

**THE
JOURNAL OF HYGIENE**

THE JOURNAL OF HYGIENE

(Founded in 1901 by G. H. F. Nuttall, F.R.S.)

EDITED BY

J. R. PATTISON, M.A., D.M.
M. J. LEWIS, M.D., J. H. McCOY, M.B., D.P.H.
W. C. NOBLE, D.Sc., F.R.C.PATH.

IN CONJUNCTION WITH

R. D. BARRY, M.A., B.V.Sc., Ph.D., Sc.D.
A. B. CHRISTIE, M.A., M.D., F.R.C.P., F.F.C.M.
A. W. DOWNIE, M.D., F.R.S.
R. I. N. GREAVES, M.D., F.R.C.P.
O. M. LIDWELL, D.Phil.
J. NAGINGTON, M.D.
HILLAS SMITH, M.A., M.D., F.R.C.P.
C. C. SPICER, M.R.C.P.
SIR GRAHAM WILSON, M.D., LL.D., F.R.C.P., D.P.H., F.R.S.

VOLUME 86, 1981

CAMBRIDGE UNIVERSITY PRESS
CAMBRIDGE
LONDON NEW YORK NEW ROCHELLE
MELBOURNE SYDNEY

**Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57th Street, New York, N.Y. 10022, U.S.A.**

© Cambridge University Press 1981

Printed in Great Britain at the University Press, Cambridge

Contents

No. 1 (FEBRUARY 1981)

	PAGE
JENNINGS, R., POTTER, C. W., MASSEY, P. M. O., DUERDEN, B. I., MARTIN, J. and BEVAN, A. M. Responses of volunteers to inactivated influenza virus vaccines	1
OXFORD, J. S., HAAHEIM, L. R., SLEPUSHKIN, A., WERNER, J., KUWERT, E. and SCHILD, G. C. Strain specificity of serum antibody to the haemagglutinin of influenza A (H3N2) viruses in children following immunization or natural infection	17
PYHÄLÄ, R. and AHO, K. Seroepidemiology of H1N1 influenza: the infection and re-infection rate in winter 1978-79	27
HOPE-SIMPSON, R. E. The role of season in the epidemiology of influenza	35
TILLETT, HILARY E. and THOMAS, MAIR E. M. Monitoring infectious diseases using routine microbiology data. I. Study of gastroenteritis in an urban area	49
TILLETT, HILARY E. Monitoring infectious diseases using routine microbiology data. II. An example of regression analysis used to study infectious gastroenteritis	59
MOBTMER, P. P., PARRY, J. V. and APPLETON, HAZEL. Diagnosis of recent hepatitis A infection: a comparison of two methods for detecting specific IgM	71
ABU ELZEIN, E. M. E. and CROWTHER, J. R. Detection and quantification of IgM, IgA, IgG ₁ and IgG ₂ antibodies against foot-and-mouth disease virus from bovine sera using an enzyme-linked immunosorbent assay	79
GUST, I. D., DIMITRAKAKIS, M., FAIUSO, S., AINUU, J. and ZIMMET, P. The prevalence of hepatitis B infection amongst urban and rural populations in Western Samoa	87
IRVING, L., KENNETT, M., LEWIS, F., BIRCH, C. and DONALDSON, A. Adenovirus eye infections in an Australian city, 1972-9	95
VUKOVIĆ, B. S., RONČEVIĆ, N., BOROTA, R. and TERZIN, A. L. Hepatitis A virus infections in Vojvodina	105
GROSS, R. J., ROWE, B., SECHTER, I., CAHAN, D. and ALTMAN, G. Antigenic scheme for <i>Citrobacter koseri</i> (syn. <i>C. diversus</i> , <i>Levinea malonatica</i>); three new antigens recognized in strains from Israel	111
GRINSTEIN, S., KAHN, T. M., TISMINETSKY, S., DONADIO, MARTA and WEYLAND, G. Duration of the immune response in subjects inoculated with antimeningococcal A and C vaccines kept in storage at -20 °C and at 4 °C: influence of pre-vaccination titres on the vaccinal response	117
JONES, P. W., RENNISON, LYNNE M., MATTHEWS, P. R. J., COLLINS, P. and BROWN, ANNE. The occurrence and significance to animal health of <i>Leptospira</i> , <i>Mycobacterium</i> , <i>Escherichia coli</i> , <i>Brucella abortus</i> and <i>Bacillus anthracis</i> in sewage and sewage sludges	129

