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COVID 19  
Más información

PIC®

HEALTH ASSURANCE TEAM



A person wearing blue overalls is holding a small, light-colored piglet in their arms. The background is a blurred farm environment with metal structures and white pipes. The overall tone is soft and professional.

**PERSISTENCIA DE DIFERENTES CORONAVIRUS EN UNA  
VARIEDAD DE SUPERFICIES:**

**Desde 1h a 9 días**

**Table 1**  
Persistence of coronaviruses on different types of inanimate surfaces

Type of surface	Virus	Strain / isolate	Inoculum (viral titer)	Temperature	Persistence	Reference
Steel	MERS-CoV	Isolate HCoV-EMC/2012	$10^5$	20°C	48 h	[21]
				30°C	8–24 h	
	TGEV	Unknown	$10^6$	4°C	≥ 28 d	[22]
				20°C	3–28 d	
				40°C	4–96 h	
				4°C	≥ 28 d	[22]
MHV	Unknown	$10^6$	20°C	4–28 d		
			40°C	4–96 h		
Aluminium	HCoV	Strain 229E	$10^3$	21°C	5 d	[23]
	HCoV	Strains 229E and OC43	$5 \times 10^3$	21°C	2–8 h	[24]
Metal	SARS-CoV	Strain P9	$10^5$	RT	5 d	[25]
Wood	SARS-CoV	Strain P9	$10^5$	RT	4 d	[25]
Paper	SARS-CoV	Strain P9	$10^5$	RT	4–5 d	[25]
	SARS-CoV	Strain GVU6109	$10^6$	RT	24 h	[26]
Glass	SARS-CoV	Strain P9	$10^5$		3 h	
			$10^4$		< 5 min	
			$10^5$	RT	4 d	[25]
Plastic	HCoV	Strain 229E	$10^3$	21°C	5 d	[23]
	SARS-CoV	Strain HKU39849	$10^5$	22°-25°C	≤ 5 d	[27]
PVC	MERS-CoV	Isolate HCoV-EMC/2012	$10^5$	20°C	48 h	[21]
				30°C	8–24 h	
	SARS-CoV	Strain P9	$10^5$	RT	4 d	[25]
	SARS-CoV	Strain FFM1	$10^7$	RT	6–9 d	[28]
	HCoV	Strain 229E	$10^7$	RT	2–6 d	[28]
Silicon rubber	HCoV	Strain 229E	$10^3$	21°C	5 d	[23]
Surgical glove (latex)	HCoV	Strains 229E and OC43	$5 \times 10^3$	21°C	≤ 8 h	[24]
Disposable gown	SARS-CoV	Strain GVU6109	$10^6$	RT	2 d	[26]
			$10^5$		24 h	
			$10^4$		1 h	
Ceramic	HCoV	Strain 229E	$10^3$	21°C	5 d	[23]
Teflon	HCoV	Strain 229E	$10^3$	21°C	5 d	[23]

MERS = Middle East Respiratory Syndrome; HCoV = human coronavirus; TGEV = transmissible gastroenteritis virus; MHV = mouse hepatitis virus; SARS = Severe Acute Respiratory Syndrome; RT = room temperature.

