

FEB 5 1993

Letter to Public - Whole Body Only

Oncology Services Corp.

Docket No. 03031765

License No. 37-28540-01

Dear _____:

As you probably know, the U.S. Nuclear Regulatory Commission conducted a technical investigation of the loss of a radioactive source at Oncology Services Corporation's Indiana Regional Cancer Center, Indiana, Pennsylvania, facility. As part of our investigation, we estimated your radiation exposure resulting from this incident.

The purpose of this letter is to notify you of our estimate of your radiation exposure associated with this incident. Your dose was estimated from NRC calculations based on the time that you spent in proximity to the radiation source. Specifically, your dose has been estimated to be between ___ and ___. The range is provided to account for uncertainties in the duration of your exposure and your distance from the radiation source during the exposure. This information was acquired from interviews of individuals and reviews of records, for example, when people logged in and out of places where the source was present. To put your dose in perspective, the average annual dose to a member of the public from natural sources of radiation is approximately 300 millirem. The average dose from a chest x-ray is six millirem and the average dose from a roundtrip cross country airplane flight is five millirem.

When calculations are used to estimate exposures to radiation, it is important to compare the estimates to physical evidence of the effects of the exposure, if such evidence is available. On selected individuals (generally, individuals whose estimated doses were the highest calculated) physical evidence for a range of exposures was obtained by blood studies. Some of these studies involve the evaluation of a randomly selected set of white blood cells to determine how many in each set showed radiation-induced changes. The results of these tests indicate that the dose for these individuals did not exceed approximately 20 rem (20,000 millirem).

With your estimated dose, radiation injury or clinical signs of damage are not expected to occur. However, the exposure you received may result in a ___% increase in the risk of a cancer induced fatality considering the best available scientific estimates for the long term risk of cancer based on large population statistics. You should be aware that the risk of a cancer induced fatality to the general public from all causes is estimated to be one chance in five.

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PDR ADDCK 03013765
C PDR

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You may wish to discuss this information with your physician. Additionally, should you or your physician wish to discuss the significance of your estimated dose, you may contact Dr. Robert Ricks of the Oak Ridge Institute for Science and Education in Oak Ridge, Tennessee at 615/576-3131 between the hours of 9 AM and 4:30 PM EST. You may call collect. When calling, please indicate that your inquiry is related to the Indiana, PA incident.

You have probably read and heard a lot about this case in recent weeks and we wanted you to have details of our investigation. Therefore, a copy of our investigation report will be mailed to you under separate cover when it becomes available later this month.

Sincerely,

Thomas T. Martin
Regional Administrator

THE RADIATION DOSE INFORMATION CONTAINED
IN THIS LETTER IS EXEMPT FOR DISCLOSURE TO THE
PUBLIC IN ACCORDANCE WITH 10 CFR 2.790(a)

NOTE: 65 IDENTICAL LTRS WENT TO MEMBERS OF THE PUBLIC

FEB 04 1993

Letter to Public - Whole Body and Extremity

Dear _____:

As you probably know, the U.S. Nuclear Regulatory Commission conducted a technical investigation of the loss of a radioactive source at Oncology Services Corporation's Indiana Regional Cancer Center, Indiana, Pennsylvania, facility. As part of our investigation, we estimated your radiation exposure resulting from this incident.

The purpose of this letter is to notify you of our estimate of your radiation exposure associated with this incident. Your whole body and extremity doses were estimated from NRC calculations based on the time that you spent in proximity to the radiation source. Specifically, your whole body dose has been estimated to be between ____ and ____ and your extremity dose has been estimated to be between ____ and _____. The ranges are provided to account for uncertainties in the duration of your exposure and your distance from the radiation source during the exposure. This information was acquired from interviews of individuals and reviews of records, for example, when people logged in and out of places where the source was present. To put your whole body dose in perspective, the average annual dose to a member of the public from natural sources of radiation is approximately 300 millirem. The average dose from a chest x-ray is six millirem and the average dose from a roundtrip cross country airplane flight is five millirem.

When calculations are used to estimate exposures to radiation, it is important to compare the estimates to physical evidence of the effects of the exposure, if such evidence is available. On selected individuals (generally, individuals whose estimated doses were the highest calculated) physical evidence for a range of exposures was obtained by blood studies. Some of these studies involve the evaluation of a randomly selected set of white blood cells to determine how many in each set showed radiation-induced changes. The results of these tests indicate that the whole body dose for these individuals did not exceed approximately 20 rem (20,000 millirem).

With your estimated dose, radiation injury or clinical signs of damage are not expected to occur. However, the exposure you received may result in a ____% increase in the risk of a cancer induced fatality considering the best available scientific estimates for the long term risk of cancer based on large population statistics. You should be aware that the risk of a cancer induced fatality to the general public from all causes is estimated to be one chance in five.

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You may wish to discuss this information with your physician. Additionally, should you or your physician wish to discuss the significance of your estimated dose, you may contact Dr. Robert Ricks of the Oak Ridge Institute for Science and Education in Oak Ridge, Tennessee at 615/576-3131 between the hours of 9 AM and 4:30 PM EST. You may call collect. When calling, please indicate that your inquiry is related to the Indiana, PA incident.

You have probably read and heard a lot about this case in recent weeks and we wanted you to have details of our investigation. Therefore, a copy of our investigation report will be mailed to you under separate cover when it becomes available later this month.

Sincerely,

original Signed By:

Thomas T. Martin
Regional Administrator

THE RADIATION DOSE INFORMATION CONTAINED
IN THIS LETTER IS EXEMPT FOR DISCLOSURE TO THE
PUBLIC IN ACCORDANCE WITH 10 CFR 2.790(a)

NOTE: 12 IDENTICAL LETTERS WENT TO MEMBERS OF THE PUBLIC

Docket No.
030-31765

bcc:

H. Thompson, DEDS
R. Bernero, NMSS
E. Jordan, AEOD
T. Martin, RI
W. Kane, RI
C. Paperiello, IIT
R. Cooper, RI
R. Cunningham, NMSS
L. Spessard, AEOD
J. Fouchard, OPA
S. Shankman, RI
B. Letts, RI
J. Goldberg, OGC
S. Lewis, OGC
J. Glenn, NMSS
R. Bellamy, RI
M. Shanbaky, IIT
V. McCree, OEDO
K. Abraham, PAO
D. Scirenci, PAO
K. Smith, RI
D. Holody, RI
OEMAIL
J. Dwyer, RI

OFC	DRSS	DRSS		RA	HQ:NMSS	HQ:OGC	HQ:AEOD
NME	SHANKMAN	COOPER		MARTIN	BERNERO	SCINTO TREBY	JORDAN
DTE	s/2/2/93	s/2/1/93		s/2/3/93	2/3/93 ARLOTTO FOR VIA E- MAIL	2/3/93 VIA E- MAIL	2/3/93 VIA E- MAIL

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