

国家职业卫生标准推广应用



国际劳工组织



中国性病艾滋病防治协会

《血源性病原体职业接触防护导则》

(GBZ/T 213—2008)

实施应用指南

The Implementation Note for
Guideline for Prevention and Control of
Occupational Exposure to Blood Borne Pathogens

张敏 武汝廉 主编



科学出版社

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内 容 简 介

医护人员在从事职业活动过程中面临多种职业性有害因素及其危害。本书从职业卫生的专业角度,全面阐述了医护人员面临的职业危害、国内外预防控制策略及技术工具,并对《血源性病原体职业接触防护导则》(GBZ/T 213—2008)进行了解读和条文解释。本书还提供了“血源性病原体职业接触防护干预量化评估表”和“医护人员血源性病原体职业接触风险控制手册”两项技术工具,以期从多方面推动医护人员的职业卫生防护。另附相关宣贯材料及课题组已发表的相关论文的清单供读者参考。

本书适合医护人员、医疗卫生管理人员阅读,从事相关工作的人员亦可参考。

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序 言 一

“健康胜于财富”不仅仅是一句古老的谚语，所有人，无论其社会地位高低，始终把身体健康作为优先考虑，国民健康对任何社会来说都是重要基石。良好的健康状况能够促进劳动生产率的提高、教育程度的改善、收入水平的增加以及最终增进人们的信心和幸福感，从而有利于社会经济发展。正如《2030年可持续发展议程》所示，不分年龄，保证所有人拥有健康生活以及促进所有人拥有幸福感是可持续发展的关键。

提高健康结果取决于劳动者的健康。没有安全、健康的医务人员，卫生体系无法良好地运转。在提高医护人员工作条件方面，在过往的几年，中国已经迈出了大步：2008年医护人员相关国家职业卫生标准《血源性病原体职业接触防护导则》（GBZ/T 213—2008）发布，要求医院采取措施预防职业暴露；2013年《国家职业病分类目录》更新，确认医护人员职业感染艾滋病属于职业病；2016年《“健康中国2030”规划纲要》提出强化安全生产和职业健康的重要性，这包括医护人员的职业安全与健康。

中国有1000万医护人员，是全球卫生工作者总数的10%。医疗机构被称为世界上最危险的工作场所之一。正如矿工或建筑工人一样，医护人员也需要职业保护避免职业伤害。然而，由于工作内容是照顾病人和病患，医护人员被误以为对职业伤害或疾病具有“免疫”力。在“病人第一”服务意识下，医护人员常常为了病人而牺牲自己的幸福。中国存在很大的空间进一步提高医护人员职业安全健康意识、进一步增强医院职业安全健康管理能力。

《〈血源性病原体职业接触防护导则〉（GBZ/T 213—2008）实施应用指南》是国际劳工组织北京局和中国性病艾滋病防治协会多年合作的重要产出之一，是为医护人员开发的实用性工具。该应用指南为医疗机构和医护人员预防控制血源性病原体等职业性有害因素提供了指导。编写小组在制定应用指南时，翻阅了大量文献，包括来自国际劳工组织、世界卫生组织、联合国艾滋病规划署和其他专业网络的相关文书，融汇了其他国家的经验和最佳实践。我们深信，该应用指南将大大改善医护人员的安全和健康，从而改善健康结果。

多年来中国性病艾滋病防治协会与国际劳工组织密切合作，致力于医护人员职业安全与健康的提高。2016年中国性病艾滋病防治协会成立医护人员职业安全卫生防护工作委员会，展现出中国在增进医护人员职业安全健康方面的政治意愿和进一步筹集资源继续推动该领域工作的决心。国际劳工组织期待深化与中国性病艾滋病防治协会的合作，共同增进中国医护人员的职业安全与健康。

我希望该应用指南广泛应用于中国医疗卫生机构。

Tim De Meyer
国际劳工组织北京局局长



FOREWORD I

Health before wealth is more than just an old adage. All people, regardless of social status, consistently rank good health as a top priority, and healthy people are the lifeblood of any society. Good health boosts labour productivity, educational attainment, income and ultimately confidence and happiness, thus improves the economy. As stated in the SDGs 2030 Agenda, ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development.

Improving health outcomes is dependent on the health of workers. And health systems can only function with safe and healthy workers. Significant strides have been made in China in the past years in enhancing the working conditions of healthcare workers. *The Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens*, as one of the critical National Occupational Health Standards was issued in 2008 requesting hospitals to take action to prevent occupational exposure. The National Categories and Catalogue of Occupational Diseases were updated in 2013 and recognized HIV infection as one of the occupational diseases for healthcare workers. The Outline of the Healthy China 2030 Agenda, which was issued in 2016, highlighted the significance of occupational safety and health, including OSH in health settings.

