

[Download key passages/title pages as a PDF](#)

**Doull JA, Hardy M, Clark JH, Herman NB (1931)**. The effect of irradiation with ultra-violet light on the frequency of attacks of upper respiratory disease (common colds). *American Journal of Hygiene* 13:460-77.

### Key passages

THE EFFECT OF IRRADIATION WITH ULTRA-VIOLET  
LIGHT ON THE FREQUENCY OF ATTACKS OF  
UPPER RESPIRATORY DISEASE (COMMON  
COLDS).\*

By

JAMES A. DOULL, MARY HARDY, JANET H. CLARK,  
AND NATHAN B. HERMAN.

(Received for publication September 11, 1930.)

*Selection of those to be irradiated.*—Those to be offered irradiation were selected at random as follows: A list of 373 volunteers, expected to be in residence, was given to Professor Lowell J. Reed with the request that he select approximately one half for irradiation. From this irradiation group, he was requested also to select about two thirds for one treatment weekly (A). The remaining third was to be offered two treatments weekly (B). The other half of the volunteers constituted the control group C.\*

\* The method used by Professor Reed was to represent each volunteer by a die. Thus 122 white dice represented group A; 66 red dice group B and 185 black dice group C. The dice were thoroughly mixed in a sampling machine known to be practically free from systematic error. They were then withdrawn from the bottom of the machine one at a time. The name of each volunteer was written on a card and the cards were arranged alphabetically. The first die drawn being black, indicated that the first individual on the list belonged to the control group; the next happened to be red and indicated that the second name belonged to group B, etc.