

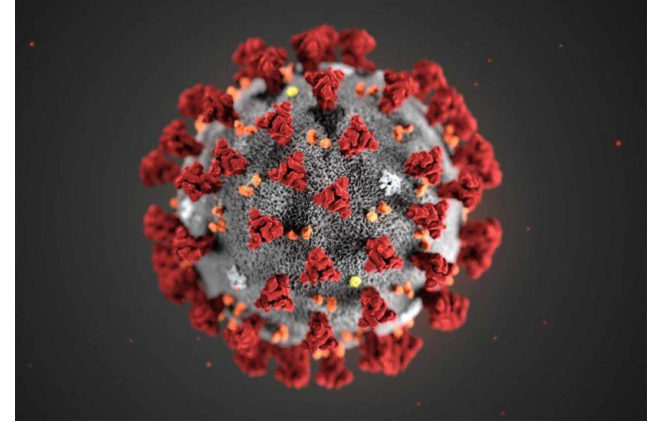
PHN Session: Pharmacy COVID19 Update 16/9/21

John Ferguson

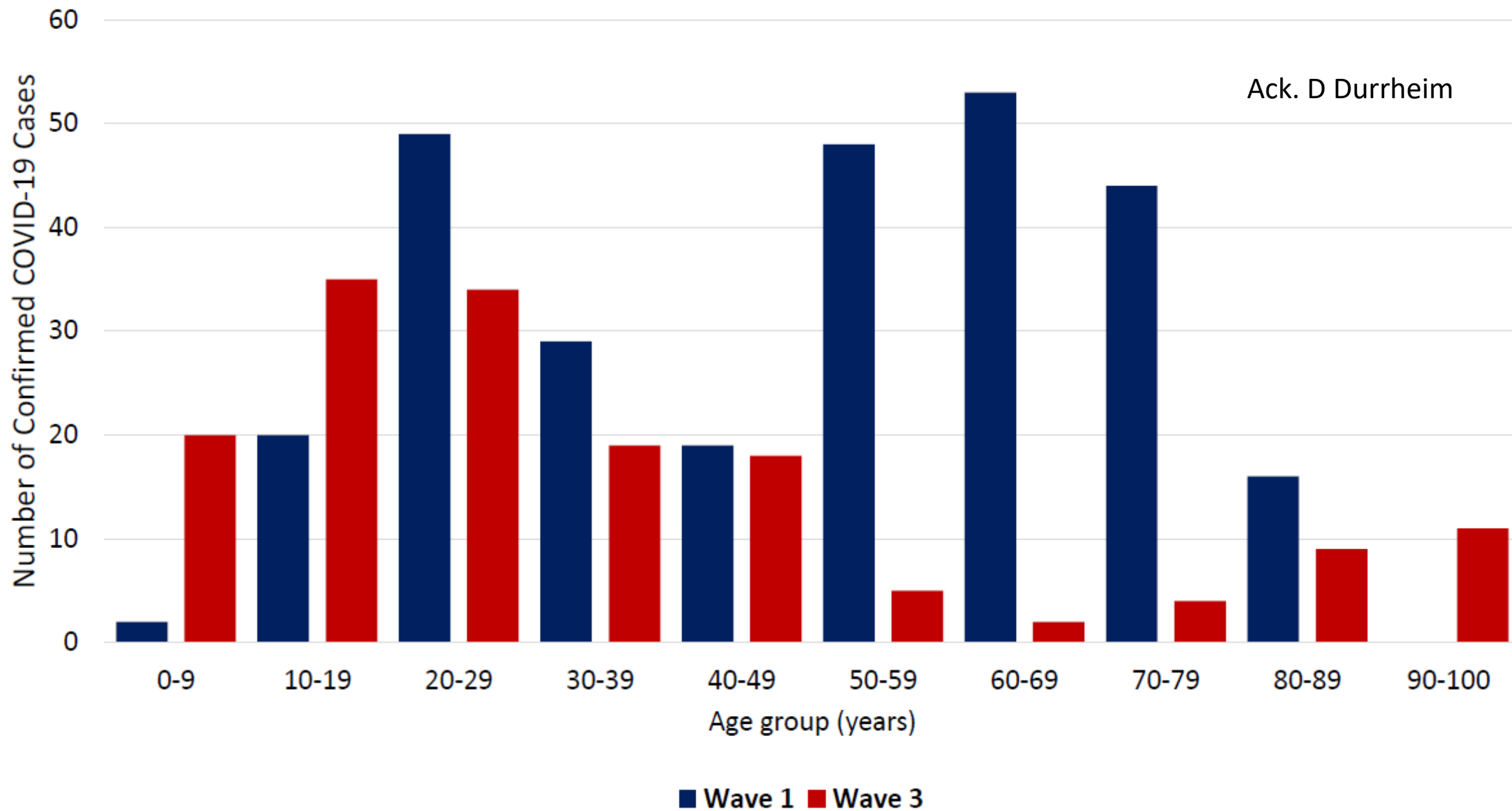
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HNELHD COVID-19 cases, age group distribution Wave 1 and Wave 3