China is home to ten million healthcare workers, and accounts for 10% of healthcare providers globally. Healthcare settings are known worldwide one of the most hazardous places to work. Healthcare workers need protection against workplace hazards just as much as do mining or construction workers. Yet, because their job is to care for the sick and injured, healthcare workers are often viewed erroneously as “immune” to injury or illness. Their patients come first and they are often expected to sacrifice their own well-being for the sake of their patients. There is much room for improvement healthcare workers’ OSH awareness and capacity to management occupational risks and hazards in China.

The Implementation Note for Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens, is one of the key outputs of the cooperation among the ILO Beijing Office, the Chinese Association of STD and AIDS Prevention and Control (CASAPC) and the Chinese Center for Disease Control and Prevention. As a practical tool addressing the OSH challenge in healthcare settings, it introduces the background of the 2008 Guidelines, explains its clauses, provides technical guidance for health workers to identify occupational hazards and risks in their day to day medical practice, and encourages health workers to find solutions by themselves. The task force reviewed a significant number of instruments from ILO, WHO, UNAIDS and other networks of expertise when developing the guidelines and introduced the experience and best practice from China and other countries, and put forward a quantitative assessment tool for hospitals to measure improvements. We strongly believe the guideline will greatly improve the safety and health of healthcare workers and thus generate improved health outcomes.

CASAPC has been dedicated to occupational safety and health of healthcare workers for many years by working closely with the ILO. CASAPC established its own Occupational Safety and Health Committee in 2016

to demonstrate political wills and mobilize resources. The ILO is looking forward to deepening cooperation with the CASAPC in the interest of healthcare workers' health and safety.

We hope these guidelines will be utilized broadly throughout the hospitals and clinical community as well in the country.

Dr. Tim De Meyer

Director

The ILO Country Office for China and Mongolia



序 言 二

2016年，中国正式发布《“健康中国2030”规划纲要》，旨在全面提升中华民族健康素质、实现人民健康与经济社会协调，也是积极参与全球健康治理、履行2030年可持续发展议程国际承诺的举措。令业内同仁兴奋的还有：强化安全生产和职业健康，进一步完善职业安全卫生标准体系被纳入规划纲要。

中国性病艾滋病防治协会是以艾滋病防治专业工作者为主体的社会组织，是中国艾滋病性病防治工作的重要社会力量。多年来，中国性病艾滋病防治协会高度关注并积极倡导加强艾滋病职业卫生防护工作，批准成立了医护人员职业卫生防护工作委员会，充分调动各种资源，搭建多部门、多学科参与的交流与合作平台，开展医护人员艾滋病职业安全及其他职业卫生防护的研究，工作试点和新标准、新技术的推广应用，营造关心和歧视艾滋病病人以及关心爱护医护人员的良好医疗环境。

2008年中国发布了医护人员相关国家职业卫生标准《血源性病原体职业接触防护导则》（GBZ/T 213—2008），并于2013年把职业性艾滋病列入《国家职业病分类目录（2013）》，在医疗卫生机构采取了多种形式推动该标准贯彻落实。但是，距离“健康中国2030”规划要求，中国医疗卫生机构整体的职业卫生防护体系建设仍显得滞后。

为了促进中国1000万医护人员特别是艾滋病防治工作人员职业健康工作目标的实现，近几年来，中国性病艾滋病防治协会、国际劳工组织和中国疾病预防控制中心进行持续合作，开展了一系列项目活动，其中编写《〈血源性病原体职业接触防护导则〉（GBZ/T 231—2008）实施应用指南》是重要活动之一，目的是帮助医疗卫生机构建立完善医护人员职业病防护体系，提供操作性强的技术工具，用于实施教育培训，构建专业工作网络，指导医疗卫生机构和医护人员，预防控制包括艾滋病在内的血源性病原体感染等职业性有害因素。

该指南系统介绍了国际国内医护人员职业卫生防护的最新进展和技术工具，对《血源性病原体职业接触防护导则》进行条文解释，同时提供了《血源性病原体职业接触防护干预量化评估表》和《医护人员血源性病原体职业接触风险控制手册》。该指南的出版不仅有利于保护艾滋病防治工作者、所有医疗卫生工作者职业安全，也将会有利于促进中国医疗卫生机构建立完善的职业病防治体系，提高中国医护人员的职业健康水平，为大众提供优质安全的医疗服务，为实现“健康中国2030”规划目标作出贡献！

沈洁

中国性病艾滋病防治协会副会长

2017年3月



FOREWORD II

China officially issued *Outline of the Healthy China 2030 Plan* in 2016, This is a national strategy to promote the healthy development of the Chinese and to realize the harmonious development of people's health and economic society. It is an important measure to actively participate in global health governance and fulfill the international commitment to the Sustainable Development Agenda 2030. Healthy China 2030 puts forward to strengthen work safety and occupational health, and further improve the occupational safety and health standard system.

