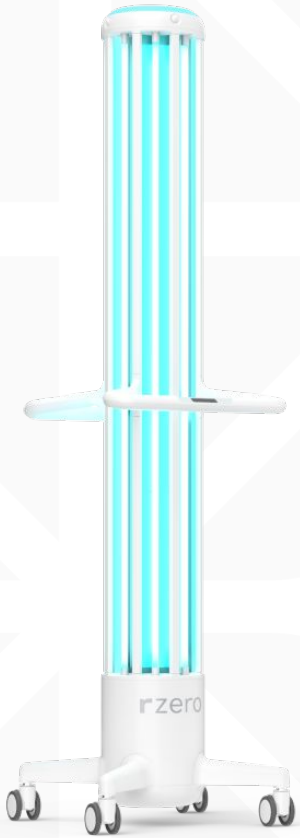
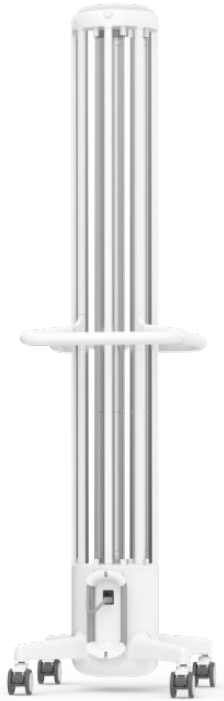
FROMM

rzero

Cost-Effective and Sustainable Ways of Designing a Safer Campus





R-Zero. Because we all need a new normal.

COVID-19 exposed how vulnerable we are to infectious diseases. But the challenge is bigger than the coronavirus alone. When it comes to infection prevention, we need a new normal.

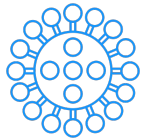
Increase trust and confidence

Protect students and staff

Reduce sick days

Environmentally friendly

Before COVID-19, 40M Americans caught the flu each year and we accepted this as normal.



40M
INFLUENZA
Impacts 40 million Americans every year

1M
HAIs
Occur across health care every year

21M
NOROVIRUS
Impacts 21 million Americans every year

265K
E. COLI
Impacts 265 thousand Americans every year

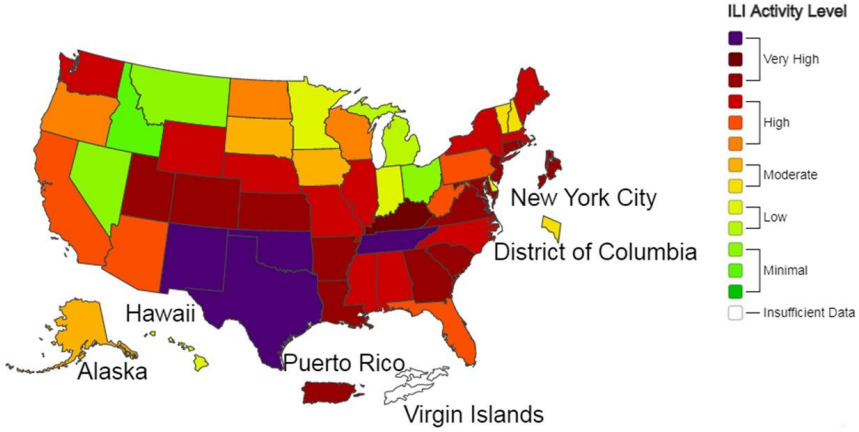
100K
STAPH INFECTIONS
Impact 100 thousand Americans every year

Sources: *CDC, U.S. Department of Health & Human Services, CB Insights*

But while fighting Coronavirus, we've proven we can wipe out the flu.

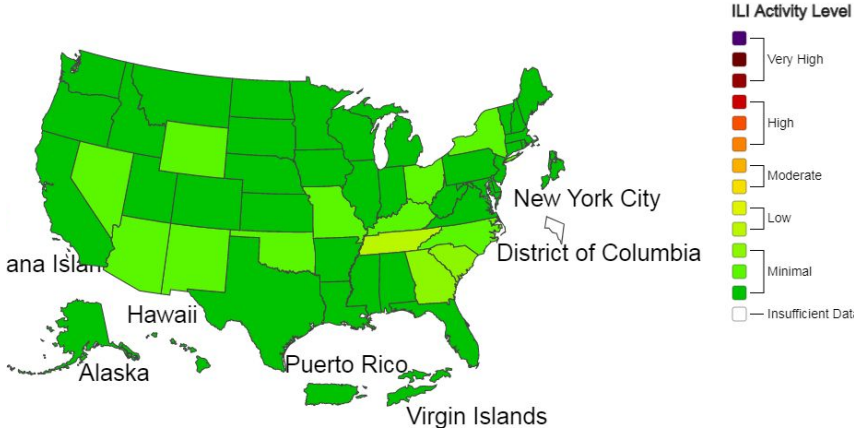
Flu Cases Before Coronavirus

A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Influenza-Like Illness (ILI) Activity Level Indicator Deteremined by Data Reported to ILINet
2019-20 Influenze Season Week 3 ending Jan 18, 2020



Flu Cases During Coronavirus

A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Influenza-Like Illness (ILI) Activity Level Indicator Deteremined by Data Reported to ILINet
2020-21 Influenze Season Week 2 ending Jan 16, 2021



Source: CDC

We can, and we must, create a new, better normal.