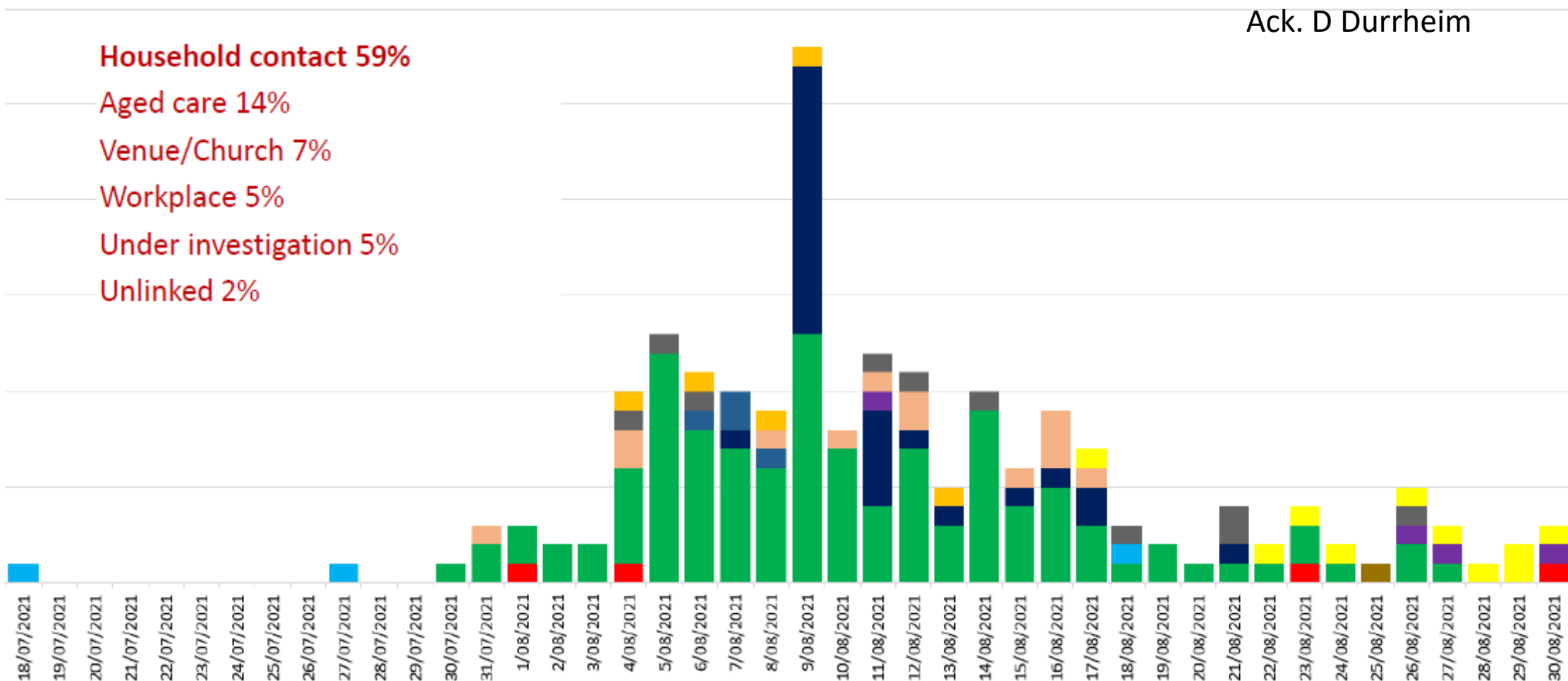


HNELHD COVID-19 cases by source of infection (N=196)

Number of confirmed COVID-19 cases

Ack. D Durrheim

