

Supporting the Implementation of Infectious Diseases Programs in Schools in Puerto Rico

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Emerging Workplace Hazards: Creating Adaptable and Innovative Safety and Health Training

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Atlantic Center for Occupational
Health and Safety Training

Objectives

- Overview of occupational health and safety training content for workers responsible for implementing school-based policies to keep workers and students safe.
- Review methods, best practices, and challenges in helping workers foster safe workplaces in schools.
- Identify strategies to foster effective collaboration between public health agencies and schools

School Closures in Puerto Rico

- Infrastructure damage and recovery processes.
- Multiple schools on one campus.
 - Other damaged schools.
 - Temporary buildings and trailers.
- Remote learning before the pandemic.

2017

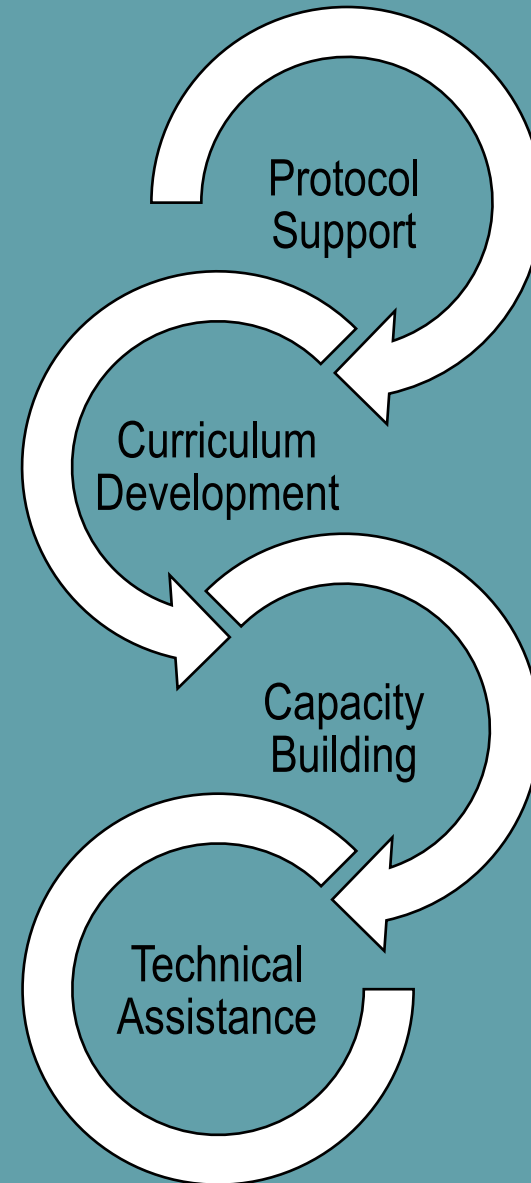
- Hurricane María

2019-20

- Earthquakes
- COVID-19

The process

- Participation in multiple stakeholder groups, including workers' groups, community-based organizations initiatives, and consulting groups for the Health Department.
 - Mesa Social



MCN's Initial Support

- External
 - Support for the development of the industrial hygiene section of the school reopening protocol.
 - Assistance and consult over the implementation process.
- Internal
 - Capacity building for monitors.
 - Training for staff members providing testing.



Guía para la prevención de COVID-19 en las escuelas de Kindergarten (K) a Grado 12

NOTA: Este documento está basado en la información disponible a la fecha de su redacción (22 de julio de 2021). El mismo será actualizado en la medida en que el Departamento de Salud lo estime necesario.

Needs assessment

- Site visit “COVIVEO”
- Meeting with the Department of Health team for school surveillance
- Community-based organization group discussion





Findings

- No occupational health and safety programs in schools or health departments.
 - Risk assessment
 - Training
 - Control measures limited to PPE for infectious diseases
- Basic sanitary procedures are not compliant in schools.

Curriculum Development

Overview of occupational health and safety training content

Training Inventory

Training Department of Health Staff

- School Monitors (Basics of OHS for schools)

