

# THE JOURNAL OF HYGIENE

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

EDITED BY

**R. M. FRY, M.A., M.R.C.S.**

LATELY DIRECTOR OF THE PUBLIC HEALTH LABORATORY, CAMBRIDGE

IN CONJUNCTION WITH

**P. ARMITAGE, M.A., PH.D.**

Professor of Medical Statistics in the University of London

**R. D. BARRY, M.A., B.V.Sc., PH.D.**

Huddersfield Lecturer in Special Pathology in the University of Cambridge

**W. I. B. BEVERIDGE, D.V.Sc., M.A.**

Professor of Animal Pathology in the University of Cambridge

**A. W. DOWNIE, M.D., F.R.S.**

Lately Professor of Bacteriology in the University of Liverpool

**R. I. N. GREAVES, M.D., F.R.C.P.**

Professor of Pathology in the University of Cambridge

**E. T. C. SPOONER, C.M.G., M.D., F.R.C.P.**

Dean, London School of Hygiene and Tropical Medicine

**Sir GRAHAM S. WILSON, M.D., LL.D., F.R.C.P., D.P.H.**

Lately Director of the Public Health Laboratory Service

**VOLUME LXVIII. 1970**

**CAMBRIDGE  
AT THE UNIVERSITY PRESS  
1970**

PUBLISHED BY  
THE SYNDICS OF THE CAMBRIDGE UNIVERSITY PRESS

Bentley House, 200 Euston Road, London, N.W.1  
American Branch: 32 East 57th Street, New York, N.Y. 10022

*Printed in Great Britain at the University Printing House, Cambridge*

# Contents

No. 1 (March 1970)

	PAGE
LEVITT, L. P., WOLFE, V. and BOND, J. O. Winter vomiting disease in Florida students . . . . .	1
GUNATILLAKE, P. D. P. and PERERA, T. D. S. Antistreptolysin O titres amongst children in a rural area of Ceylon. . . . .	13
DUDDING, B. A., BURNETT, J. W., CHAPMAN, S. S. and WANNAMAKER, L. W. The role of normal skin in the spread of streptococcal pyoderma . . . . .	19
SUZUKI, MASATOSHI. Effect of suspending media on freeze-drying and preservation of vaccinia virus . . . . .	29
CAMERON, A. S. Staphylococcal epidemiology in Antarctica . . . . .	43
HEDGER, R. S. Observations on the carrier state and related antibody titres during an outbreak of foot-and-mouth disease . . . . .	53
REEVE, P., ROSENBLUM, MARGARET and ALEXANDER, D. J. Growth in chick chorioallantoic membranes of strains of Newcastle disease virus of differing virulence . . . . .	61
PENTTINEN, K., SAIKKU, P., MYLLYLÄ, G., BRUMMER-KORVENKONTIO, M. and OKER-BLOM, N. The platelet aggregation test in group B arbovirus infections . . . . .	71
CORBEL, M. J., RONDLE, C. J. M. and BIRD, R. G. Degradation of influenza virus by non-ionic detergent . . . . .	77
CORBEL, M. J. and RONDLE, C. J. M. Soluble antigens obtained from influenza virus by treatment with non-ionic detergent . . . . .	81
BULLIN, C. H., TANNER, ELIZABETH I. and COLLINS, C. H. Isolation of <i>Mycobacterium xenopei</i> from water taps . . . . .	97
MIRCHAMSY, H., SHAFYI, A., BASSALI, Y., BAHRAMI, S. and NAZARI, F. A comparative study of two live measles vaccines in Iran . . . . .	101
HALL, BARBARA M. Distribution of mercury resistance among <i>Staphylococcus aureus</i> isolated from a hospital community . . . . .	111
HALL, BARBARA, M. Mercury resistance of <i>Staphylococcus aureus</i> . . . . .	121
HIBBERT, H. R. and SPENCER, R. An investigation of the inhibitory properties of sodium thioglycollate in media for the recovery of clostridial spores . . . . .	131
SOBEY, W. R., CONOLLY, DOROTHY, HAYCOCK, P. and EDMONDS, J. W. Myxomatosis. The effect of age upon survival of wild and domestic rabbits ( <i>Oryctolagus cuniculus</i> ) with a degree of genetic resistance and unselected domestic rabbits infected with myxoma virus . . . . .	137
BARRY, R. D. and DAVIES, PATRICIA. The effects of UK2054 on the multiplication of influenza viruses . . . . .	151