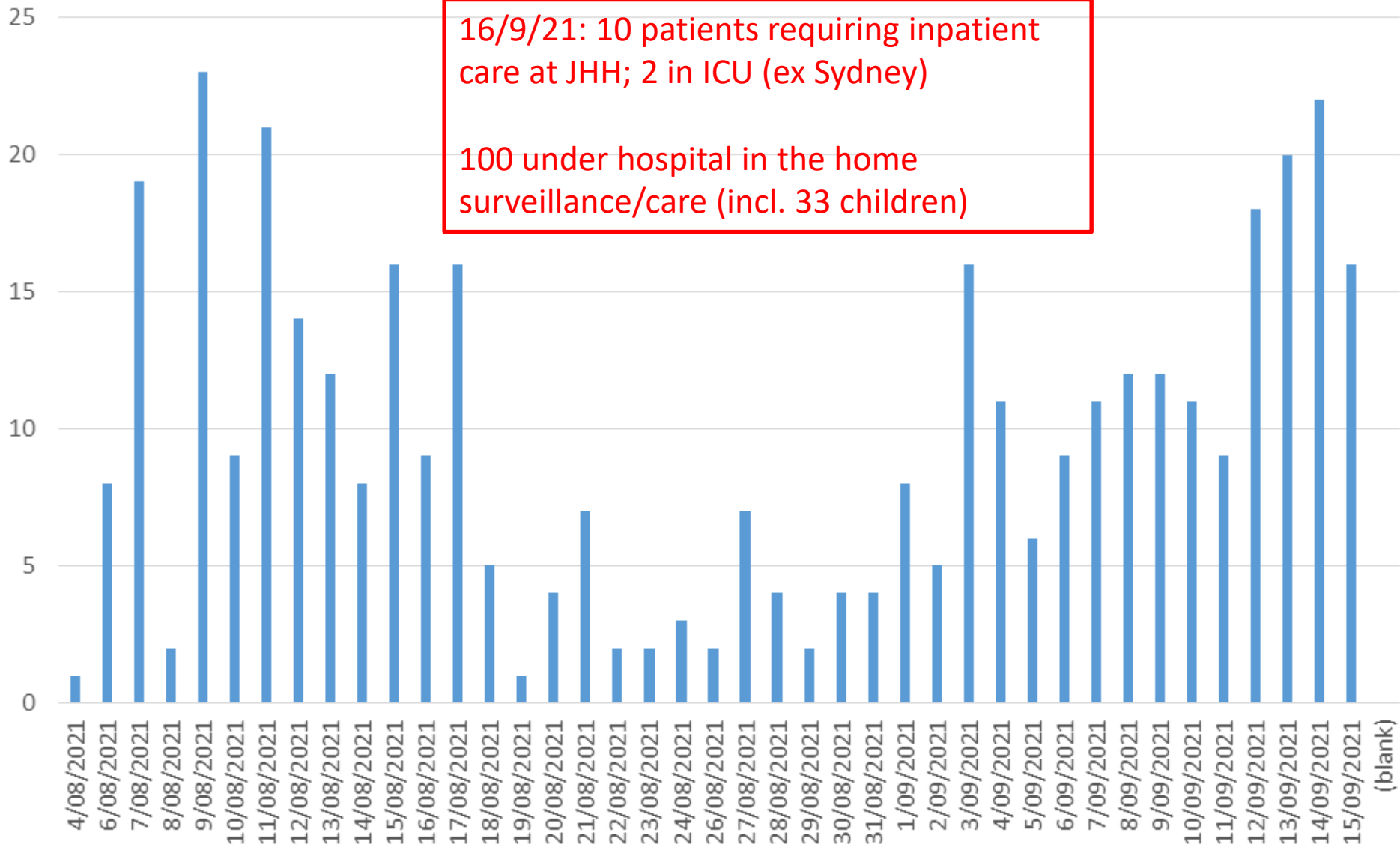
Household contact 59%
 Aged care 14%
 Venue/Church 7%
 Workplace 5%
 Under investigation 5%
 Unlinked 2%