Training Department of Education Staff



Workers Rights and Responsibilities

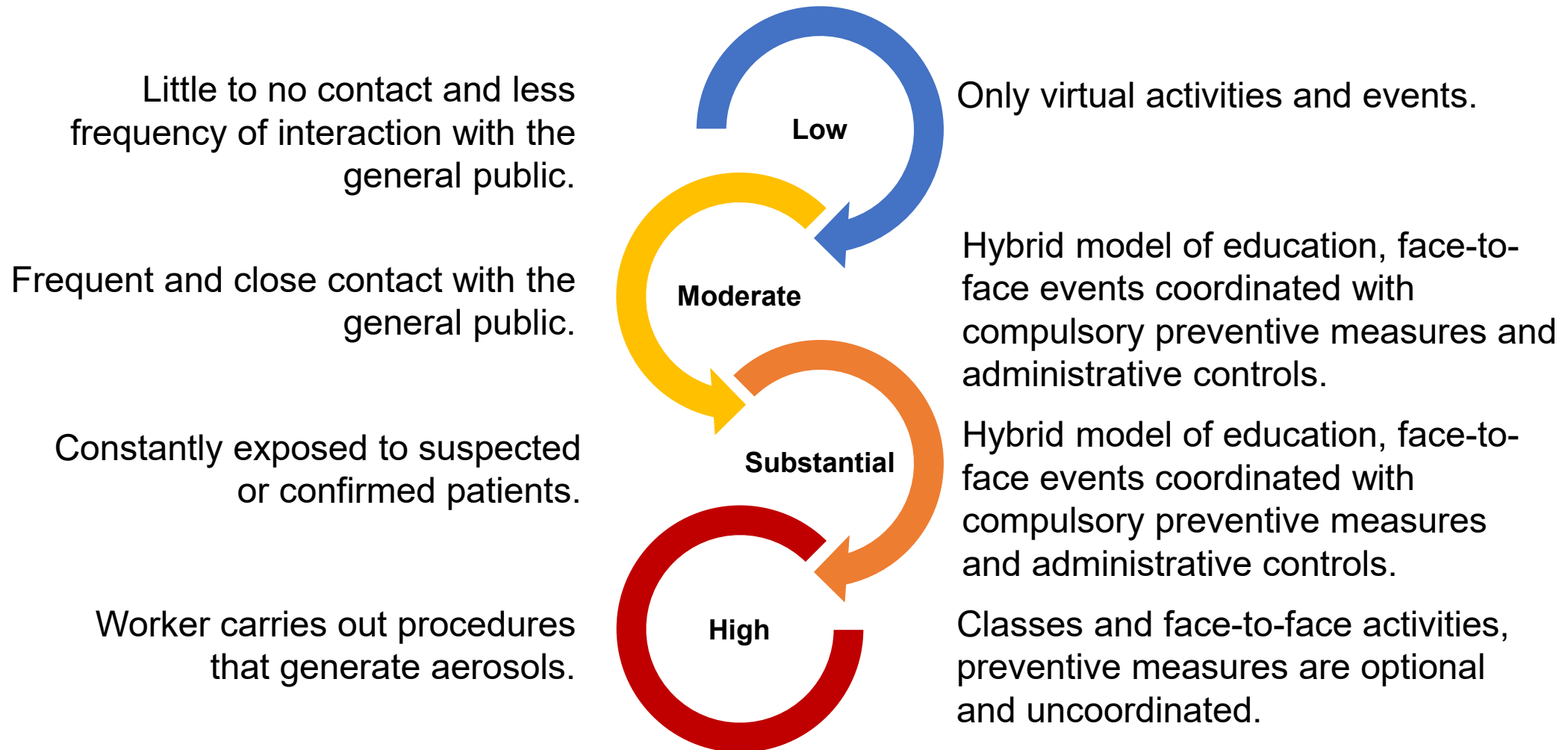
- General clause
- Main worker's rights and responsibilities
- Limitations of regulations during the pandemic
- Applicable standards
 - Personal protective equipment
 - Respiratory protection standard
 - Hazard communication standard

Workplace Risk Assessment

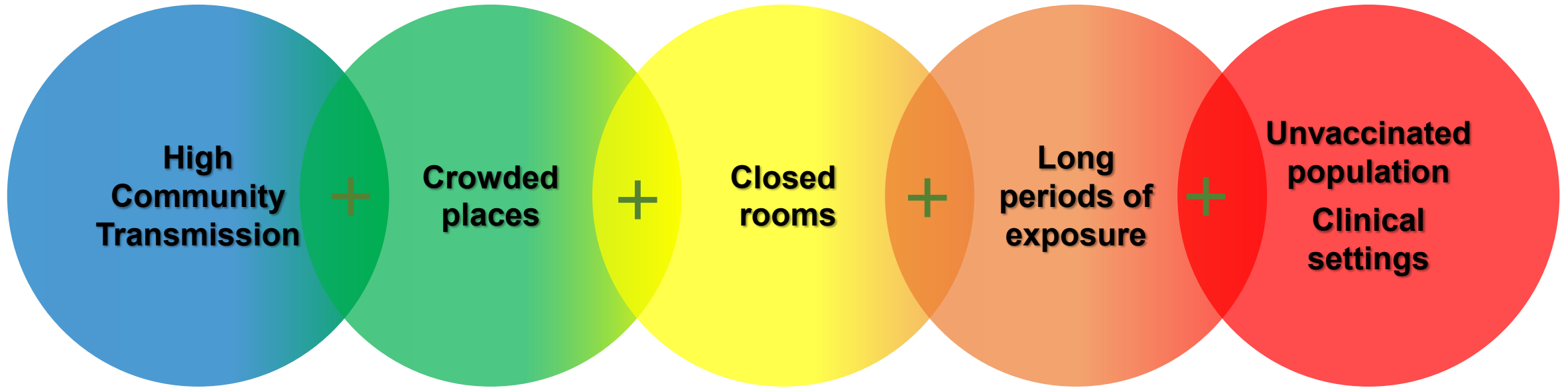
- Understanding risk perspectives
 - OSHA risk matrix for COVID-19
 - CDC risk matrix for in-person learning
- Indirect risks identification
 - Chemical risks
 - Physical risks