## No. 2 (June 1970)

	PAGE
ANDERSON, E. C., CAPSTICK, P. B., MOWAT, G. N. and LEECH, F. B. <i>In vitro</i> method for safety testing of foot-and-mouth disease vaccines . . . . .	159
MCDEVITT, D. G. The relevance of the anti-human globulin (Coombs) test and the complement-fixation test in the diagnosis of brucellosis . . . . .	173
KAMPELMACHER, E. H., MOSSEL, D. A. A., VAN NOORLE JANSEN, L. M. and VINCENTIE, H. A survey on the occurrence of <i>Vibrio parahaemolyticus</i> on fish and shellfish marketed in The Netherlands . . . . .	189
TURNER, G. S., SQUIRES, E. J. and MURRAY, H. G. S. Inactivated smallpox vaccine. A comparison of inactivation methods . . . . .	197
UPPAL, P. K. Direct complement fixation test with avian infectious bronchitis virus in chickens . . . . .	211
GILBERT, R. J. Comparison of materials used for cleaning equipment in retail food premises, and of two methods for the enumeration of bacteria on cleaned equipment and work surfaces . . . . .	221
DOWNIE, JEAN C. and STUART-HARRIS, C. H. The production of neutralizing activity in serum and nasal secretion following immunization with influenza B virus . . . . .	233
DARK, F. A. and NASH, T. Comparative toxicity of various ozonized olefins to bacteria suspended in air . . . . .	245
HUGH-JONES, M. E. and WRIGHT, P. B. Studies on the 1967-8 foot-and-mouth disease epidemic. The relation of weather to the spread of disease . . . . .	253
THOMAS, G. An adhesive surface sampling technique for airborne viruses . . . . .	273
MCQUILLIN, JOYCE, GARDNER, P. S. and STURDY, PATRICIA, M. The use of cough/nasal swabs in the rapid diagnosis of respiratory syncytial virus infection by the fluorescent antibody technique . . . . .	283
LEY, F. J., KENNEDY, T. S., KAWASHIMA, K., ROBERTS, DIANE and HOBBS, BETTY, C. The use of gamma radiation for the elimination of <i>Salmonella</i> from frozen meat . . . . .	293
GOODWIN, R. F. W. and HURRELL, JOAN M. W. Further observations on the problem of isolating <i>Mycoplasma suis pneumoniae</i> from field cases of enzootic pneumonia in pigs . . . . .	313
GOODWIN, R. F. W. and HODGSON, RUTH G. The passive haemagglutination test for the detection of <i>Mycoplasma suis pneumoniae</i> and the possible diagnosis of enzootic pneumonia of pigs . . . . .	327
MPAIRWE, Y. Observations on the nasopharyngeal carriage of <i>Haemophilus influenzae</i> type b in children in Kampala, Uganda . . . . .	337