Chinese Association of STD and AIDS Prevention and Control (CASAPC) is a NGO mainly consisting of professionals in HIV/AIDS prevention and control, it plays a key role in STD and AIDS prevention and control in China. Over the years, CASAPC always pays high attention and advocates the occupational health protection against AIDS/HIV among health workers. On the basis of many years effort, CASAPC recently establishes occupational health protection committee for healthcare workers, the committee will fully mobilize various resources, build a multi-sectoral and multi-disciplinary platform to carry out research on the occupational safety and health against HIV/AIDS and other occupational health protection issues relate to healthcare workers, focus on application of new standards and new technologies, and create a sound medical environment free of discrimination and with care for healthcare workers.

China has released a national occupational health standards—*Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens* in 2008, has included the occupational infected HIV/AIDS into the National Categories and Catalogue of Occupational Diseases in 2013, and taken comprehensive measures to promote the national standards in hospitals and public health institutions, however, the occupational health for healthcare workers in China is still lagging behind compared to other industrial sectors in China and to other developed countries.

Based on several pilot investigation projects, ILO, CASAPC and Chinese Center for Disease Control and Prevention (China CDC) have conducted continuous cooperation with a series of work in order to achieve ultimately the goal of occupational health and well-being of 10 million healthcare workers in China, among which, the writing of *The Implementation Note for Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens (Implementation Note)* is one of the most important outputs. The purposes of the book are intended to facilitate medical and public health institutions to establish and improve the occupational disease prevention system for healthcare workers, to provide strong technical tools for the implementation of education and training, to build a national professional network to guide hospital and public health institutions as well as healthcare workers, to prevent and control the occupational hazards including HIV/AIDS and other blood borne pathogens.

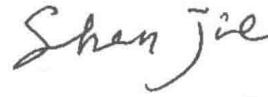
This Implementation Guideline systematically pools the state-of-art of international and domestic technical tools and progress on occupational health for healthcare workers. On the theoretical level, it provides general interpretation and clause explanation for the *Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens*, on the practical level, it provides a *Quantitative Evaluation Tool of the Protective*

Intervention of Occupational Exposure to Blood Borne Pathogens and a Risk Control Manual for Healthcare Workers Towards Protection of Occupation Exposure to Bloodborne Pathogens. We do believe that the application and extension of this *Implementation Note* will facilitate to protect safety and health of professionals relate to HIV/AIDS prevention and control, and of all health workers, meanwhile, it will promote the establishment of occupational disease prevention and control system in hospitals and other public health institutes, improve the overall health of healthcare workers in China, provide high quality medical service for the public, and therefore contribute to achieve the goals of Healthy China 2030.

Dr. Jie Shen

Vice President of Chinese Association of STD and AIDS Prevention and Control

March 2017



前 言

世界发展的历程表明，经济增长和社会发展有赖于人民的健康，良好的卫生人力资源和健康就业处于可持续发展议程的核心地位。为了实现 2030 年可持续发展目标，联合国秘书长于 2016 年成立了“健康就业和经济增长高层委员会”，旨在促进全球和各国对卫生人力进行投资，重点推进可持续发展目标 3（良好健康与福祉）和目标 8（体面工作和经济增长），进而支持其他目标的实现。

医护人员的职业健康不仅关乎其个人，而且对全民健康有着十分重大的影响。医护人员良好的健康意识、健康行为、职业健康意识和职业健康行为是促进全民健康和劳动者健康的最有力保障。

医护人员在从事职业活动过程中面临多种职业性有害因素及其危害，2008 年，针对医护人员在提供医疗卫生服务过程中面临艾滋病病毒、乙型肝炎病毒、丙型肝炎病毒等血源性病原体感染的职业危害，国家发布了国家职业卫生标准《血源性病原体职业接触防护导则》（GBZ/T 213—2008），旨在指导医疗卫生机构及其他存在血源性病原体职业接触的用人单位，建立职业病防控体系，履行职业病防治职责，开展血源性病原体职业接触的预防控制活动，以保障劳动者享有职业病防治法所规定的职业卫生权利，并接受政府、劳动者和工会组织的监督。

