

# Pandemic influenza and the laboratories

David Smith

PathWest Laboratory Medicine WA

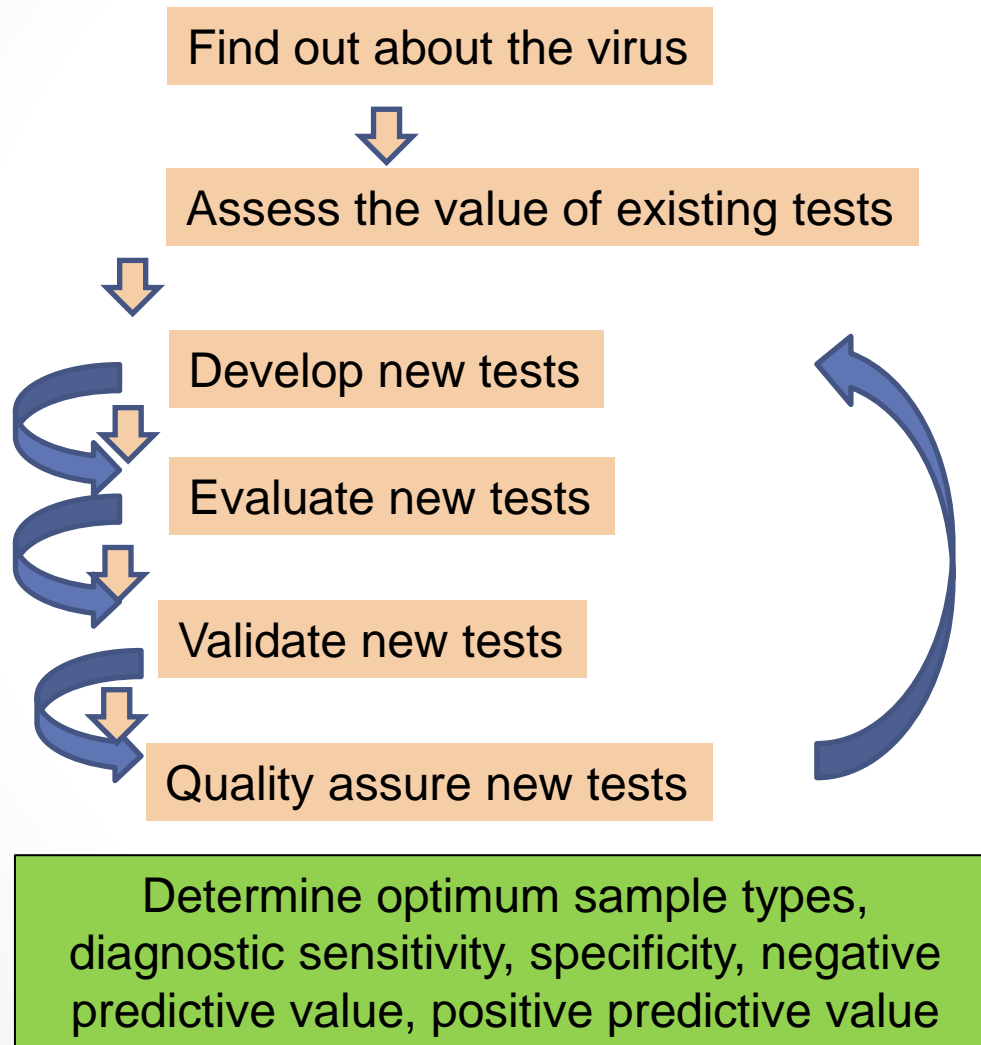
and

Faulty of Medicine and Health Silences, University of  
Western Australia

# The role of laboratories in a pandemic

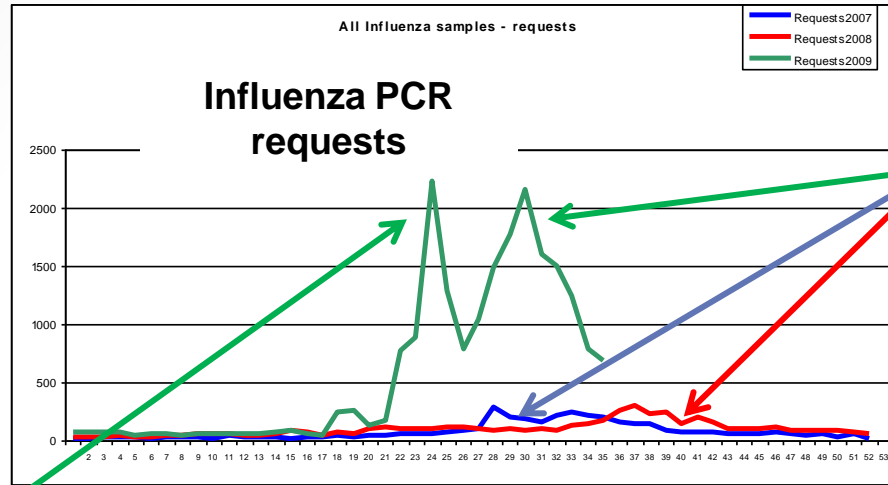
- The reasons for testing
  - Public health – case detection, case exclusion, outbreak investigation
  - Clinical – Diagnosis, Prognosis, Monitoring, Antiviral susceptibility
  - Infection control – patient cohorting, staff exclusion, clearing patients/staff
- Used for reassurance as well as diagnosis
  - Clinicians like to know what they are treating, patient like to know they haven't got pandemic influenza for the sake of themselves and their families, institutions like to know that their staff are safe to work, etc
  - Politicians and the media like to know risks and predictions of risk

# The laboratory response process

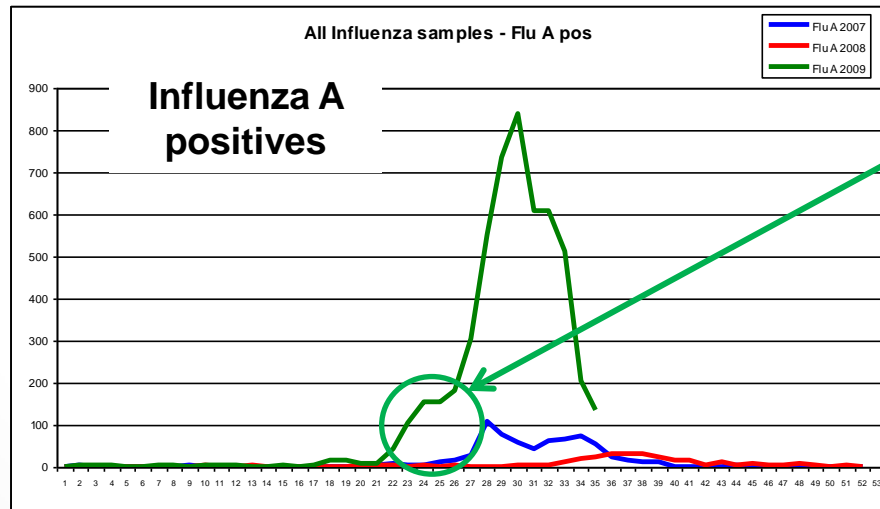


# The 2009 experience

Request numbers were significantly affected by policy decisions, public perceptions and media



The test numbers received vastly exceeded any previous seasons



The influenza "season" began earlier than usual

The wheels didn't fall off, but they were wobbling!

# The challenges we anticipate

- Getting a test up and running for a new virus of uncertain pathogenicity
  - Test development, regulatory requirement, staff safety, biocontainment requirements, ensuring equipment and reagent availability
- Getting the samples in and the results out
  - Number, urgency, private sector involvement
- Prioritisation of samples
  - Pretest demand management and adjusting expectations, identifying the truly urgent ones
  - Getting the other work done as well
- Communication expectations
  - Test number reporting, result reporting, personal communication with health care staff, meetings and reports, politicians and media
  - Concerns of our own staff
- Who pays?