- Central Coast acquired
- Greater Sydney acquired
- Household contact
- Aged care
- Non household close contact
- Overseas acquired
- School
- Venue
- Workplace
- Acute healthcare (hospital)
- Under investigation
- Unlinked

Count of Onset Confirmation

Recent HNE cases



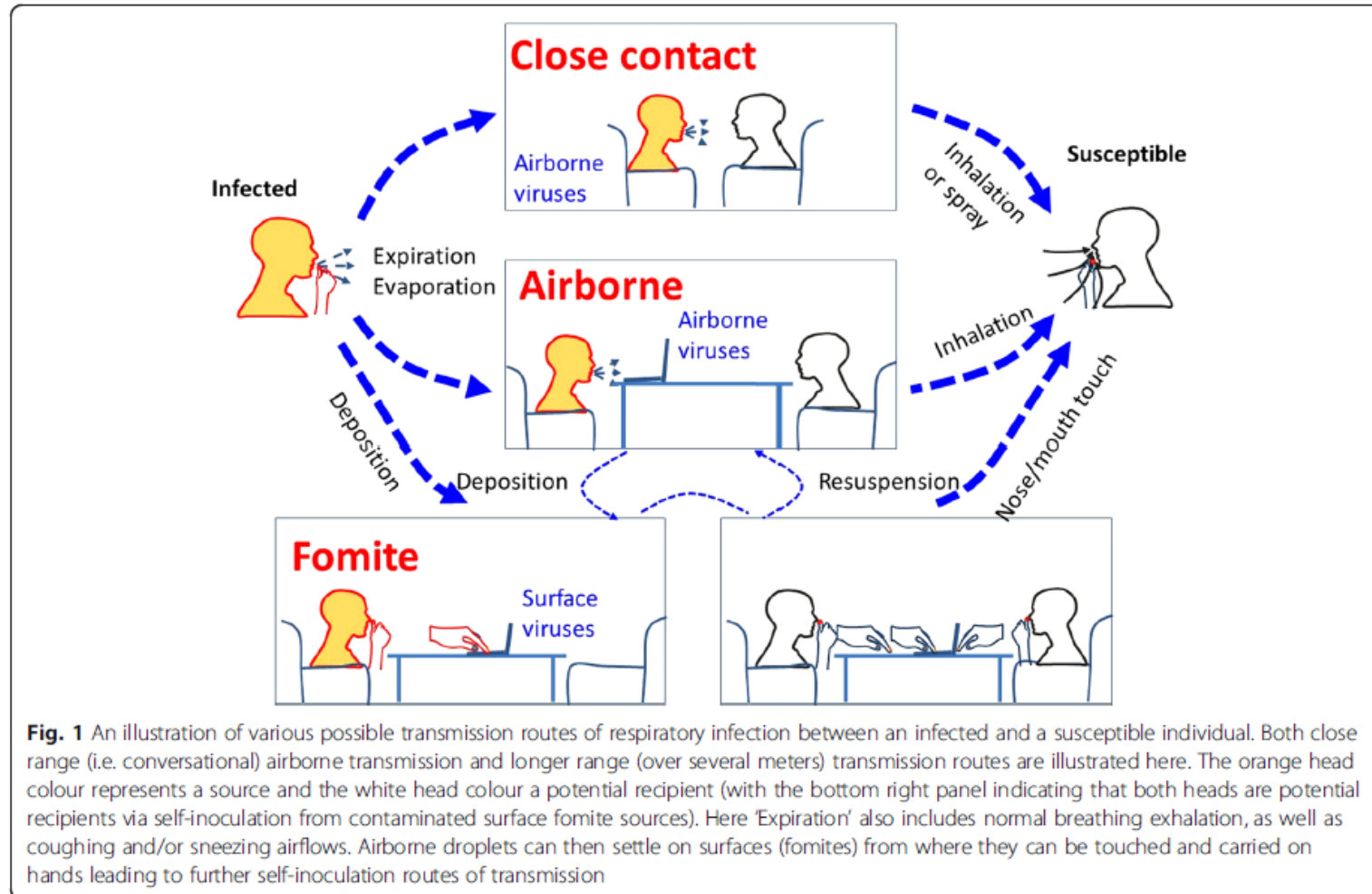
16/9/21: 10 patients requiring inpatient care at JHH; 2 in ICU (ex Sydney)