No. 2 (APRIL 1981)

MORTIMER, P. P., TEDDER, R. S., HAMBLING, M. H., SHAFI, M. S., BURKHARDT, F. and SCHILT, U. Antibody capture radioimmunoassay for anti-rubella IgM	139
--	-----

	PAGE
COURSAGET, P., DRUCKER, J., MAUPAS, P., HIBON, P., GOUDEAU, A., BERNARD, D., SAUVAGE, D. and LELORD, G. Epidemiological and serological study of hepatitis A virus outbreaks in France: a comparison between immunoadherence and radioimmunoassay	155
TEDDER, R. S. and WILSON-CROOME, RUTH. IgM-antibody response to the hepatitis B core antigen in acute and chronic hepatitis B	163
LEMCKE, RUTH and BURROWS, M. R. A comparative study of spirochaetes from the porcine alimentary tract	173
NAIDOO, JAY and NOBLE, W. C. Transfer of gentamicin resistance between coagulase-negative and coagulase-positive staphylococci on skin	183
RICHARDS, HILARY, HUGHES, VICTORIA and DATTA, NAOMI. Diversity of plasmids responsible for multiple resistance in klebsiella serotype K2	189
FENLON, D. R. Seagulls (<i>Larus</i> spp.) as vectors of salmonellae: an investigation into the range of serotypes and numbers of salmonellae in gull faeces	195
LAWRENCE, J. C., LILLY, H. A. and WILKINS, M. D. Evaluation of a portable air purifier	203
MSOLLA, P. M., WISEMAN, A. and SELMAN, I. E. The prevalence of serum neutralizing antibodies to infectious bovine rhinotracheitis virus in Scotland	209
SELLWOOD, JANE, DADSWELL, J. V. and SLADE, J. S. Viruses in sewage as an indicator of their presence in the community	217
COBET, ANDRE B., GERSHMAN, M., MOECHTAR, M. ASRIL., SUMARMO AND SUNOTO. Salmonellosis in Indonesia: phage-type of <i>Salmonella oranienburg</i> obtained from hospitalized patients in Jakarta, Indonesia	227

No. 3 (JUNE 1981)

BARROW, P. A. and GALLAGHER, J. Aspects of the epidemiology of bovine tuberculosis in badgers and cattle. I. The prevalence of infection in two wild animal populations in south-west England	237
BARROW, P. A. Aspects of the epidemiology of bovine tuberculosis in badgers and cattle. II. The development and use of a typing system for <i>Mycobacterium bovis</i>	247
DURRANT, D. S. and BEATSON, SUSAN H. Salmonellae isolated from domestic meat waste	259
WIDDOWSON, J. P. and WORMALD, P. J. Streptococcal antibodies in patients with burn injuries	265
OJAJÄRVI, J. The importance of soap selection for routine hand hygiene in hospital	275
TOMKINS, A. M., BRADLEY, A. K., OSWALD, SARAH and DEASAR, B. S. Diet and the faecal microflora of infants, children and adults in rural Nigeria and urban U.K.	285
SALVESON, A. and BERGAN, T. Contamination of chlorhexidine cream used to prevent ascending urinary tract infections	295
TABER, L., PAREDES, A., GLEZEN, W. P. and COUCH, R. B. Infections with influenza A/Victoria virus in Houston families, 1976	303

