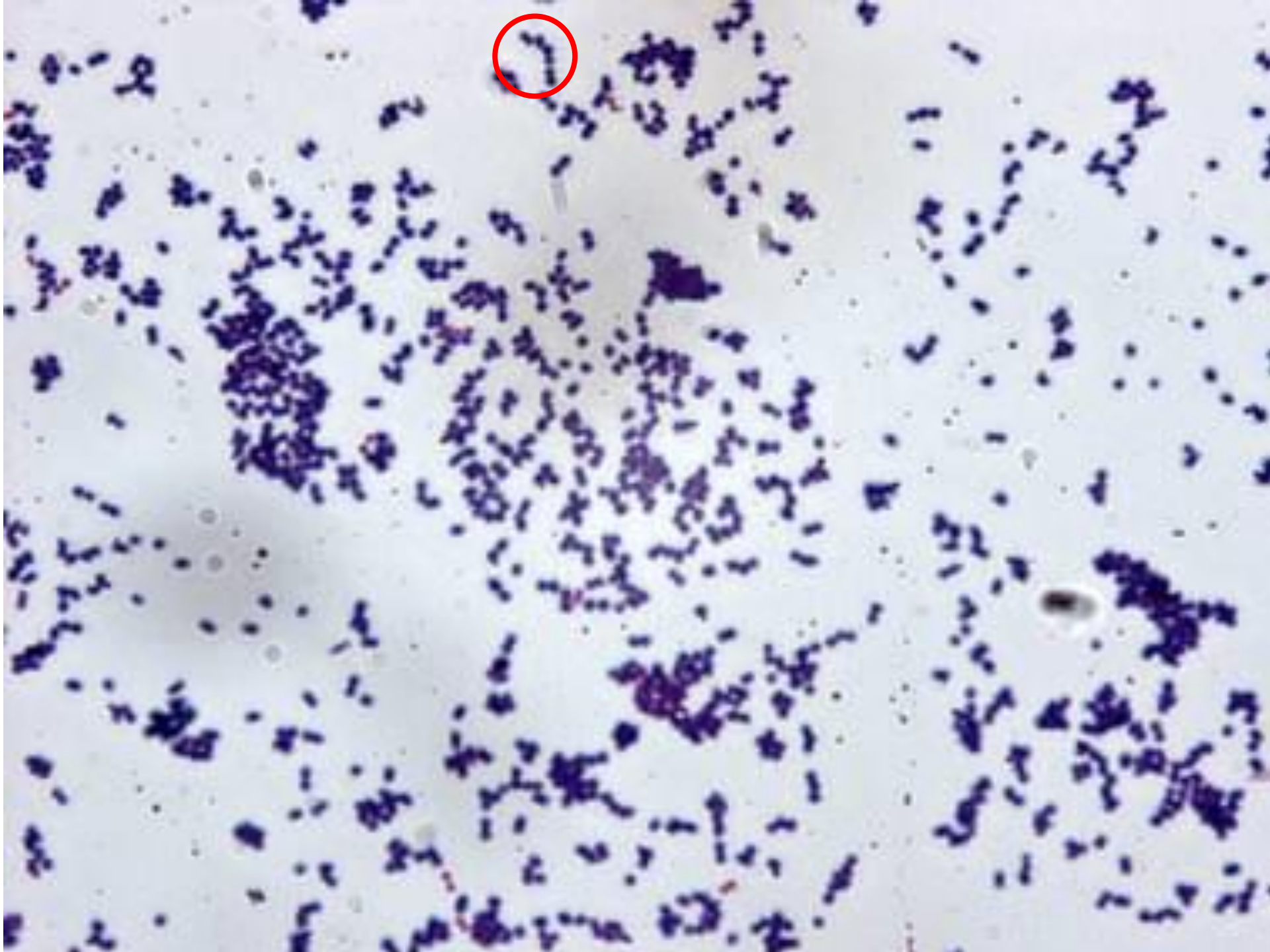


acuterheumatic**fever** rheumatic**heart**disease **an**overview

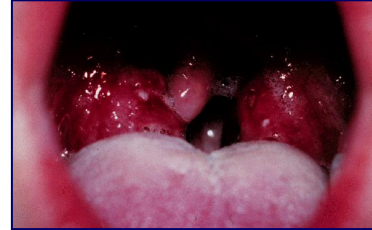
Sara Noonan
22 March 2016
Brisbane



Superficial infection

Pharyngitis

Skin infections



Invasive diseases

Septicaemia

Pneumonia, osteomyelitis, etc

Necrotising fasciitis



Toxin mediated diseases

Scarlet fever

Streptococcal toxic shock syndrome



Post-streptococcal autoimmune conditions

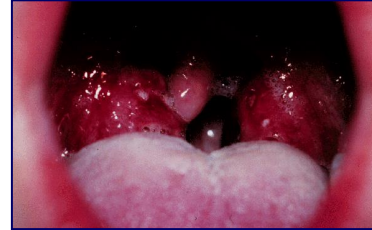
Acute rheumatic fever

Post-streptococcal glomerulonephritis

Superficial infection

Pharyngitis

Skin infections



Invasive diseases

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Pneumonia, osteomyelitis, etc

Necrotising fasciitis



Toxin mediated diseases

Scarlet fever

Streptococcal toxic shock syndrome



Post-streptococcal autoimmune conditions

Acute rheumatic fever

Post-streptococcal glomerulonephritis

Estcourt House 1894

Adelaide, Australia



Irvington House New York USA

PEDIATRICS Vol. 33 No. 5 May 1964, pp. 653-660

CONGESTIVE HEART FAILURE AND
RHEUMATIC ACTIVITY IN YOUNG
PATIENTS WITH RHEUMATIC HEART
DISEASE



A view of beds in the Irvington Home for

A view of beds in the Irvington Home for Rheumatic Fever.

**A CONTROLLED STUDY OF THREE METHODS OF
PROPHYLAXIS AGAINST STREPTOCOCCAL INFECTION IN A
POPULATION OF RHEUMATIC CHILDREN¹
II. RESULTS OF THE FIRST THREE YEARS OF THE STUDY,
INCLUDING METHODS FOR EVALUATING THE
MAINTENANCE OF ORAL PROPHYLAXIS**



