









Antibo	ody Tests
What does it test for	 Presence of antibodies in a patient sample Has the patient been exposed to this pathogen?
When would you use this test	 May be actively infected May have been infected in the past Check for immunity
Examples	HepatitisHIV
OREGON STATE PUE Public Health Division 5	









Cultur	re Tests	
What does it test for	 Viable pathogen growth and isolation/identification of pathogen 	
When would you use this test	 Pathogen hasn't been identified yet Want to study it further (subtyping) Need to know if it is an active infection 	
Examples	B. pertussisEnteric pathogen culturesTuberculosis	
OREGON STATE PUI Public Health Division	BLIC HEALTH LABORATORY	Health



Molec	ular Tests			
What does it test for	 Presence of generation patient sample Bacterial or vira Active/live or integration of the second seco	netic material in a Il active/dead		
When would you use this test	 Test for something specific High levels of sensitivity Need a faster result than culture 			
Examples	NorovirusInfluenza	PertussisChlamydia		
OREGON STATE PUB Public Health Division	BLIC HEALTH LABORATORY	(Health	



PCR vs NAAT in Public Health Response		
PCR	Automated NAAT	
Individual components measured and mixed together at the lab	Pre-made kits from manufacturers	
Manual processing	Automated platforms	
Lower volume throughput	High volume throughput	
Highly flexible – test/instrument can be modified	Less flexible – test/instrument is not easily modified	
First to be deployed for emerging pathogen response	Distributed later in emerging pathogen response	
REGON STATE PUBLIC HEALTH LABORATORY ublic Health Division		











Recap					
What Are We Testing?	Also Known As	Pros	Cons		
Antibodies ໍ ∛ ≩≻	Serology	 Can give info about current, chronic, past, and immune status 	 Check what antibody was tested – all mean different things 		
Antigens	Serology	Tests for presence of pathogen	 Applicable use varies based on test – read the instructions! 		
Molecular	PCR, NAAT	Very specificFlexible/adaptable technology	 Can detect "dead" material 		
Pathogen	Culture	 Detects "live" material 	 Can be fragile – make sure you handle specimens carefully 		

