ZHONGGUO FUSHE WEISHENG

双月刊

1992年6月创刊

苹

第33卷

第6期

2024年12月出版

主 管

国家疾病预防控制局 北京市海淀区知春路14号 邮编: 100191

主 办

中华预防医学会 北京市东城区广渠门内大街 47号 楼雍贵中心 A 座 8 层 100062 山东省医学科学院放射医学研究所 山东省济南市青岛路 6699 号 250117

编辑出版

《中国辐射卫生》编辑部 济南市青岛路 6699 号 250117 电话:(0531)59567177 E-mail: REDI@ chinajournal. net. cn http://www.zgfsws.com

总 编 辑 苏旭 编辑部主任 李海亮 广告发布登记编号 鲁广发登字 3700005204 号

印刷

山东新社科印务有限公司 发 行

济南市邮局

邮发代号

24 - 094

订 购

全国各地邮局

邮 购

《中国辐射卫生》编辑部

定价

每期 40 元,全年 240 元

中国标准连续出版物号

ISSN 1004 - 714X

CN 37 - 1206/R

2024年版权归中华预防医学会和《中 国辐射卫生》编辑部共同所有。

本刊刊出的所有文章不代表中华预 防医学会和本刊编委会的观点,除非特别 声明。

本刊如有印装质量问题,请向本刊编 辑部调换。

次 目

论	著
Ì	自屏蔽头颈部放射治疗系统辐射防护检测与评估方法
	马向捷,姜庆寰,刘雅,张雨,李明生(621)
-	环境空气测氚用正比计数器研制及性能测试
	吕洋,朱保吉,李元桥,吕晓侠,朱亨,徐利军,林敏(626)
- 14	基于 ICRP137 号出版物的伤口摄入铀的滞留与排泄分数计算
	雷洁瑛,张洋,张斌,徐明,盛伟,孙高峰(631)
:	累积法与连续法在居室氡测量中的比较
	寇珊珊,侯长松,宋延超,孙浩然,崔宏星,尚兵,武云云(638)
7	核设施现场新型呼吸防护全面罩设计孙岩松, 韩毅, 李国栋, 曾进忠, 刘杰,
	杜长斌,池晓森,陈志伟,姬俊杰,曹勤剑(642)
2	2022 年我国部分动物医院放射工作人员外照射水平调查与分析
į	东莞市东江水源饮用水总α、β放射性水平调查及年有效剂量估算
J	医疗机构放射人员外照射剂量及身心健康状况调查分析
	季丁浩,杨叶中,李娜,王夏冬,孙震,张芮,南亚捷(659)
-	北京市两家医疗机构儿童心脏介入程序辐射剂量试点调查
	秦杰林,徐辉,冯泽臣,崔力萌,赵俏俏(667)
14	我国直线加速器质量控制检测结果中存在的问题分析
	王红波,刘雪霞,张松辉,黄晨旭,郭跃信,孙全富(675)

三大核事故应急撤离的问题与经验教训分析 胡鹏磊, 陈惠芳, 袁龙, 付熙明, 雷翠萍(681)
2023年南通市非医疗放射机构辐射防护现状调查 黎源, 钟恩德, 曹亚强, 孙程, 许滋宁(686)
放射卫生科研院所青年基金管理工作的实践与思考王宏涛, 习聪, 王子唯, 刘佳宸, 韩艳清(692)
嘉峪关市非铀矿山高氡暴露矿工职业健康资料分析 王彩环, 刘军(699)
医用电离辐射对人体血液指标的影响 张晔(706)
锥形束 CT 在经肝动脉化疗栓塞术治疗肝癌效果评价中的价值李兆山, 沈志桃, 张显顺, 陈路宁(710)
综一述
DNA 损伤应答关键蛋白对肿瘤放疗敏感性影响的研究进展 ····································
黄绍荣,方连英,孙昊,郑林萍,陈英民,李卫国,马娅(716)
儿童脉管性疾病介入诊疗患者剂量优化研究进展徐振博, 陈英民, 马娅, 王小山, 陈睿(722)
低剂量辐射生物标志物的研究新进展

CHINESE JOURNAL OF RADIOLOGICAL HEALTH

Bimonthly Established in June, 1992 Volume 33 Number 6 Dec, 2024

Responsible Institution

National Disease Control and Prevention Administration 14[#] Zhichunlu, Haidian District, Beijing 100191

Sponsor

Chinese Preventive
Medicine Association
8th Floor, Yonggui Center A Building,
No. 47 Guangqumennei Street,
Dongcheng District, Beijing 100062,
P. R. China
Institute of Radiation Medicine,
Shandong Academy of Medical
Sciences
6699 Qingdao Road, Jinan 250117