Contents

V

	PAGE
TRAAVIK, T., SPANNE, O. and MENNEN, S. Rubella serology: a comparison of four methods for exclusion of non-specific serum inhibitors	315
MAHMOUD, WAFEYA and REDFERN, R. The response of the Egyptian spiny mouse (<i>Acomys cahirinus</i>) and two other species of commensal rodents to anticoagulant rodenticides	329
SIMS, D. G. A two year prospective study of hospital-acquired respiratory virus infection on paediatric wards	335
FITZGEORGE, R. B., BASKERVILLE, A. and LANDER, K. P. Experimental infection of Rhesus monkeys with a human strain of <i>Campylobacter jejuni</i>	343
BETTELHEIM, K. A. Colony incompatibility studies among New Zealand and Australian isolates of <i>Salmonella typhimurium</i> phage type 179	353
REID, T. M. S. and PORTER, I. A. An outbreak of otitis externa in competitive swimmers due to <i>Pseudomonas aeruginosa</i>	357
RICHARDS, C. G. J. Field trials of bromadiolone against infestations of warfarin-resistant <i>Rattus norvegicus</i>	363
WILLIAMS, D. R., HUNTER, D., BINDER, JEANNETTE and HOUGH, ELAINE. Observations on the occurrence of <i>Salmonella cholerae-suis</i> and other salmonellas in two herds of feeder pigs	369

CONTENTS

BARROW, P. A. and GALLAGHER, J. Aspects of the epidemiology of bovine tuberculosis in badgers and cattle. I. The prevalence of infection in two wild animal populations in south-west England	237
BARROW, P. A. Aspects of the epidemiology of bovine tuberculosis in badgers and cattle. II. The development and use of a typing system for <i>Mycobacterium bovis</i>	247
DURRANT, D. S. and BEATSON, SUSAN H. Salmonellae isolated from domestic meat waste	259
WIDDOWSON, J. P. and WORMALD, P. J. Streptococcal antibodies in patients with burn injuries	265
OJAJÄRVI, J. The importance of soap selection for routine hand hygiene in hospital	275
TOMKINS, A. M., BRADLEY, A. K., OSWALD, SARAH and DRASAR, B. S. Diet and the faecal microflora of infants, children and adults in rural Nigeria and urban U.K.	285
SALVESON, A. and BERGAN, T. Contamination of chlorhexidine cream used to prevent ascending urinary tract infections	295
TABER, L., PAREDES, A., GLEZEN, W. P. and COUCH, R. B. Infections with influenza A/Victoria virus in Houston families, 1976	303
TRAAVIK, T., SPANNE, O. and MENNEN, S. Rubella serology: a comparison of four methods for exclusion of non-specific serum inhibitors	315
MAHMOUD, WAFEYA and REDFERN, R. The response of the Egyptian spiny mouse (<i>Acomys cahirinus</i>) and two other species of commensal rodents to anticoagulant rodenticides	329
SIMS, D. G. A two year prospective study of hospital-acquired respiratory virus infection on paediatric wards	335
FITZGEORGE, R. B., BASKERVILLE, A. and LANDER, K. P. Experimental infection of Rhesus monkeys with a human strain of <i>Campylobacter jejuni</i>	343
BETTELHEIM, K. A. Colony incompatibility studies among New Zealand and Australian isolates of <i>Salmonella typhimurium</i> phage type 179	353
REID, T. M. S. and PORTER, I. A. An outbreak of otitis externa in competitive swimmers due to <i>Pseudomonas aeruginosa</i>	357
RICHARDS, C. G. J. Field trials of bromadiolone against infestations of warfarin-resistant <i>Rattus norvegicus</i>	363
WILLIAMS, D. R., HUNTER, D., BINDER, JEANNETTE and HOUGH, ELAINE. Observations on the occurrence of <i>Salmonella cholerae-suis</i> and other salmonellas in two herds of feeder pigs	369