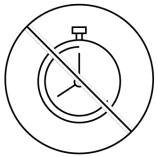
So where do we go from here?

Disinfection has not changed significantly in a century.

1940

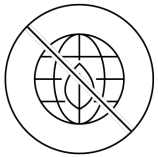
2021

The pandemic exposed the flaws of antiquated disinfection



Inefficient

A Clorox study found that hospital disinfection through wiping surfaces cleaned only 50% of surfaces (even with trained staff).



Unsustainable

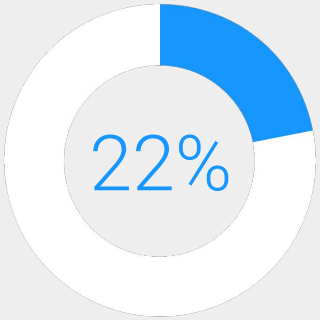
Disinfecting buildings means thousands of gallons of chemicals per year.

Dangerous

Errors in dilution, mixing, and application of chemicals can result in respiratory issues, skin and eye damage, asthma, lung disease, and more.

Manual

On average, 87% of manual disinfection costs are labor related.



Nurses who used disinfectants at least once a week for 8 years saw their risk of developing COPD, the third leading cause of death in the US, rise by 22 percent

Source: Harvard University and the French National Institute of Health and Medical Research (Inserm)

UV-C has been the leading disinfection solution for the highest risk environments, hospitals, since the 1950s.

It hasn't crossed the chasm to non-medical applications for the following reasons…

Expense

Previous non-medical options were ineffective

Poor user experience

Meet R-Zero Arc

An IoT-enabled whole room UV-C disinfection system that is more powerful than medical devices, but affordable for non-medical businesses.

Destroys over 99.99% of pathogens in a 1,000 ft^2 room in just 7 minutes

>99.99%
MRSA

>99.99%
Escherichia Coli (E. Coli)

>99.99%
Human Coronavirus

>99.99%
Feline Calicivirus

Smart disinfection technologies like Arc will be the future of how we ensure safety across indoor spaces.

- **Efficacy**
- **Sustainability**
- **Visibility and Data Driven Insights**
- **Cost Savings**

Easy, Actionable Protocols

Integrates **seamlessly** into **custodial workflows**.

Arc's 4-button system is easy to use and R-Zero supports your staff with in-person training.

Easy to move

It's lightweight, nimble, and has a low center of gravity, so it's easy to move from one room to the next.

Easy to use

Starts with the push of a button

Highly efficient

With less than two minutes of touch time required per cycle, staff can work in one room while Arc is cleaning another.

Makes invisible visible

With built in connectivity, facility managers can check usage and manage devices from anywhere.

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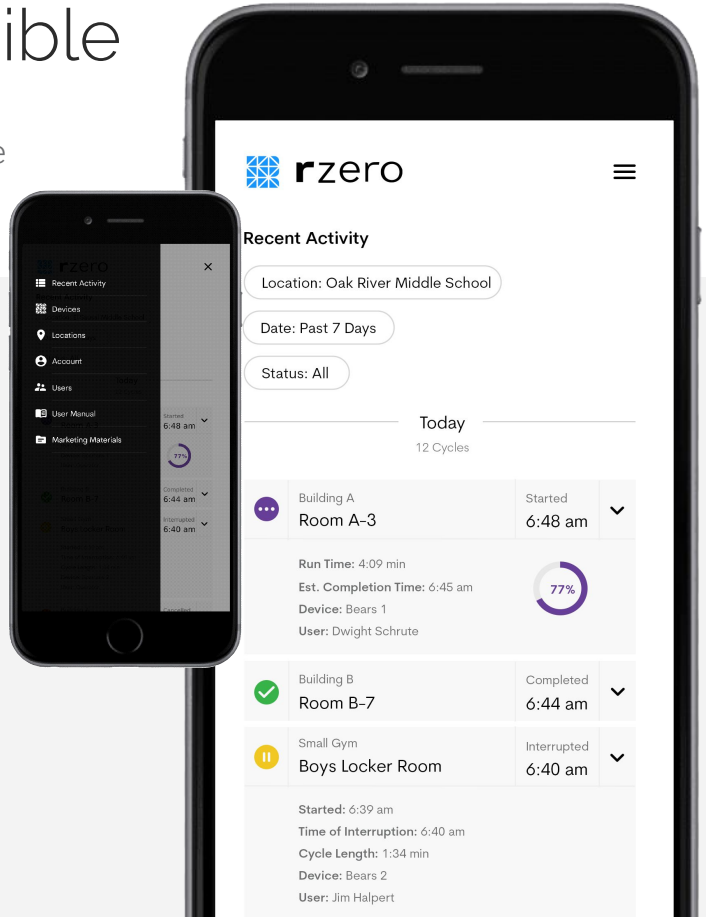
Software & Analytics Make the Invisible Disinfection Process, Visible

The R-Zero Cloud enables users to check usage and manage devices anytime and anywhere, creating an audit trail of disinfection activities



Compliance

Enable managers to check if the UV-C device is being run at the correct frequency.