Editing and Publishing

Editorial Department of Chinese Journal of Radiological Health 6699 Qingdao Road, Jinan 250117 Tel:(0531) 59567177 E-mail;REDI@chinajournal.net.cn. http://www.zgfsws.com

Editor-in-chief

SU Xu

Managing Director

LI Hailiang

Printing

Shandong Social Science Printing House

Distributor

Jinan Post Office

Subscription

Local Post Office

Mail-order Distributor

Editorial Department of Chinese Journal of Radiological Health

CSSN

ISSN 1004 - 714X

CN 37 - 1206/R

CONTENTS IN BRIEF

Mothods for radiation protection testing and evaluation of a solf shielded head and neel

Original Articles		

rections for radiation protection testing and evaluation of a sen-sinctucu near and neck					
radiotherapy system · · · · · · · · · · · · · · · · · · ·					
MA Xiangjie, JIANG Qinghuan, LIU Ya, ZHANG Yu, LI Mingsheng (621)					
Design and test of proportional counter for measurement of tritium in air · · · · · · · · · · · · · · · · · · ·					
···LYU Yang, ZHU Baoji, LI Yuanqiao, LYU Xiaoxia, ZHU Heng, XU Lijun, LIN Min (626)					
Calculation of retention and excretion fractions for uranium intake via wounds based on					
ICRP Report 137 ·····					
······LEI Jieying, ZHANG Yang, ZHANG Bin, XU Ming, SHENG Wei, SUN Gaofeng (631)					
Comparison of accumulation and continuation methods in indoor radon measurement · · · · ·					
······KOU Shanshan, HOU Changsong, SONG Yanchao, SUN Haoran,					
CUI Hongxing, SHANG Bing, WU Yunyun (638)					
Design of a new full-face respiratory protection mask for on-site use at nuclear facilities ·····					
······SUN Yansong, HAN Yi, LI Guodong, ZENG Jinzhong, LIU Jie, DU Changbin,					
CHI Xiaomiao, CHEN Zhiwei, JI Junjie, CAO Qinjian (642)					
Investigation and analysis of external exposure levels of radiation workers in selected					
veterinary clinics in China, 2022 ····HAO Shuxia, YU Haitao, LI Mengxue, FAN Shengnan,					
WANG Tuo, ZHANG Jingguo, DENG Jun (649)					
Investigation of gross α and gross β radioactivity and estimation of annual effective dose in					
drinking water from Dongjiang River in Dongguan City, China ·····					
HUANG Xing, CHEN Huipeng, LIANG Zhanhui (654)					
Investigation and analysis of external radiation dose and physical and mental health status					
of radiation workers in medical institutions					
JI Dinghao, YANG Yezhong, LI Na, WANG Xiadong,					
SUN Zhen, ZHANG Rui, NAN Yajie (659)					
A pilot survey of radiation doses for pediatric cardiac interventional procedures in two					
medical institutions in Beijing, China					
QIN Jielin, XU Hui, FENG Zechen, CUI Limeng, ZHAO Qiaoqiao (667)					

Analysis of issues in quality control test results of linear accelerators in China · · · · · · · · · · · · · · · · · · ·	
WANG Hongbo, LIU Xuo	exia, ZHANG Songhui, HUANG Chenxu,
	GUO Yuexin, SUN Quanfu (675)
Analysis of issues and lessons learned from emergency evacuations in three major nuclear	r accidents ······
HU Penglei, CHEN Huifang, YU.	AN Long, FU Ximing, LEI Cuiping (681)
Investigation of radiation protection status of non-medical radiation institutions in Nanto	ong, China, 2023 ·····
LI Yuan, ZHONG Ende, CAC	Yaqiang, SUN Cheng, XU Zining (686)
Practice and reflection on the management of youth funds in radiation health research in	stitutions ·····
WANG Hongtao, XI Cong, WANG	Ziwei, LIU Jiachen, HAN Yanqing (692)
Analysis of occupational health data of miners with high radon exposure in non-uranium	mines in Jiayuguan, China ·····
	······WANG Caihuan, LIU Jun (699)
Effect of medical ionizing radiation on human blood parameters	ZHANG Ye (706)
Value of cone-beam computed tomography in evaluating the response of liver cancer to the	ransarterial chemoembolization ······
LI Zhaoshan, SHEN Zhitao,	ZHANG Xianshun, CHEN Luning (710)
Review Articles	
Research progress on impact of key proteins associated with DNA damage response on ra	ndiosensitivity ·····
······································	HEN Yingmin, LI Weiguo, MA Ya (716)
Research progress on dose optimization for interventional procedures in children with va	scular anomalies ·····
XU Zhenbo, CHEN Yingmin, MA	Ya, WANG Xiaoshan, CHEN Rui (722)
Progress of research on the development of low-dose radiation biomarkers ······	
SUN Xin, WA	aNG Yalin, LIU Qingjie, LI Shuang (728)