## No. 3 (September 1970)

	PAGE
KUIPERS, J. S. and DANKERT, J. Bactericidal properties of Tego 103S and Tego 103G . . . . .	343
UPPAL, P. K. and NILAKANTAN, P. R. Studies on the serological relationships between avian pox, sheep pox, goat pox and vaccinia viruses . . . . .	349
TYRRELL, D. A. J., BUCKLAND, ROSEMARY, RUBENSTEIN, D. and SHARPE, D. M. Vaccination against Hong Kong influenza in Britain, 1968-9 . . . . .	359
HOBSON, D., BAKER, F. A., CHIVERS, C. P., REED, SYLVIA E. and SHARP, D. A comparison of monovalent Hong Kong influenza virus vaccine with vaccines containing only pre-1968 Asian strains in adult volunteers . . . . .	369
HUGHES, W. HOWARD. The irreducible minimum in cross-infection control and isolation nursing . . . . .	379
DAVIDSON, R. J. L. A survey of infectious mononucleosis in the North-East Regional Hospital Board area of Scotland, 1960-9 . . . . .	393
FLETCHER, S. M., RONDLE, C. J. M. and MURRAY, I. G. The extracellular antigens of <i>Micropolyspora faeni</i> : their significance in farmer's lung disease . . . . .	401
TOMLINSON, A. H. and MACCALLUM, F. O. The incidence of complement-fixing antibody to varicella-zoster virus in hospital patients and blood donors . . . . .	411
LIDWELL, O. M., POLAKOFF, SHEILA, DAVIES, J., HEWITT, J. H., SHOOTER, R. A., WALKER, K. A., GAYA, H. and TAYLOR, G. W. Nasal acquisition of <i>Staphylococcus aureus</i> in a subdivided and mechanically ventilated ward: endemic prevalence of a single staphylococcal strain . . . . .	417
WEINER, L. P., COLE, G. A. and NATHANSON, N. Experimental encephalitis following peripheral inoculation of West Nile virus in mice of different ages . . . . .	435
KASATIYA, S. S. Temperate bacteriophages of <i>Escherichia coli</i> O119:B14 . . . . .	447
ANNEAR, D. I. Recoveries of bacteria after drying and heating in glutamate foams . . . . .	457
CLOONAN, M. J., HAWKES, R. A. and STEVENS, L. H. Postnatal decline of maternally acquired rubella antibodies . . . . .	461
HOLLINGDALE, M. R. and LEMCKE, RUTH M. Antigenic differences within the species <i>Mycoplasma hominis</i> . . . . .	469
Ogilvie, MARIE M. Serological studies with human papova (wart) virus . . . . .	479
MOHAMMED, Y. S., GREŠIKOVÁ, M., ADAMOYOVÁ, K., RAGIB, A. H. and EL-DAWALA, K. Studies on arboviruses in Egypt. II. Contribution of arboviruses to the aetiology of undiagnosed fever among children . . . . .	491
MACHIN, S. J., POTTER, C. W. and OXFORD, J. S. Changes in the antibody status of a population following epidemic infection by influenza virus A2/Hong Kong/1/68 . . . . .	497
GRANT, L., BELLE, E. A., PROVAN, G., KING, S. D. and SIGEL, M. M. Trials with a live attenuated rubella virus vaccine, Cendehill strain . . . . .	505

## No. 4 (December 1970)

	PAGE
THOMAS, G. Sampling rabbit pox aerosols of natural origin . . . . .	511
CORBEL, M. J. and CULLEN, G. A. Differentiation of the serological response to <i>Yersinia enterocolitica</i> and <i>Brucella abortus</i> in cattle . . . . .	519
EDMUNDS, P. N. Staphylococcal infection in subdivided general surgical wards .	531
O'REILLY, K. J. Determination of an optimal dilution of virulent feline infectious enteritis (panleucopaenia) virus for challenge purposes . . . . .	549
DONALDSON, A. I., HERNIMAN, K. A. J., PARKER, J. and SELLERS, R. F. Further investigations on the airborne excretion of foot-and-mouth disease virus .	557
SELLERS, R. F., DONALDSON, A. I. and HERNIMAN, K. A. J. Inhalation, persistence and dispersal of foot-and-mouth disease virus by man . . . . .	565
GARDNER, P. S., MCQUILLIN, JOYCE and MCGUCKIN, ROSEMARY. The late detection of respiratory syncytial virus in cells of respiratory tract by immunofluorescence . . . . .	575
SCOTT, R. and GARDNER, P. S. Respiratory syncytial virus neutralizing activity in nasopharyngeal secretions . . . . .	581
COSTELLO, R. and SLATS, SARA C. Tuberculous morbidity in Swiss albino mice immunized with BCG . . . . .	589
VASSILIADIS, P., TRICHOPOULOS, D., PAPADAKIS, J. and POLITI, G. <i>Salmonella</i> isolations in abattoirs in Greece . . . . .	601
HARVEY, R. W. S. and PRICE, T. H. Sewer and drain swabbing as a means of investigating salmonellosis . . . . .	611
MAGUIRE, T. The laboratory transmission of Coxsackie A6 virus by mosquitoes	625
HAWLEY, T. G. The natural history of molluscum contagiosum in Fijian children	631
WORMALD, P. J. The effect of a changed environment on bacterial colonization rates in an established burns centre . . . . .	633
HIGGINS, P. G., EILEEN M., WOOLLEY, D. A. and CASSIDY, P. F. Viruses associated with acute respiratory infections in Royal Air Force personnel .	647
LANE-PETTER, W., OLDS, R. J., HACKING, M. R. and LANE-PETTER, M. E. Respiratory disease in a colony of rats. I. The natural disease . . . . .	655
THOMAS, MAIR E. M. and MOGFORD, HILARY E. Salmonellosis in general practice. Observations of cases and their households in Enfield . . . . .	663
GREIG, A. and PLOWRIGHT, W. The excretion of two virulent strains of African swine fever virus by domestic pigs . . . . .	673
LAWN, A. M. and MEYNELL, ELINOR. Serotypes of sex pili . . . . .	683