Mobile App

Collect location-based usage data and provide reminders and checklists.

Community

Reassure community that the best cleaning solutions are implemented consistently.

Maintenance

Provide bulb cycle count and hour count, as well as bulb replacement notifications.

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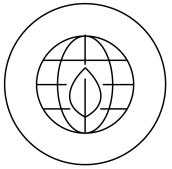
Safer and Higher ROI than Alternatives

Safer and less expensive than spraying.



A better way to disinfect than chemicals.

ARC vs SPRAYERS

Health Benefits

- No harmful chemicals / No aerosolized bleach that causes asthma / No diluted pesticides / No irritating vapors - eyes, nose, throat, lungs, skin -
- Enter the room immediately after the cycle (vs up to 3 hour wait before it's safe to enter again
- Safe to use around food, toys and shared objects and equipment like musical instruments and computers

Cost Effective

- No chemical refills nor PPE required for operators
- ~30% labor savings (1 min touchtime for Arc vs > 10 mins for spraying the room)
- Savings from reduced sick days (staff and students)

ARC vs SCHOOL CHEMICAL WIPE DOWNS

Health Benefits

- No poor indoor air quality due to chemicals that may cause cancer, reproductive disorders, and respiratory ailments
- Higher efficacy: manual wipes misses up to 50% of surfaces even in hospital audit environment
- Effective against airborne pathogens (e.g. coronavirus)

Cost Effective

- No variable chemical costs
- Labor savings (1 min touchtime for Arc vs > 15 mins for spraying the room)
- Software to measure compliance (vs manual wiping)
- Savings from reduced sick days (staff and students)

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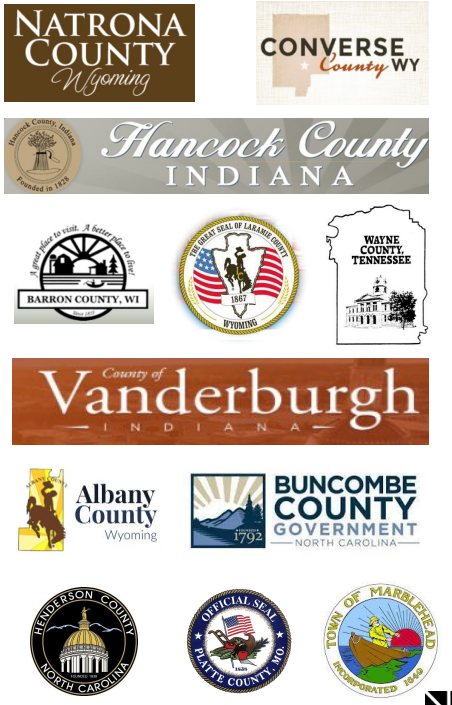
Select R-Zero Customers

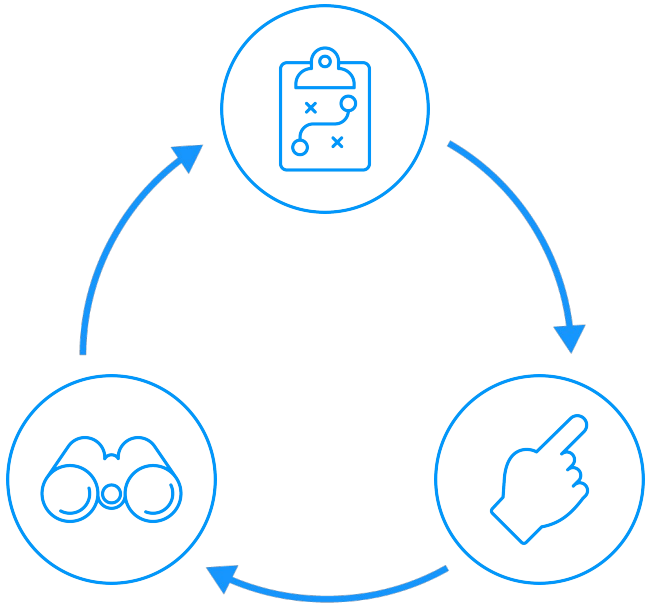
MEDICAL

EDUCATION

GOVERNMENT



The world today needs a closed-loop disinfection system, that provides data



rzero

is at the forefront of UV-C innovation to sustainably reduce risk and lower sick days for students and staff

rzero.com/education

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