100 under hospital in the home surveillance/care (incl. 33 children)

Delta is different from previous strains:

- Highly contagious – viral loads 1000-fold higher ; evidence of transmission during fleeting contact ; airborne transmission risk probably – predominantly indoors
- Likely more severe ; more disease in younger adults and children – but still serious paediatric disease unusual
- Risk of infection reduced at least 3-fold in vaccinated
- Breakthrough infections may be as transmissible as unvaccinated cases – similar viral load but excreted for shorter duration
- Vaccines will prevent >90% of severe disease, but are less effective at preventing infection or transmission – i.e. more breakthrough and more community spread despite vaccination

Significance of aerosol transmission: esp. Delta relevant



National COVID Evidence Taskforce IPC panel & Infection Control Expert Group changes to advice May 2021:

P2/n95 respirators required for COVID care and high risk suspected cases

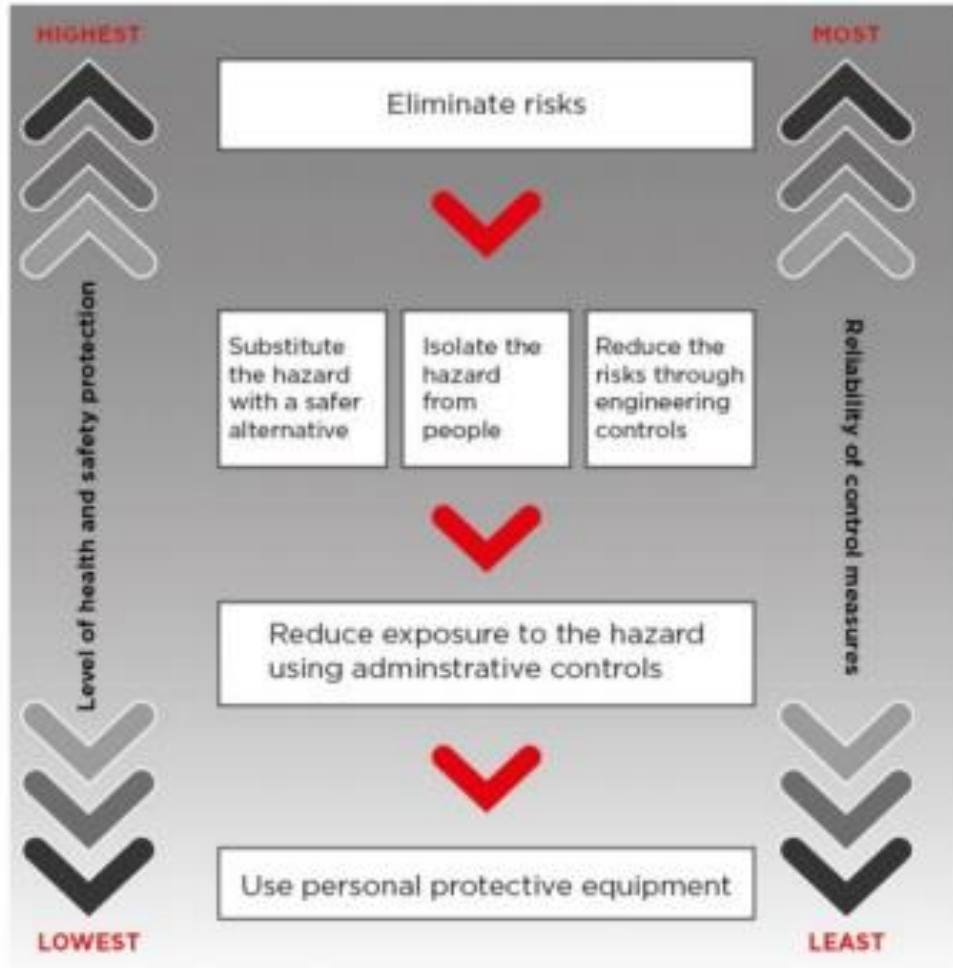
Fine particle aerosol production (SARS-CoV-2)

- Breathing
- Speaking (singing)
- Coughing
- Nebulisation