Mozart



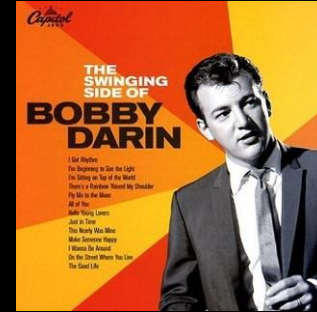
Christopher
Columbus



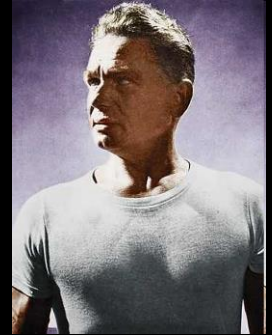
Andy
Warhol



Lou
Costello



Bobby Darin



Joseph
Pilates



Robert Burns



Donald
Sutherland



Patsy Cline

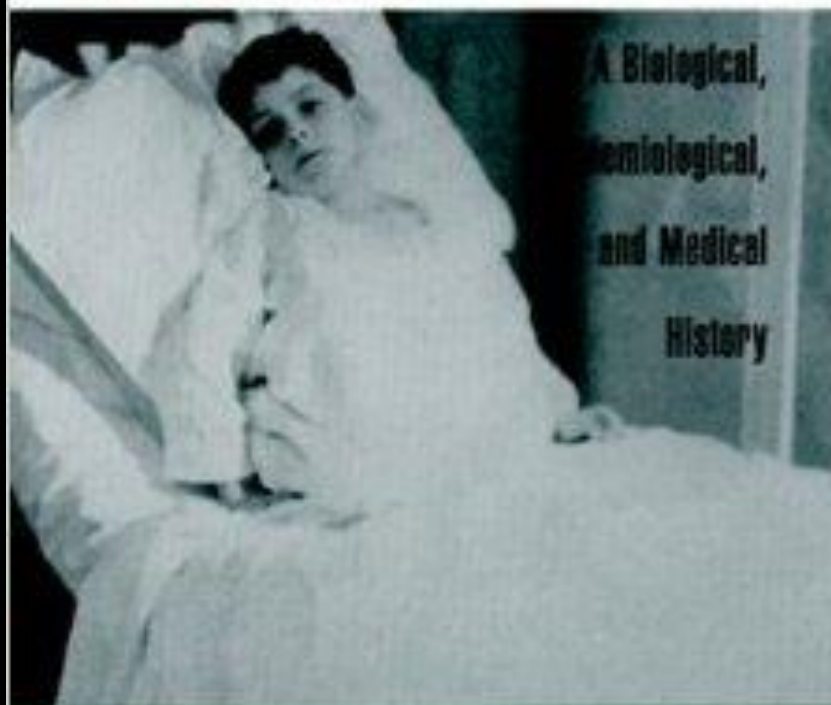


Princess
Astrid



Kevin O7

RHEUMATIC FEVER IN AMERICA AND BRITAIN



A Biological,
Epidemiological,
and Medical
History

PETER C. ENGLISH



(strep)

GAS infection

(Common sites of infection:
throat, skin)

β -haemolytic group A streptococcus
person-to-person contact

Acute Rheumatic Fever

autoimmune response to **strep**

3% strep throat \rightarrow ARF

poverty & overcrowding

5 to 14 years of age

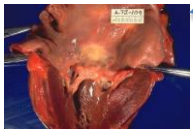
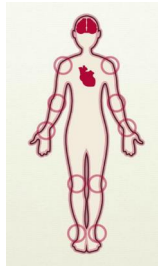
Jones criteria for diagnosis

Recurrent Acute Rheumatic Fever

Rheumatic Heart Disease

no symptoms = disease often undetected
first diagnosis = heart failure or pregnancy
heart valve surgery and death common