《血源性病原体职业接触防护导则》发布后，我作为该标准第一起草人，牵头组建了多学科、多部门的专业团队，借助于原卫生部、原国家卫生计生委、人力资源社会保障部、农工民主党中央、中华全国总工会、中国疾病预防控制中心、中国性病艾滋病防治协会和国际劳工组织等平台，持续开展了标准宣贯、推广應用和追踪研究工作。在此过程中，形成了多项产出，得以结集出版本指南。

本指南分为五章和两个附录，其中，第一章为医护人员面临的职业危害及国内外预防控制工具；第二章为血源性病原体的职业危害及国内外预防控制策略概论；第三章为《血源性病原体职业接触防护导则》（GBZ/T 213—2008）标准解读与条文说明；第四章为血源性病原体职业接触防护干预量化评估表；第五章为医护人员血源性病原体职业接触风险控制手册。附录 1 为课题组已发表的相关论文清单；附录 2 为相关宣贯材料。

十年磨一剑。本指南汇集了十余年以来的工作成果，其中，第一章主要由农工党中央重点提案工作支持，于 2015 年完成初稿；第二章和第五章主要由国家科技支撑计划项目支持，于 2010 年完成初稿；第三章主要由国际劳工组织合作项目支持，于 2015 年完成初稿；第四章主要由原卫生部项目支持，于 2010 年完成初稿。在此基础上，通过与国际劳工组织、中国性病艾滋病防治协会和中国疾病预防控制中心的合作，2015 年，我们启动了本指南的编写工作，邀请了国际劳工组织专家、国内职业病防治专家以及职业病防治示范医院试点的代表，共同审定本指南的提纲；多次在山东省立医院组织会议，邀请一线医护人员对量化评估表进行逐条讨论和修改；2016 年，根据新修订的职业病防治法，结合课题组最新研究成果，重点对职业病防治体系框架图和协调机制图进行了修订，并对指南中所有文字、图表进行了审核修订。在本指南即将付梓之际，党和国家机构改革启动，新组建国家卫生健康委员会等机构，因此，我们对指南中涉及机构名称的个别内容进行了调整。

本指南具有四个比较突出的特点：一是强调从职业健康视角出发，开展医护人员职业卫生防护，具有系统性；二是提供很多技术工具，指导医护人员识别、评估和控制血源性病原体的职业危害，具有操作性；三是整合国际先进技术工具，弥补国内现有医护人员血源性病原体防护工具的不足，具有集成性；四是首次尝试对我国职业卫生标准进行条文解释，以利于使用者准确理解和正确执行标准，具有示范性。

本指南适合医疗卫生机构及其他存在血源性病原体职业接触用人单位的管理者和医护人员进行学习和使用,也为职业卫生与健康领域的政策研究、立法工作、标准管理、技术服务、科学研究、文化建设、教育培训等方面工作者提供了有益参考。

衷心感谢所有为本指南编写作出贡献的国家和地方政府部门、中华全国总工会和地方工会、国际劳工组织、世界卫生组织、医疗机构、疾控机构、教学科研机构、行业协会学会的领导和同仁!

限于本人水平有限,指南很多内容尚处于探索阶段,恳请各位读者在使用过程中积极实践,积累案例和解决方案,发现不足,并向我们反馈修改建议,以便于标准修订和指南再版时进一步完善。

本导则在撰写过程中还得到了许多其他国内外专家和同行的支持,因篇幅有限就不一一列举,在此一并表示感谢。

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PREFACE

The progress of global development demonstrates that economic growth and social development depend on the health of the people. Health workers and healthy employment reside at the heart of the 2030 Agenda. To achieve the goal of sustainable development in 2030, the Secretary General of the United Nations launched the High-Level Commission on Health Employment and Economic Growth to promote global and national investment in health manpower in 2016, the commission focuses on promoting sustainable development goals, particular Goal 3 (good health and well-being) and Goal 8 (decent work and economic growth), eventually, it is certainly to provide further support for other goals.

The occupational health for healthcare workers is not only a key point to their individual health and well-being, but also has a significant impact on the universal health of the society. Sound health consciousness, health behavior, occupational health awareness and occupational health behavior of health care workforce are among the most fundamental security to promote and safeguard the overall health of the people and of men and women in working populations.

Healthcare workers are facing tremendous serious occupational hazardous factors and being at high risks arising out of their health care services delivery. In 2008, China promulgated *Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens* (GBZ/T 213—2008), including HIV, HBV and HCV that healthcare workers would encounter in the provision of medical and public health services. It is aimed at guiding the medical and public health institutions and other employers to establish occupational disease prevention and control system to assume the responsibility of prevention and treatment of occupational diseases, initiate employer-based prevention and control programme and conduct activities for occupational exposure to blood borne pathogens. This national standard can also ensure that healthcare workers enjoy their legal occupational health rights and related welfare rights provided by their employers, under the supervision of the government, healthcare workers and the trade unions of all level.

