

# **Diagnostic Applications of Aero Microbiology**

Aero microbiology has the potential to offer various diagnostic applications across different disease segments.

#### **Airborne Pathogen Detection**

Rapid identification of respiratory pathogens in indoor air to monitor disease outbreaks. 2.

#### **Tuberculosis Screening**

Developing sensitive tests for detecting airborne TB transmission in crowded settings. 4.

#### **Infectious Diseases**

5.

#### Influenza Surveillance

Real-time monitoring of indoor air for early detection of flu outbreaks.

#### **Vaccine Efficacy Assessment**

Assessing the presence of airborne pathogens to evaluate vaccine efficacy.

## **Allergy Testing**

Identifying specific airborne allergens responsible for allergic reactions. 10.

#### **Immunodeficiency Screening**

Monitoring indoor air for immunodeficiency-associated pathogens.

#### Malaria Surveillance

Detecting airborne vectors and pathogens responsible for malaria transmission. 13.

#### **Lyme Disease Assessment**

Identifying the presence of infected ticks and pathogens in the air.

## **Foodborne Pathogen Detection**

Rapid detection of airborne pathogens that may contaminate food. 16.

## **Dermatological Diseases**

17.

#### **Eczema Triggers**

Investigating airborne factors that may trigger eczema outbreaks.

## **Eye Infection Detection**

Detecting airborne pathogens that may cause eye infections. 20.

## **Neurological Diseases**

21.

#### **Migraine Triggers**

Identifying airborne triggers for migraines.

#### **Heart Disease Risk Assessment**

Studying the influence of air quality on cardiovascular health. 24.

## **Oncology**

25.

#### **Cancer Risk Assessment**

Assessing indoor air quality and its potential links to cancer risk.

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#### **Urinary Tract Infection Detection**

Detecting airborne pathogens associated with urinary tract infections. 28.

#### Hematology

29.

## **Hematological Disorder Assessment**

Studying the impact of indoor air quality on hematological disorders.

## **Diabetes Risk Assessment**

Investigating potential links between indoor air quality and diabetes risk. 32.

#### Rheumatology

33.

#### **Inflammatory Disease Links**

Studying potential connections between indoor air quality and inflammatory diseases.

#### **Childhood Respiratory Health**

Investigating the impact of indoor air quality on child health. 36.

#### **Geriatrics**

37.

#### **Dementia Research**

Exploring potential links between airborne factors and dementia in the elderly.