Workplace Risk Assessment



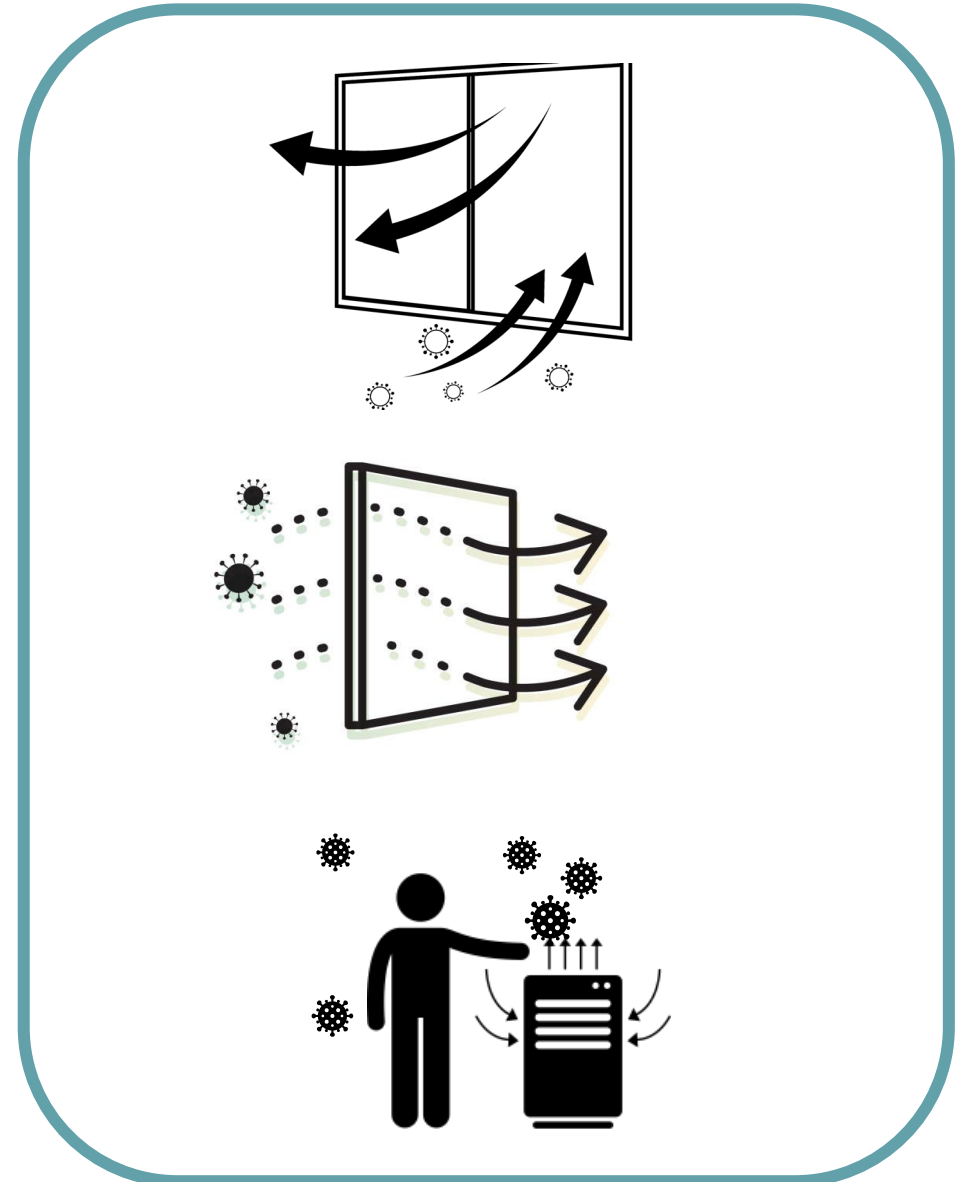
Workplace Risk Assessment



- Considering aspects to decide on masking.