After the release of *Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens*, as the leading expert of the national standard, I lead a multi-disciplinary and multi-sectoral team to promote its application and follow-up research work. The team work has been conducted continuously over ten years under the support and sponsorship of ex-Ministry of Health(MOH), National Health and Family Planning Commission(NHFPC), Ministry of Human Resources and Social Security(MHRSS), Central Committee of Chinese Peasants and Workers Democratic Party(CCCPWD Party), All-China Federation of Trade Unions(ACFTU), Chinese Center for Disease Control and Prevention(China CDC), Chinese Association of STD and AIDS Prevention and Control(CASAPC), as well as International Labor Organization(ILO). During this process, a series of high valuable outputs are harvested, which provides a solid basis for the team to issue and update the implementation guideline to the national standard GBZ/T 213—2008.

The Implementation Note, *Implementation Note for Guideline for Prevention and Control of Occupational Exposure to Blood Borne Pathogens*, is consisted of five chapters and two appendices. Among them, the first

chapter highlights the occupational hazards among the healthcare workers, as well as the domestic and international instruments for prevention and control. In terms of contents, the second chapter highlights the occupation hazard due to bloodborne pathogens and a brief introduction of national and international control approaches. The third chapter presents general interpretation and clauses explanation of the national standard GBZ/T 213—2008. The fourth chapter shows a quantitative evaluation table for the protective intervention against occupational exposure to bloodborne pathogen. The fifth chapter focuses on a manual for controlling risks of the occupational exposure to blood borne pathogen for healthcare workers. Appendix one is a list of reference of related papers published by the research team. Appendix two is a list of public communication materials.

Persistence is the key to success. This *Implementation Note* brings together innovative and wise work of the team among more than ten years. Among them, the first chapter was mainly conducted under the key proposal for consultation programme of the CCCPWD Party, and the first draft was finished in 2015. The second chapter and the fifth chapter are supported by research programme of Ministry of Science and Technology (MST), and the first draft was completed in 2010. The third chapter is the output from cooperation project supported by ILO, and the first draft was completed in 2015. The fourth chapter is supported by the project of MOH, and the first draft was completed in 2010. On this basis, the compiling of this *Implementation Note* has been started in 2015 through the cooperation with ILO, CASAPC, China CDC. Leading experts, including senior experts from headquarter of ILO, domestic leading experts on occupational disease prevention and control as well as representatives of the pilot hospitals for occupational disease prevention and control, were invited to jointly examine the outline of this *Implementation Note*. Several meetings have been held in the Shangdong Provincial Hospital, first-line healthcare workers had the opportunity to discuss and modify the quantitative evaluation table. In 2016, the framework and coordination mechanism of occupational disease prevention and control system in China were revised, according to the newly amended *Law of the People's Republic of China on Occupational Diseases Prevention and Control*, meanwhile, the latest research outcomes of our team are included into this *Implementation Note*. During the process, all the texts and charts in this *Implementation Note* are revised. During the process of publication, the reform of governmental organizations is launched, accordingly, several minor changes have been made in the manuscript, based on the new responsibilities of National Health Commission and related ministries.

This *Implementation Note* demonstrates four prominent features: Firstly, it is systematic, since it carries out occupational health protection for healthcare workers from the perspective of occupational health. Secondly, it is practical, since it provides several technical tools to guide healthcare workers how to identify, assess and control the occupation hazards relate to blood borne pathogens. Thirdly, it is integrated, since it integrates international advanced technical instruments to the less developed research area in China. Finally, it is exemplary, since it tries to interpret the clauses of national occupational health standards for the first time in China and help users to accurately understand and correctly implement these standards.

This *Implementation Note* is suitable for training and application for medical, public health institutions and other employers, as well as their managers and healthcare workers who may encounter with occupational exposure to blood borne pathogens. It also provides a valuable and innovative reference for the policy research, legislation, standard management, technical service, scientific research, cultural fostering, education and training in the field of occupational health.

We are deeply grateful to everyone who contributed to the preparation of this guideline, including leaders and colleagues from central and local government, ACFTU and local trade unions, international organizations,

medical institutions, CDCs, universities, research institutes, associations.

Due to exploratory features of many issues in this *Implementation Note*, as well as the limited ability of the authors, it is heartily welcome for readers to take active practice, accumulate good cases and explore wise solutions, and find out problems in this *Implementation Note*, provide us constructive feedbacks and outstanding insights for the purpose of further improving and modification.

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