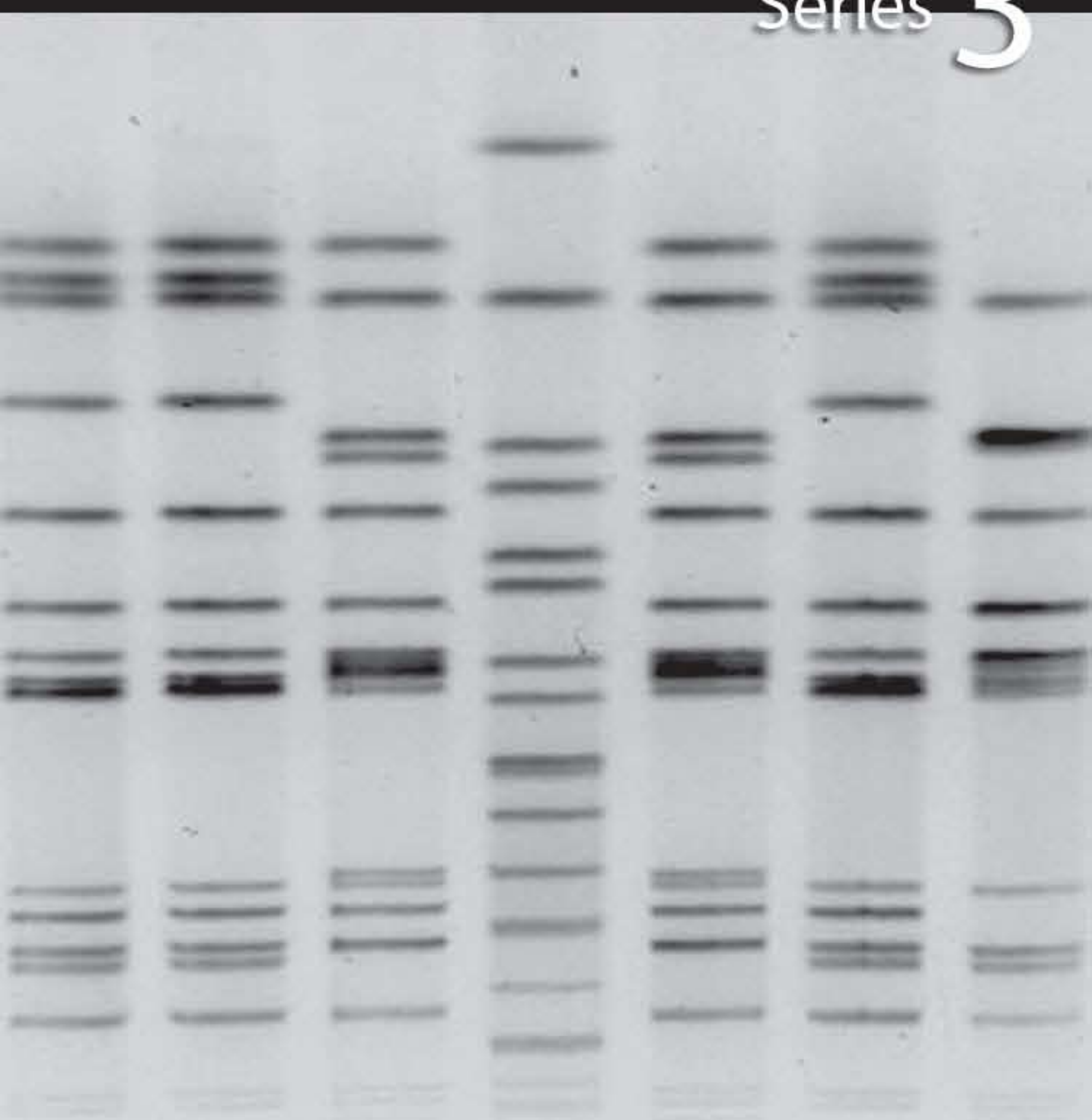
PulseNet

Series 3



PFGE Patterns

Department of Health and Human Services

CDC & ATSDR

PFGE Patterns

The fingerprints that scientists use to identify bacteria are called PFGE patterns. PFGE stands for Pulsed-Field Gel Electrophoresis. Scientists find bacterial fingerprints by cutting the bacteria's DNA into tiny pieces and then placing them on a gel. When scientists send electricity through the gel, the DNA pieces separate. Small pieces of DNA get carried farther down the gel than bigger pieces. This process creates a banding pattern or "fingerprint" you can see on the front of this card.