Cardiac Surgery, Stroke, Endocarditis, Death

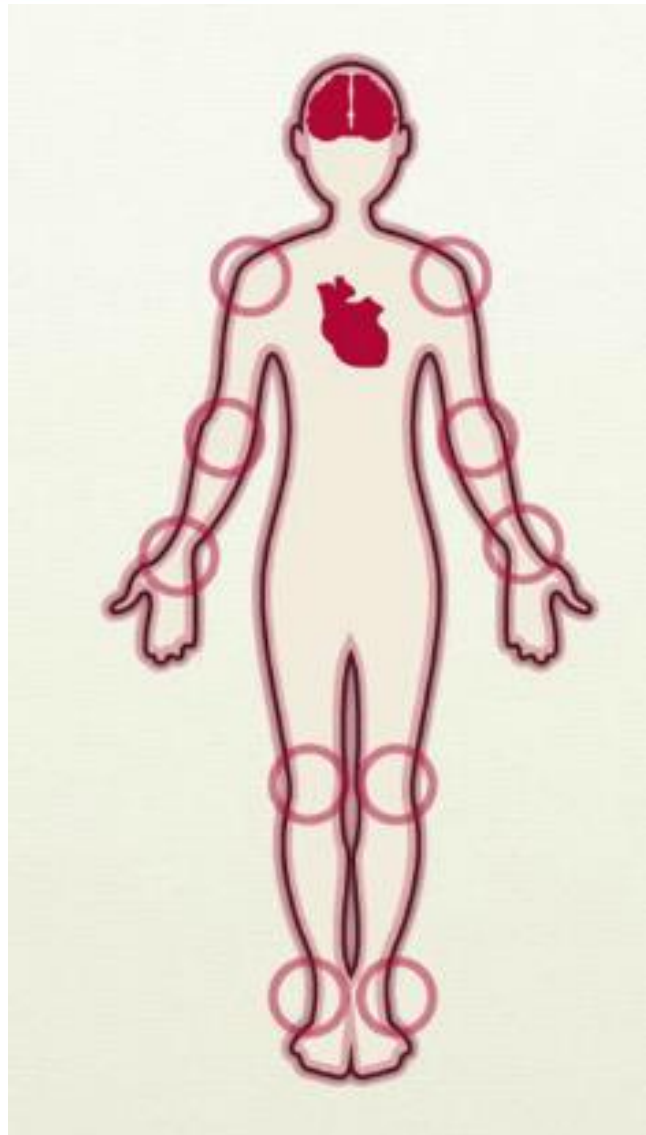


Joints

Brain

Skin

Heart



Unwell

Inflammation

Pain

Fever

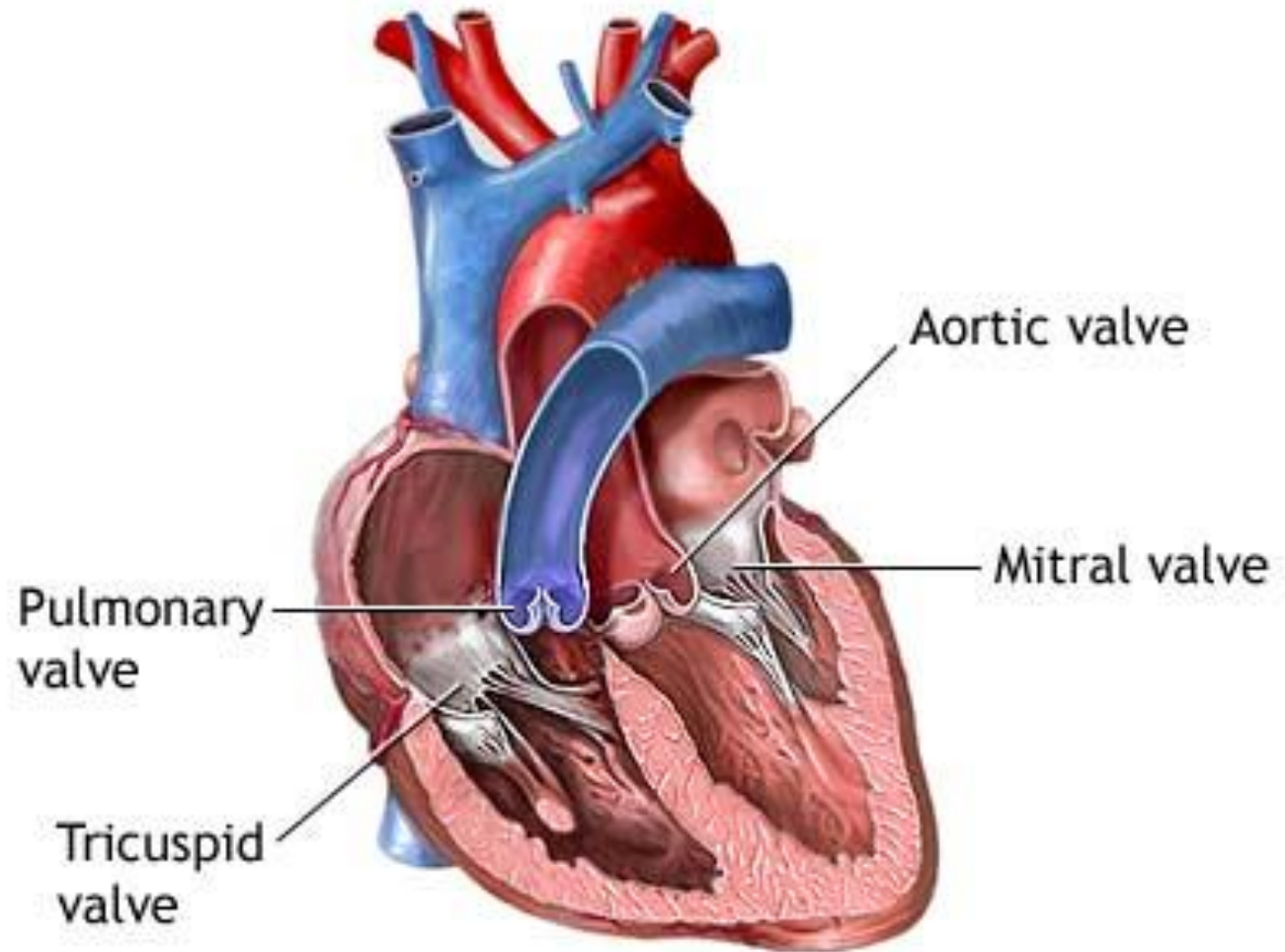


1.9 million people
with a history of
Acute Rheumatic Fever



470,000 new cases

