

「주간 건강과 질병(Public Health Weekly Report)」 인수공통감염병 특집호 발간 기념

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이번 주 「주간 건강과 질병(Public Health Weekly Report, PHWR)」에서는 ‘인수공통감염병 특집호’라는 제목으로 말라리아, 브루셀라증, 중증열성혈소판감소증후군 등 3개 감염병과 원헬스 접근을 주제로 한 4편의 논문을 특집호로 발간하였다[1-4].

한국에서 삼일열 말라리아는 1913년 기록되기 이전부터 자생적(autochthonous)으로 발생하였고, 한국전쟁 중 급증하여 ‘전쟁 말라리아’로 불렸다. 이후 세계보건기구의 지원 아래 ‘말라리아 근절사업’을 통해 1970년대 후반 거의 사라졌고, 1984년 이후 10년 동안 보고되지 않아 퇴치 수준을 달성하였다[5]. 그러나 1993년 경기 북부 비무장지대에서 해외여행 이력이 없는 한 군인 환자가 발생한 이후 현재까지 경기·강원 북부 비무장지대의 군인과 민간인에서 말라리아가 지속 발생하고 있다. 이에 정부와 지자체는 예방과 관리 노력을 지속해왔으며, 2019년에 ‘제1차 말라리아 퇴치 실행계획’을 수립하였고, 2024년 2단계 계획을 수립하여 2030년 퇴치를 추진하고 있다[6]. 2008-2025년까지 「주간 건강과 질병(PHWR)」은 말라리아 관련 논문 56편(국제 동향 18편, 국내 감시 15편, 역학조사 23편)을 발간하였다. 이번 호에서 Shin 등[1]은 ‘대한민국 말라리아 퇴치를 위한 지역단위 퇴치인증 체계’ 논문을 통해 세계보건기구의 국가·지역 단위 말라리아 퇴치인

증 체계와 기준, 해외 인증 사례를 소개하고, ‘한국형 지역 단위의 말라리아 퇴치 인증 체계’를 제안하여, 2030년 퇴치 목표 달성에 기여할 것으로 기대된다. 한편, 한국의 말라리아 발생은 북한의 발생 양상과 높은 상관성을 보여, 향후 남북 간의 조사·감시, 예방·관리를 위한 협력 체계를 구축하는 것이 필요하다.

한국인에서 브루셀라증은 2002년에 첫 사례가 보고되었고[7], 2003년에는 한 농촌지역에서 7개월 동안 산발적으로 발생하여 11명의 환자가 보고되었다[8]. 1950년 이후 한국의 소에서도 브루셀라증이 지속적으로 발생하고 있었다는 수의계의 보고와[9], 1939년 국내 거주 일본인 감염 사례를 고려하면[10] 이전부터 상당 수준의 사람 감염이 있었을 가능성이 있다. 2008-2025년 「주간 건강과 질병(PHWR)」에는 논문 6편이 게재되었는데, 고위험군 대상 실태조사 3편, 감시 자료의 분석 2편, 해외 유입 브루셀라증에 대한 역학조사 결과 1편이다. 이번 호에서 Oh 등[2]은 ‘2025년 사람 브루셀라 감염 사례 관련 동물생산업소 개브루셀라병 유행 공동 역학조사 결과’에서 사람 브루셀라증 지표사례를 발견한 뒤, 개 사육업소의 종사자, 사육견, 분양견을 대상으로 5개 기관 6개 부서가 참여한 공동 조사 결과를 보고하였다.

2009년도 중국에서 중증열성혈소판감소증후군이 처음 발

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견된 이후[11], 한국에서도 2012년에 첫 사례가 보고되었다 [7]. Lee 등[12]은 중국의 중증열성혈소판감소증후군 발생 양상을 파악하고, 한국에도 매개체인 참진드기가 서식함을 확인하고 예방 수칙을 개발하였으며, 향후 조사 계획과 대응 방안을 「주간 건강과 질병(PHWR)」에 보고하였다. 이후 동 잡지에는 중증열성혈소판감소증후군 관련 논문 22편이 게재되었는데, 실험실 진단과 분자·유전 검사 관련 5편, 매개체 실태 조사와 감시 5편, 사람 감염 역학조사와 감시 5편, 매개체와 사람 접촉 조사 2편, 기타 연구 논문 4편 등이다. 이번 호에서 Nam 등[3]은 '2025년 국내 중증열성혈소판감소증후군 공동 역학조사 결과'에서 사람 지표사례 발견 시 지표사례와 함께 주위 노출자, 주위 환경의 참진드기, 동물 병원소(개)에 대해 6개 기관 7개 부서가 공동 시행한 조사 결과를 보고하였다.

Heo 등[4]은 2022년 유엔 식량농업기구와 유엔 환경 프로그램, 세계보건기구, 세계동물보건기구 등이 공동 발표한 '원헬스 공동 실행계획[13]'을 검토하고, 한국형 국가 원헬스 공동실행계획의 방향을 수립하고 실행 체계 구축을 위한 기반을 마련하여 보고하였다. 이 논문에서 저자들은 다부문 협력 거버넌스와 인간·동물·환경 연계 감시체계, 지역 기반의 통합적 위험관리 체계가 유기적으로 연계된 대응 체계를 강조하였다[4]. 앞의 Oh 등[2]과 Nam 등[3]의 브루셀라증과 중증열성혈소판감소증후군 역학조사 논문에서도 이미 여러 부처와 부서가 협력하여 공동조사를 시행하고 있음을 확인할 수 있었는데, 향후 더 많은 인수공통감염병과 매개체 전파 감염병에 대한 역학조사와 감시, 예방과 관리에서 원헬스 기반의 접근이 활성화되기를 기대한다. 한편, '원헬스 공동 실행계획'에서는 사람-동물-식물-환경의 접점에서 건강 문제를 다루고 있는 만큼 [13], 향후 식물 영역까지 포함하는 기반 연구와 실행 방안 마련이 필요하다.

