles ordered, prescription	66	
Spectacles issued, prescription	37	
Ortho-Rater Examination	206	
Partial replacement	22	
Adjustment or repair	12	
Advisory service	19	
Total		436
X-ray examination:		
X-ray examination, non-occupational	36	
X-ray examination, occupational	202	
Total		238
Special study interview		30
Clinical photograph		6
Dispensary visit, patient not seen		11
Psychologic consultation		7
Psychiatric consultation		13
Consultation, occupational conditions		7
Consultation, non-occupational conditions		213
Consultation without patient, occupational		13
Consultation without patient, non-occupational		56
Premarital serodiagnostic test		4
Immunizations		678
Diagnostic procedures for an outside M. D.		34
GRAND TOTAL		5505

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

Agglutination	1
Bacteriological culture	2
Bacteriological smear	8
Blood alcohol	1
Blood creatinin	10
Blood glucose	15
Blood icteric index	1

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	<u>No. of Procedures</u>
Blood urea nitrogen	11
Blood urea clearance	11
Blood uric acid	1
Complete blood count	394
Feces, parasitological	1
Gastric analysis	1
Hematocrit	1
P. S. P.	13
Red blood count and hemaglobin	19
Rh factor	52
Sedimentation rate	7
Typing, blood	47
Urinalysis	444
Urinalysis, bile	1
Venipuncture for Kahns to be sent to state laboratory	296
Fishberg conc.	13
White blood count and differential	14
Vital capacity	2
Total	1366

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DISPOSITION FOLLOWING DISPENSARY VISIT

Return to regular work	4773
Return to modified or part-time work	313
Death	1
Remain off work	363
Rejected	2
Accepted	37
Sent to hospital or physician's office	16
	5505

ATTENDANT

Psychiatrist	14
First aid attendant	52
First aid attendant and nurse	13
First aid attendant, nurse and doctor	12
Nurse	2622
Nurse and doctor	237
Doctor	582
Doctor and first aid attendant	41
Technician	1925
Psychologist	7
	5505

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TIME LOST DUE TO ILLNESS ABSENCE

	<u>No. of Absences</u>	<u>No. of Days Lost</u>
Less than one day	20	0
1 day	83	83
2 days	35	70
3 days	15	45
4 days	3	12
5 days	9	45
6 days	1	6
7 days	5	35
8 days	4	32
9 days	1	9
10 days	4	40
12 days	2	24
13 days	2	26
14 days	1	14
15 days	2	30
16 days	1	16
18 days	2	36
19 days	1	19
24 days	1	24
25 days	1	25
27 days	1	27
28 days	1	28
30 days	1	30
36 days	2	72
59 days	1	59
	199	807

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NUMBER OF DIAGNOSES FOR ALL VISITS

No. of Diagnoses

INJURIES

Non-occupational:

Superficial injuries (abrasions, blisters, insect bites, scratches)	62
Lacerations	61
Contusions	41
Sprains and strains	48
Foreign body	7
Burns (thermal, chemical and radiant)	19
Fractures	12
Head injury	4
Miscellaneous	18

Total 272

Occupational:

Superficial injuries (abrasions, blisters, insect bites, scratches)	111
Lacerations	205
Contusions	87
Sprains and strains	53
Foreign bodies	22
Burns (thermal, chemical and radiant)	110
Fractures	26
Head injury	21
Poisonings	9

Total 644

GRAND TOTAL OF INJURY 916

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	<u>No. of</u> <u>Diagnoses</u>
<u>ILLNESSES:</u>	
Non-occupational:	
Respiratory	457
Digestive	252
Circulatory	51
Diseases of the blood and blood-forming organs	14
Genito-urinary	92
Bones and joints	173
Diseases of the skin	129
Dermatitis	44
Diseases of the eye	84
Diseases of the ear	38
Allergic, endocrine, metabolic, etc.	124
Diseases of the thyroid	82
Infectious diseases	73
Psychoneurotic disorders	14
Common benign tumors	6
Symptoms and ill-defined conditions	107
Total	1740
Occupational:	
Dermatitis	22
Diseases of the eye	2
Total	24
GRAND TOTAL OF ILLNESSES	1764
No abnormal findings	21
Persons receiving prophylactic inoculations and vaccination	30
Follow-up examination after operation, injury or disease	28
Normal pregnancy	6
Consultation regarding sick relative	10
Medical and surgical aftercare	28
Immunizations	712

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Loss due to accident by cutting and piercing instrument	1
Congenital malformation	17
Operations as causes of absences	19
Deliveries and complications of pregnancy	1
Neoplasms	6
Total	879
TOTAL DIAGNOSIS	3559
Special services <u>not</u> involving diagnoses	2175
GRAND TOTAL	<u>5734</u>