of **Acute Rheumatic Fever** each year





**15.6 million
people globally**

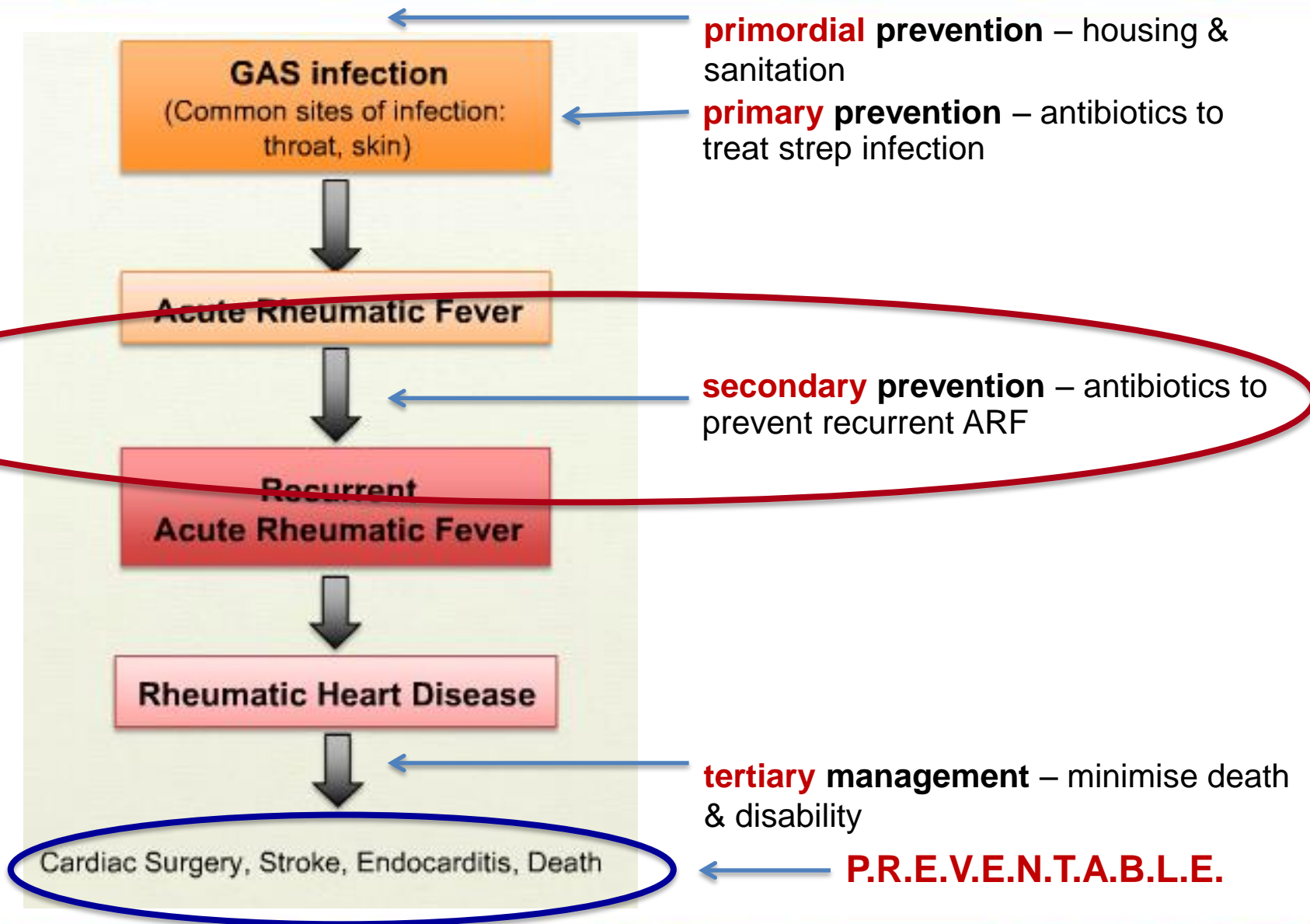
with
**Rheumatic
Heart Disease**

Over

230,000 deaths

due to **Rheumatic Heart Disease** annually

rheumatic heart disease ...
most common
cause of heart disease in children &
young adults