Exposure controls

- Natural ventilation tools
 - Creating flows with fans
- HEPA Filters
 - Identification and calculations



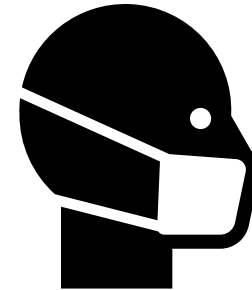
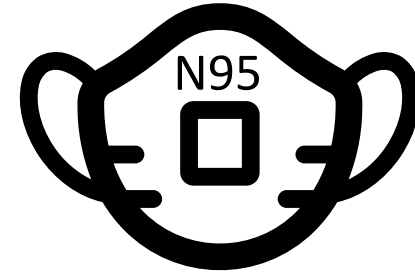
Exposure controls

- Chemical Uses
 - EPA List N
 - Hazard communication
- Disinfection Needs
 - Cleaning vs Disinfection
 - Contact Time



Exposure controls

- Personal protective equipment
 - Respirators vs Masks
 - NIOSH-certified respirators
 - Surgical Masks vs Disposable Masks



Handouts and Resources for the Health Department

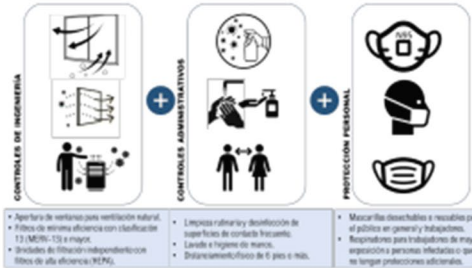


Ventilación como estrategia esencial de control de contagios

El mecanismo principal por el cual podemos contagiarnos con COVID-19 es a través del aire. Esto ocurre cuando inhalamos aire con partículas aerosolizadas o gotas finas que están contaminadas con el virus. Estas partículas son suficientemente pequeñas para viajar mayores distancias y permanecer en el aire por tiempos prolongados. Los lugares cerrados con ventilación deficiente y pocos controles como distanciamiento físico, protección facial e higiene, presentan un mayor riesgo de transmisión.

¿Qué consideraciones debemos tener cuando queremos implementar mejores estrategias de ventilación?

La ventilación adecuada es aquella que provee suficiente aire limpio para que la cantidad de partícula contaminado con COVID-19 que pudiera haber en el aire disminuya. Debido a las diferencias entre salones y estructuras, requiere que se evalúen cada uno de los espacios para determinar la mejor forma de llevar a cabo esto. No hay una respuesta única por la diversidad de estructuras y su uso, pero al combinar algunas de las siguientes estrategias con otras como el uso de mascarillas y el distanciamiento físico, podemos reducir sustancialmente nuestro riesgo.



This resource was created in partnership with the Migrant Clinicians Network.

The National Resource Center for Refugees, Immigrants, and Migrants (NRC-RIM) is funded by the U.S. Centers for Disease Control and Prevention to support state and local health departments working with RIM communities. Learn more at nrcrim.uminn.edu. Last updated: 06/25/2021.

RECURSOS DE SALUD OCUPACIONAL PARA PERSONAL DE RESPUESTA A EMERGENCIAS DE SALUD PÚBLICA



The content in this resource was supported by the National Institute of Environmental Health Sciences of the National Institutes of Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Capacity Building

Methods, best practices, and challenges



Virtual Trainings

- Eight 2-hour sessions for teachers and school staff
- Six 2-hour sessions for Department of Health Staff
- One 4-hour session for school nurses
- 1,894 contact hours

Results



256

**HEALTH
DEPARTMENT
SURVEILLANCE**



284

**TEACHERS AND OTHER
SCHOOL STAFF**



406

**SCHOOL
NURSES**



Relationship Building

Lessons Learned

Outreach Activities and Meetings

Department
of education

Mesa Social

Parents
meeting

Consulting
and technical
assistance

Lessons Learned

Communication

Transparency

Empathy

Roles and
Expectations

Emotional Support



Communication Skills

- What might be the primary concerns of the public you are speaking to?
- What is the main goal of your speech?
- What is needed to achieve the goal?



Other considerations

- Most guides were not available in Spanish.
- Need to adapt comprehensive industrial hygiene information.
- Taking the time to address misinformation and disinformation.
- Understanding the goals/demands of each group
 - Agencies (Department of Health and Department of Education)
 - Staff (teachers, workers, administration)
 - Parents

Case study

Implementation and support to schools 2020-2023

Application Activity

- You are an industrial hygienist contracted to develop and implement a protocol in a school with the overarching goal of returning to in-person learning. After your risk assessment, you will need to present to _____ (board of directors, staff, or parents) your recommendations explaining risks and controls. Based on your knowledge, create an elevator pitch to the assigned group to sustain your decision to open the school for in-person learning.

Application Activity

Think about...

- What might be the primary concerns of the public you are speaking to?
- What is the main goal of your speech?
- What is needed to achieve the goal?



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