

Greatest Radiation Fallout Danger Expected Next February

Thursday, September 21, 1961

Page 7-A

By JOSEPH L. MYLER
WASHINGTON (UPI) — Scientists expect most of the long-lasting radioactive poison hurled into the high atmosphere by this month's Soviet atomic tests to settle on the earth in a four-month period starting in February.

They will not be surprised if next spring's fallout sets a new record. The present mark was set by the Russians in 1959.

What Dr. Lester Machta of the Weather Bureau calls "the greatest fallout ever recorded" occurred in March, April, May, and June of 1959. It came from the Soviet tests of October, 1958.

This year's Russian tests started a month earlier and continued at a pace which threatened to surpass the 1959 rate.

What humanity will suffer from this radioactive contamination imposed upon it by Russia is not known. Science so far has been unable to detect or measure whatever damage is done to man by low radiation doses such as those normally associated with worldwide test fallout.

This radiation is small to the disappearing point compared with the instantaneous radiation from an exploding bomb or that from quickly descending "local fallout."

Local fallout in wartime could produce, a few miles down wind from the explosion, radiation exposures amounting in an hour to thousands of times the dosage received from test fallout over a period of years.

The Soviet test fallout in the spring of 1959 increased by about 50 per cent the amount of strontium-90 deposited on the United States by all previous American, Russian, and British tests.

The 1961 Russian tests, if they prove comparable to those of October, 1958, could build up the strontium-90 contamination of the United States by 30 per cent above present levels.

Strontium-90 is one of the most menacing products of atomic fission. It is long-lived. It gets into plants and thence into milk and human bones. Very young children, whose diet is mainly milk and whose bones are growing rapidly, absorb more strontium-90 than adults.

It is known that in large amounts — large by comparison with those resulting from test fallout — strontium-90 can cause bone cancer in animals. It may also cause leukemia.

Another long-lasting product of bomb tests, cesium-137, is more widely distributed in the body than strontium and so can subject the reproductive organs to radiation.

There may or may not be a dose level below which strontium-90 can do no bodily harm. Scientists are not agreed whether such a threshold exists.

But most biologists believe no amount of radiation is too small to cause some genetic damage if it hits the cells of heredity. From the standpoint of man as a species, this is the worst menace of radiation because genetic damage is bequeathed to future generations.

When nuclear weapons are tested, some of their radioactive products are deposited into the troposphere, the so-called "weather zone." Above the troposphere, at altitudes ranging from 30,000 to 55,000 feet, depending on the latitude, is a vast region of relative calm known as the stratosphere.

Small bombs tested above ground throw all of their fission products into the troposphere. It stays there a matter of weeks. Tropospheric contamination from the Soviet tests has been detected all around the Northern Hemisphere.

But it has been so slight, according to government experts, as not to pose any public health threat.

The great contaminants are the "dirty" H-bombs, with their fission triggers and jackets, which spew the bulk of their poison into the stratosphere.

Stratospheric "residence time" for radioactive material from big bomb tests ranges from under a year to perhaps 10 years, depending on the latitude and altitude of the explosion.

Fallout of major proportions from past explosions had all but disappeared from the atmosphere until the Russians resumed testing on Sept. 1.

Once radioactive debris gets down from the stratosphere into the troposphere, fallout tends to be heaviest in regions where rainfall is heaviest.

For this reason next spring's fallout from the current Soviet tests is expected to be about twice as heavy in a large part of the United States as it is in Russia.

except for comparatively rainy (add sky) than they get from bomb tests. The medical radiation dose (X-rays and the like) has been more than 40 times fallout exposure.

Dr. Charles L. Dunham of the AEC's biology and medicine division came up in 1959 with some damage figures based on what he said was "the quite unsubstantiated hypothesis that radiation effects are directly proportional to total dose irrespective of the dose rate."

Tests up to then, calculated on this basis, might produce over the next 70 years in the United States "some 500 greater or lesser tragedies per year including gross genetic defects — miscarriages, etc. — as well as leukemia and bone cancer cases," he said.

But according to the same hypothesis, Dunham said, "unnecessary medical X-ray exposures could be causing annually for the next 30 years some 3,000 greater or lesser tragedies of genetic origin."

Such calculations, however comforting or frightening, do not take into account the "hot spots." Ever since nuclear testing started in a big way, it has become apparent that some communities from time to time get far more than average exposure.