1957 (pre-antibiotic era)



At St. Anthony's school Mrs. Marian Huff uses an electric torch as she examines the throat of a student. Lengthy lines form every school morning at each school.



Limb or joint pain in a school-aged
Indigenous child?

Assume
acute rheumatic fever
until proven otherwise

Typical presenting symptoms:

- fever, malaise
- one or more painful joints
- unable to walk or use a limb
- unusual movements (chorea)

THINK
ARE

Further information: Primary Clinical Care Manual
or visit the website: www.health.qld.gov.au/pccm

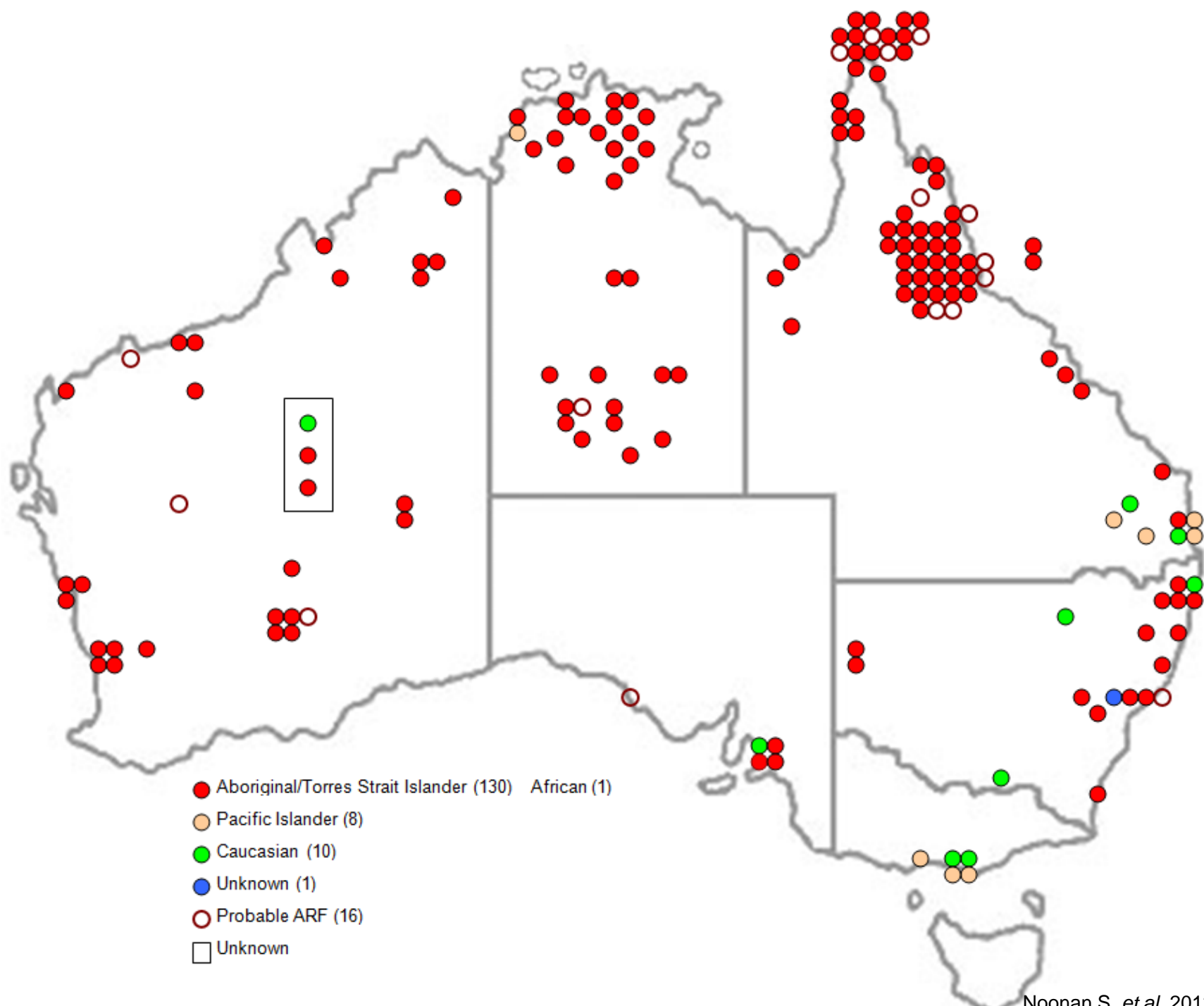
TODAY ...