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ABSENCES AND TIME LOST BY GENERAL DIAGNOSIS GROUPS

	<u>No. of Absences</u>	<u>Days Lost</u>
<u>INJURIES</u>		
Contusions	1	4
Sprains and strains	2	1
Foreign bodies	1	0
Fractures	5	16
 <u>ILLNESSES</u>		
Respiratory	69	252
Digestive system	54	112
Circulatory	3	17
Diseases of the blood and blood-forming organs	1	7
Genito-urinary	21	60
Bones and joints	9	46
Diseases of the skin	2	10
Non-occupational dermatitis	2	9
Diseases of the eye	1	2
Diseases of the ear	1	1
Allergic, endocrine and metabolic diseases	2	5
Infectious diseases	1	13
Symptoms and ill-defined conditions	10	12
Follow-up examination after operation, injury or disease other than tuberculosis	3	15
Congenital malformations	1	5
Operations as causes for absences	9	210
Deliveries and complications of pregnancy, childbirth and the puerperium	1	10
Total	199	807

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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	3742	3145	1.2
<u>SEX</u>			
Male	3114	2626	1.2
Female	628	519	1.2
<u>OCCUPATION</u>			
Life scientist	26	63	.4
Physical scientist	437	553	.8
Engineer	355	461	.8
Technical assistant	638	466	1.4
Administrative and managerial personnel	160	148	1.1
Clerical	402	368	1.1
Laborer	194	115	1.7
Maintenance	62	66	.9
Protective	205	176	1.2
Craftsman	1034	589	1.8
Chemical operator	141	93	1.5
Equipment operator	88	47	1.9
<u>RACE</u>			
White	3489	2966	1.2
Colored	250	175	1.4
Yellow	3	4	.8
<u>MARITAL STATUS</u>			
Married	3044	2542	1.2
Single	601	539	1.1
Widowed	42	26	1.6
Divorced	55	38	1.4
<u>HEALTH STATUS*</u>			
H-1	608	578	1.1
H-2	2786	2319	1.2
H-3	329	234	1.4
H-4	3		
H-5	16	14	1.1

*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 Deferred

H-5 Temporary employees who aren't 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	118	101	1.2
Physics	100	99	1.0
Chemistry	62	117	.5
Reactor Experimental Engineering	69	96	.7
Biology	46	113	.4
Metallurgy	142	149	1.0
Reactor Projects		1	
Education Relations and Training	57	72	.8
Health Physics	163	110	1.5
Engineering and Maintenance	1595	946	1.7
Industrial Relations	168	170	1.0
Health	22	25	.9
General Office	92	152	.6
Laboratory Protection	236	191	1.2
Directors	37	36	1.0
Analytical Chemistry	254	208	1.2
Math Panel	26	25	1.0
Chemical Technology	158	145	1.1
Information and Reports	77	74	1.0
Materials Chemistry	85	66	1.3
Research Director	81	73	1.1
Electromagnetic Research	29	49	.6
Isotope Research and Production	41	62	.7
ANP	80	61	1.3
Assistant Research Director	4	2	2.0
Solid State Division		2	
<u>AGE GROUP</u>			
18 to 19 years	32	16	2.0
20 to 29 years	1169	1012	1.2
30 to 39 years	1424	1287	1.1
40 to 49 years	818	606	1.3
50 to 59 years	257	195	1.3
60 to 69 years	42	29	1.4
<u>SHIFT</u>			
Straight days	3307	2834	1.2
Rotating shifts	380	276	1.4
Straight shift	55	35	1.6
<u>PAYROLL</u>			
Hourly	1704	1056	1.6
Weekly	1056	867	1.2
Monthly	982	1222	.8

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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>
<u>SEX</u>			
Male	508	55146	.9
Female	299	10899	2.7
<u>OCCUPATION</u>			
Life scientist	0	1323	
Physical scientist	46	11613	.4
Engineer	110	9681	1.1
Technical assistant	127	9786	1.3
Administrative and managerial personnel	20	3108	.6
Clerical personnel	236	7728	3.1
Laborer	102	2415	4.2
Maintenance personnel	5	1386	.4
Protective personnel	10	3696	.3
Craftsman	107	12369	.9
Chemical operator	2	1953	.1
Equipment operator	42	987	4.3
<u>RACE</u>			
White	684	62286	1.1
Colored	123	3675	3.3
Yellow		84	
<u>MARITAL STATUS</u>			
Married	603	53382	1.1
Single	156	11319	1.4
Widowed	10	546	1.8
Divorced	38	798	4.8
<u>HEALTH STATUS*</u>			
H-1	154	12138	1.3
H-2	586	48699	1.2
H-3	67	4914	1.4
H-4	0	0	0
H-5	0	294	0