After a Nevada test series in 1953, for example, Troy, N.Y., briefly was exposed to radiation levels about 1,000 times normal.

Dr. C. E. Everett
Osteopathic Physician and Surgeon

Has started practice at Merrill, Oregon

Office Hours 9 till 12 and 1 till 5 Mon. thru Fri. Sat. and Sun. by appointment and emergency.
Office Phone 798-5210 Residence Phone 798-5848

WILLIAMS APPLIANCE STORES MOONLIGHT SALE!!!

WILLIAMS APPLIANCE STORES WILL BE OPEN FROM 4 PM UNTIL MIDNIGHT TONIGHT AND FRIDAY. OUR 'MOONLIGHT SALE' IS A HOTPOINT FACTORY SPONSORED PROMOTION AND PROMISES TO BE ONE OF THE BIGGEST APPLIANCE SALES OF THE YEAR! Only a few of our numerous specials are listed! SHOP BY MOONLIGHT AND SAVE! EASY TERMS! FREE DELIVERY!



Hotpoint
40" RANGE

- 40" - Double Oven
- Deluxe Model
- Fully Calrod Equipped
- All Porcelain
- Battleship Construction

Moonlight Price **\$168**



Hotpoint
REFRIGERATOR

- Large Capacity, 15.1 Sq. Ft. shelf area
- Two Door, New Compact Styling
- Only 28 inches wide
- Automatic Defrost
- Full width porcelain crisper
- Sliding shelves

Moonlight Price **\$248**



Hotpoint
30" RANGE

- Glass Oven Door
- Fully Automatic
- Fingertip Pushbutton Control
- Full Width Storage Door
- Rotisserie

Moonlight Price **\$198**



Hotpoint
DISHWASHER

- Double Washing Action
- Quadruple Rinsing
- Electric Heat Drying
- Convenient Mobility
- Roll-R-Racks Roll Out For Easy and Convenient Loading.

Moonlight Price **\$219**



Hotpoint
Freezer

- Holds 350 lbs of frozen food
- Fast Freezing Shelves
- Magna-seal Door
- Automatic Temperature Control
- New Off-set Hinge

Moonlight Price **\$178**



Hotpoint
Refrigerator

- Full Porcelain Crisper
- Magna-Seal Door Gaskets
- 50 lb Freezer Chest
- New Square Design
- 4 Pastel Colors

Moonlight Price **\$179**



Hotpoint
Washer

- 2-Cycle Operation
- All Porcelain inside and out
- Big 10 lb. capacity

Moonlight Price **\$158**



Hotpoint
Dryer

- 2-Speed Heat Control
- Convenient Lid Door
- Modern Style Back Panel
- Both 110 or 220 volt installation optional

Moonlight Price **\$129**

OUT OF THIS WORLD SAVINGS

TAPE RECORDER
All transistor, complete with mike and earphone, battery, magnetic tape, built-in speaker, handle. Quantities limited.
Retail Price \$89.95
SPECIAL **\$29⁸⁸**

ADMIRAL CLOCK RADIO
Reg. \$24.95
Completely Automatic
\$17⁹⁵

Special! Portable **SYLVANIA TV**
Full Warranty
90-Day Service
Reg. \$199.00
\$148⁸⁸

HOTPOINT PORTABLE DISHWASHER
Reg. \$249.95
Slight Damage on Lid.
\$188⁸⁸

\$100 Trade-In Allowance. Two **ADMIRAL TV's**
Reg. Retail \$389.00!
1961 Model Consoles
\$288⁸⁸ with trade

LOW MOONLIGHT PRICES!



HOTPOINT WATER HEATER

- 52 Gallon
- Quick Recovery!

\$79

HOTPOINT DISPOSAL

- Extra Special!

\$33 ONLY

Long, Easy Terms Even With These Prices! Sale Prices Good Only Thurs., Fri., 4 p.m. till Midnight!

Williams APPLIANCE STORES

Free Service!

In Grants Pass 409 S.E. 6th St. In Klamath Falls - 2000 So. 6th In Medford 132 So. Central

Watch Our Talent Show — KOTI-TV — Monday, Sept. 25th

Coast-to-Coast NEWSPAPERS SELL THE MOST!
Herald and News