ARF – children aged **5-14** years

RHD – adults aged **35-39** years

Aboriginal **8x** more likely to be **hospitalised** with RHD

Aboriginal **20x** more likely to **die** from RHD



Australia
Pacific

Indigenous Australians

Maoris

Pacific Islanders

Sub Saharan Africa

Latin America

Indian subcontinent

Middle East

Northern Africa

Global
burden



Guam

Mariana Islands

Palau

Micronesia

Nauru

Marshall Islands

Kiribati

Papua New Guinea

Tuvalu

Independent Samoa

Solomon Islands

Wallis & Futuna

American Samoa

French Polynesia

Vanuatu

Fiji

Tokelau

Cook Islands

Pitcairn Islands

Easter Island

New Zealand

Tasmania

Victoria

New South Wales

South Australia

Western Australia

Northern Territory

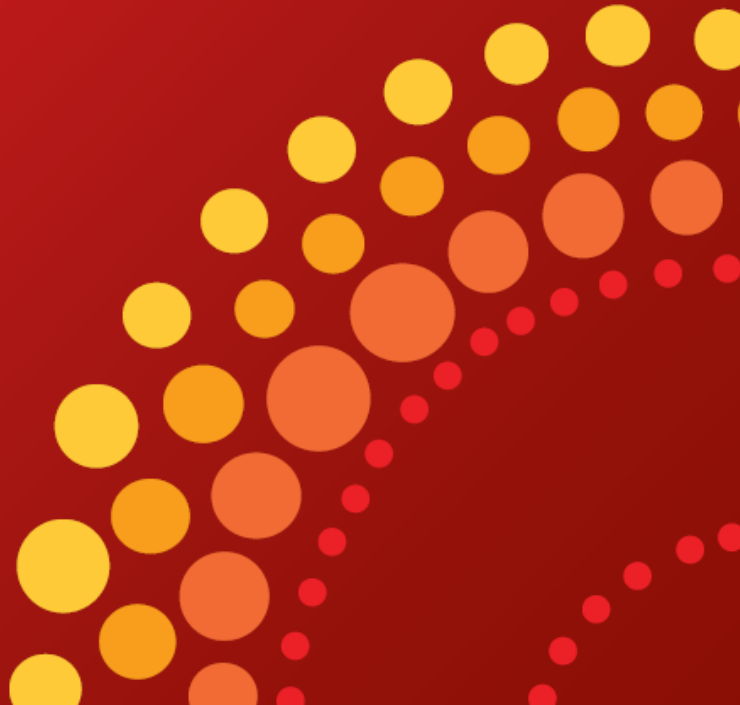
Queensland

New Caledonia

Tonga

Niue

The Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (2nd edition)



indigenous
australians

Strep
→ ARF
→ RHD

interventions
exist ...

secondary
prevention

P.R.E.V.E.N.T.A.B.L.E.