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Editorial

Commemoration of the Special Issue on Zoonotic and Vector-borne Diseases in “*Public Health Weekly Report*”Bo Youl Choi* 

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In this week's *Public Health Weekly Report (PHWR)*, four papers on the theme of three infectious diseases—malaria, brucellosis, and severe fever with thrombocytopenia syndrome (SFTS)—and the One Health approach were published as a special issue under the title, “The Special Issue on Zoonotic and Vector-borne Diseases” [1-4].

In the ROK, *Plasmodium vivax* malaria occurred autochthonously even before it was first recorded in 1913 and surged during the Korean War, when it was called “war malaria.” Subsequently, with support from the World Health Organization, it almost disappeared in the late 1970s through the National Malaria Eradication Service, and with no cases reported for 10 years after 1984, the ROK achieved elimination status [5]. However, since a case involving a soldier with no history of overseas travel was reported in the Demilitarized Zone (DMZ) in northern Gyeonggi Province in 1993, cases have continued to occur among soldiers and civilians in the northern DMZ areas of Gyeonggi and Gangwon Provinces to date. Accordingly, the central government and local governments have continued prevention and control efforts, establishing the National Malaria Re-elimination Action Plan in 2019 and the second-phase plan in 2024 to pursue elimination by 2030 [6].

From 2008 to 2025, the *PHWR* published 56 malaria-related papers (18 on international trends, 15 on domestic surveillance, and 23 on epidemiological investigations). In this issue, Shin et al. [1], through their paper “Subnational elimination certification system for malaria elimination in the Republic of Korea,” introduce the World Health Organization's national malaria elimination certification and subnational malaria elimination verification systems and criteria, as well as overseas certification cases, and propose a “Korean subnational verification system for malaria elimination”. It is expected to contribute to achieving the 2030 elimination goal. Meanwhile, malaria occurrence in the ROK shows a high correlation with the occurrence patterns in North Korea, highlighting the need to establish a collaborative system for investigation, surveillance, prevention, and control between the ROK and North Korea in the future.

The first case of brucellosis among Koreans was reported in 2002 [7]. In 2003, 11 cases were reported during a sporadic outbreak over a 7-month period in a rural area [8]. Considering reports from the veterinary community that brucellosis had continued to occur in cattle in the ROK since 1950 [9], and a case of *Brucella* infection in a Japanese resident of

the ROK in 1939 [10], significant levels of human infection may have occurred even before then. From 2008 to 2025, six papers were published in the *PHWR*, including three status surveys targeting high-risk groups, two analyses of surveillance data, and one paper reporting the results of an epidemiological investigation of imported brucellosis. In this issue, Oh et al. [2], in “Joint Epidemiological Investigation Results of the Canine Brucellosis Outbreak at a Breeding Facility Associated with a Human Brucellosis Case, 2025,” reported the results of a joint investigation conducted by five institutions and six departments following the identification of a human brucellosis index case and involving workers at a dog breeding facility, breeding dogs, and dogs for sale.

SFTS was first identified in China in 2009 [11]. The first case was subsequently reported in the ROK in 2012 [7]. Lee et al. [12] identified the occurrence patterns of SFTS in China, confirmed that ticks which serve as vectors are present in the ROK, developed prevention guidelines, and reported future investigation plans and response measures in the *PHWR*. Subsequently, twenty-two SFTS-related papers were published in the journal, including five papers on laboratory diagnosis and molecular/genetic testing, five on vector status surveys and surveillance, five on epidemiological investigations and surveillance of human infection, two on vector–human contact surveys, and four other research papers. In this issue, Nam et al. [3] in “One Health–based joint epidemiological investigation of a severe fever with thrombocytopenia syndrome case in the Republic of Korea, 2025,” report the results of an investigation jointly conducted by six institutions and seven departments following the detection of a human index case and involving the index case, exposed persons in the vicinity, ticks in the surrounding environment, and the animal reservoir (dogs).

Heo et al. [4] reviewed the “One Health Joint Plan of Action [13]” jointly announced in 2022 by the Food and Agriculture Organization of the United Nations, the United Nations Environment Programme, the World Health Organization, and the World Organisation for Animal Health. The establishment of the direction for the Korean National One Health Joint Plan of Action and the laying of the groundwork for building an implementation framework were reported. In this paper, the authors emphasized a response system wherein multi-sectoral collaborative governance, a human-animal-environment linked surveillance system, and a community-based integrated risk management system are organically linked [4]. As confirmed in the previous papers on epidemiological investigations on brucellosis and SFTS by Oh et al. [2] and Nam et al. [3], multiple ministries and departments are already collaborating to conduct joint investigations, and it is hoped that One Health-based approaches will be further promoted in epidemiological investigations, surveillance, prevention, and control of more zoonotic diseases and vector-borne diseases in the future. Meanwhile, as the “One Health Joint Plan of Action” addresses health issues at the human-animal-plant-environment interface [13], foundational research and the development of implementation measures encompassing the plant sector will be needed in the future.

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