Role of other “Aerosol-generating procedures” less relevant- excessive aerosols produced just by speaking / coughing.

<https://www.theguardian.com/culture/2020/dec/21/flay-your-fart-viral-clip-calls-on-public-to-alter-speech-to-curb-covid>

Hierarchy of infection prevention controls:



1. Immunisation
2. Engineering controls
3. Administrative controls
4. PPE

<https://www.health.gov.au/sites/default/files/documents/2021/07/minimising-the-risk-of-infectious-respiratory-disease-transmission-in-the-context-of-covid-19-the-hierarchy-of-controls.pdf>

Engineering controls- general principles

- Maximise fresh air ventilation
- Spell period room/areas as required – dependent on ventilation rates
- Avoid directed air flows out of infected zone
- Provide negative pressure (flow) isolation where possible for positive cases
- Reduce airborne load at the source (within area /room) – HEPA filtration devices
- Control temperature and humidity

Administrative controls: loom largest

Effective organisation

- Meet and greet triaging/ screening
- Managing and resourcing of staff
- Manage all work spaces to reduce transmission : n.b. tea rooms etc

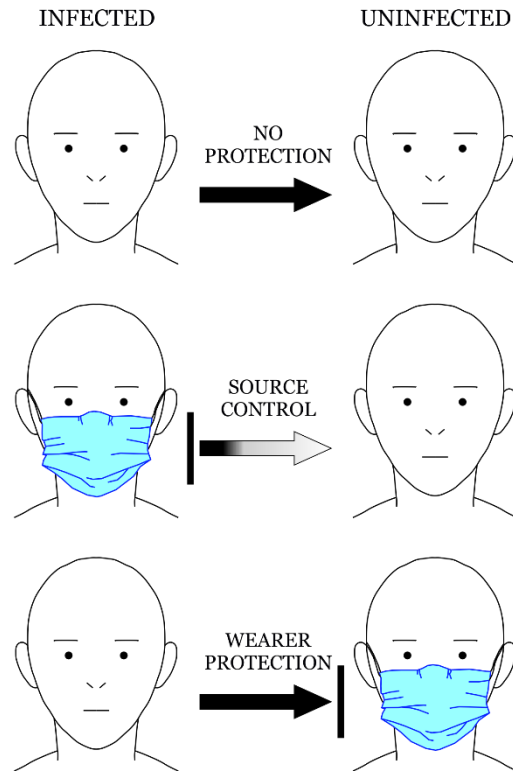
Effective and consistent implementation of IPAC