- *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 Deferred.*
 H-5 Temporary employees who aren't 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	17	2121	.8
Physics	4	2079	.2
Chemistry	5	2457	.2
Reactor Experimental Engineering	8	2016	.4
Biology	50	2373	2.1
Metallurgy	24	3129	.8
Reactor Projects	0	21	0
Education Relations and Training	0	1512	0
Health Physics	43	2310	1.9
Engineering and Maintenance	333	19866	1.7
Industrial Relations	14	3570	.4
Health	28	525	5.3
General Office	30	3192	.9
Laboratory Protection	12	4011	.3
Directors	4	756	.5
Analytical Chemistry	47	4368	1.1
Math Panel	2	525	.4
Chemical Technology	10	3045	.3
Information and Reports	45	1554	2.9
Materials Chemistry	6	1386	.4
Research Director	53	1533	3.5
Electromagnetic Research	19	1029	1.8
Isotope Research and Production	17	1302	1.3
ANP	36	1281	2.8
Assistant Research Director	0	42	0
Solid State Division		42	
<u>AGE GROUP</u>			
18 to 19 years	11	336	3.3
20 to 29 years	270	21252	1.3
30 to 39 years	270	27027	1.0
40 to 49 years	172	12726	1.4
50 to 59 years	83	4095	2.0
60 to 69 years	1	609	.2
<u>SHIFT</u>			
Straight days	801	59514	1.3
Rotating Shifts	4	5796	.1
Straight shift	2	735	.3
<u>PAYROLL</u>			
Hourly	267	22176	1.2
Weekly	401	18207	2.2
Monthly	139	25662	.5

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

	<u>Absentees</u>	<u>No. of Employees</u>	<u>Percent Absentees</u>
TOTAL	189	3145	6.0
<u>SEX</u>			
Male	100	2626	3.8
Female	89	519	17.1
<u>OCCUPATION</u>			
Life scientist	0	63	0
Physical scientist	18	553	3.3
Engineer	16	461	3.5
Technical assistant	41	466	8.8
Administrative and managerial personnel	7	148	4.7
Clerical personnel	64	368	17.4
Laborer	5	115	4.3
Maintenance Personnel	3	66	4.5
Protective personnel	5	176	2.8
Craftsman	22	589	3.7
Chemical operator	4	93	4.3
Equipment operator	4	47	8.5
<u>RACE</u>			
White	177	2966	6.0
Colored	12	175	6.9
Yellow	0	4	0
<u>MARITAL STATUS</u>			
Married	136	2542	5.4
Single	45	539	8.3
Widowed	2	26	7.7
Divorced	6	38	15.8
<u>HEALTH STATUS*</u>			
H-1	31	578	5.4
H-2	141	2319	6.1
H-3	17	234	7.3
H-4	0	0	0
H-5	0	14	0

- *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 Deferred.
- H-5 Temporary employees who aren't given complete physical examinations.

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<u>DIVISION</u>	<u>Absentees</u>	<u>No. of Employees</u>	<u>Percent Absentees</u>
Operations	11	101	10.9
Physics	3	99	3.0
Chemistry	2	117	1.7
Reactor Experimental Engineering	1	96	1.0
Biology	8	113	7.1
Metallurgy	9	149	6.0
Reactor Projects	0	1	0
Education Relations and Training	0	72	0
Health Physics	12	110	10.9
Engineering and Maintenance	49	946	5.2
Industrial Relations	11	170	6.5
Health	2	25	8.0
General Office	6	152	3.9
Laboratory Protection	7	191	3.7
Directors	3	36	8.3
Analytical Chemistry	20	208	9.6
Math Panel	3	25	12.0
Chemical Technology	7	145	4.8
Information and Reports	10	74	13.5
Materials Chemistry	4	66	6.1
Research Director	9	73	12.3
Electromagnetic Research	2	49	4.1
Isotope Research and Production	5	62	8.1
ANP	5	61	8.2
Assistant Research Director	0	2	0
Solid State Division	0	2	0
 <u>AGE GROUP</u>			
18 to 19 years	3	16	18.8
20 to 29 years	72	1012	7.1
30 to 39 years	76	1287	5.9
40 to 49 years	26	606	4.3
50 to 59 years	11	195	5.6
60 to 69 years	1	29	3.4
 <u>SHIFT</u>			
Straight days	183	2834	6.5
Rotating shifts	4	276	1.4
Straight shift	2	35	5.7
 <u>PAYROLL</u>			
Hourly	42	1056	4.0
Weekly	107	867	12.3
Monthly	40	1222	3.3