- Staff training in safe PPE don and doff
- Environmental cleaning
- Audit compliance with precautions
- Surveillance of acute resp infection in staff
- Staff understand the importance of promptly seeking medical care when required

PPE: Eye protection remains important

- Consensus recommendation for use (National COVID19 Evidence Taskforce)
- No evidence that sealed goggles provide better protection
- Eye Protection Practice points below
- Face shield equally valuable

Surgical masks provide important source control (and wearer protection)



Surgical masks highly efficacious at capturing emitted respiratory droplets and aerosols, even from coughing person

Documented to prevent transmission of TB and Pseudomonas between patients

Hamster model study suggests the same is true for SARS-Cov2.

Properly worn surgical masks also effective at reducing respiratory viral risk to wearer

















Other protective elements (pharmacy)

- Hand hygiene and standard precautions
- Routine use of surgical mask and eye protection at work
- Perspex screens
- Physical distancing
- Staff COVID19 immunisation
- Ventilation

Cleaning and disinfection

- Viable virus persists 48-72 hrs on surfaces – however whether that poses actual risk is unknown; little evidence for COVID19 spread by contact
- Avoid cloth furnishings – less able to be cleaned
- Touched surfaces and furnishings
 - Clean and disinfect – single purpose disposable disinfectant wipe
- Potential fomites- reused equipment etc
- Floors – routine cleaning; disinfection unnecessary
- Staff clothing – routine domestic hot wash sufficient

PPE GUIDANCE FOR COMMUNITY PHARMACIES

Pharmacy Activity During Red Alert – High Community Transmission	Precautions Required				
	 Frequent hand hygiene	 Surgical mask ²	 P2/N95 Respirator	 Eye Protection ³	
PATIENT/CUSTOMER MUST WEAR A MASK Everyone entering the pharmacy should undergo COVID-19 risk screening. Individuals with COVID-19 symptoms should not enter the pharmacy					
Direct patient/customer facing clinical services including vaccination (e.g. OTP dosing, disease screening, COVID-19 risk screening, over the counter advice, wound care, inhaler technique). Keep physical distancing (1.5m) if the patient/customer needs to remove their mask for a short period.	STANDARD PRECAUTIONS¹				 Face shield preferred
Direct patient/customer facing activities (e.g. prescription handling)					
All other staff in pharmacy (not involved in patient/customer facing roles)					
GLOVES⁴ AND APRONS/GOWNS⁵ ARE NOT REQUIRED IN ANY OF THESE SITUATIONS					

https://www.cec.health.nsw.gov.au/data/assets/pdf_file/0008/673955/PPE-Guidance-for-Community-Pharmacies.pdf

Staff exposure advice

- Population Health risk assessment
 - Exposure duration, environment and closeness
 - Whether source had mask on and whether compliant with wearing same
 - Whether potentially exposed staff member wore compliant PPE – including eye protection
 - Video review often used to assess interactions
- CEC Risk matrix in use public healthcare for staff
 - Similar principles followed
 - NB. Immunisation significantly reduces risk

References

- Australian Technical Advisory Group on Immunisation – excellent site :
<https://www.health.gov.au/committees-and-groups/australian-technical-advisory-group-on-immunisation-atagi>
- <https://www.psa.org.au/coronavirus/covid-19-vaccine-information-for-pharmacists/#1630218726757-47d4c056-0aa2>
- https://www.cec.health.nsw.gov.au/data/assets/pdf_file/0008/673955/PE-Guidance-for-Community-Pharmacies.pdf
- <https://www.health.gov.au/resources/publications/covid-19-vaccination-site-requirements-for-covid-19-vaccination-in-community-pharmacies>