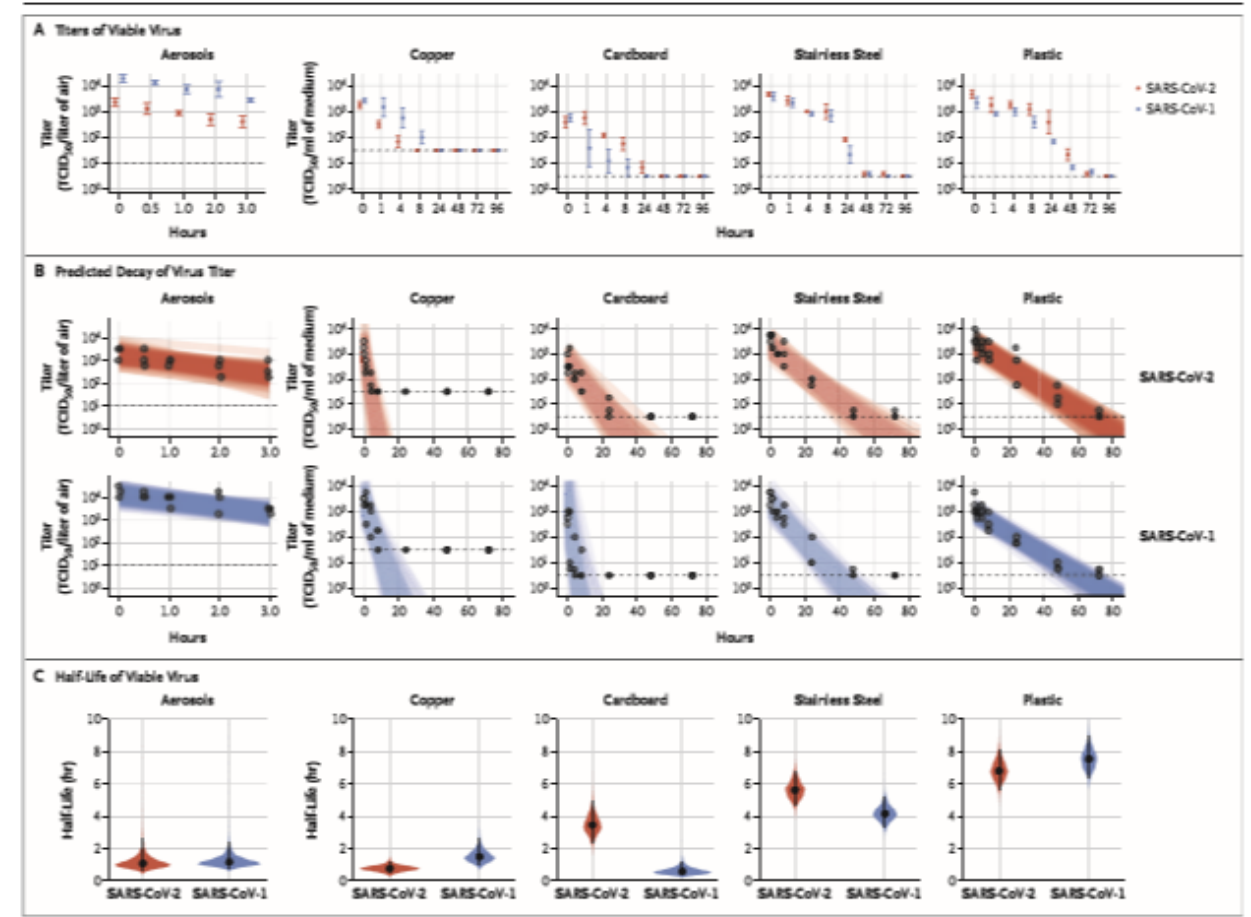


A person wearing a blue lab coat is holding a small, light-colored piglet. The background is a laboratory or farm setting with metal structures and equipment. The image is semi-transparent, allowing the text to be overlaid.

**PERSISTENCIA DEL SARS-CoV-19 EN AEROSOLES Y SUPERFICIES**

# Persistencia de SARS-CoV-2 en aerosoles y superficies

- Aerosoles tiempo de vida medio a 23°C y 40% de humedad: 1,1-1,2 horas
- Plástico y aluminio a 23°C y 40% de humedad: viable hasta 72 horas
- Cobre a 23°C y 40% de humedad: viable hasta 4 horas
- Cartón a 23°C y 40% de humedad: viable hasta 24 horas



Neeltje van Doremalen, et al 2020 (The New England Journal of Medicine)



A person wearing blue overalls is holding a small, light-colored piglet. The background is a blurred indoor setting, possibly a farm or laboratory.

## DESINFECTANTES: CONCENTRACIÓN Y TIEMPOS DE ACTUACIÓN:

- Etanol
- Peróxidos (Virkon® 1%)
- Glutaraldehídos+ Amonio cuaternario (Finvirus 0,5%, Virocid 0,5%, Sanitas Forte 1:100, etc)
- Hipoclorito (lejía (40-50gr/L) a 1:50 )
- Benzalconium (CR-36® directo)

**Table II**  
Inactivation of coronaviruses by different types of biocidal agents in suspension tests

Biocidal agent	Concentration	Virus	Strain / isolate	Exposure time	Reduction of viral infectivity ( $\log_{10}$ )	Reference
Ethanol	95%	SARS-CoV	Isolate FFM-1	30 s	$\geq 5.5$	[29]
	85%	SARS-CoV	Isolate FFM-1	30 s	$\geq 5.5$	[29]
	80%	SARS-CoV	Isolate FFM-1	30 s	$\geq 4.3$	[29]
	80%	MERS-CoV	Strain EMC	30 s	$> 4.0$	[14]
	78%	SARS-CoV	Isolate FFM-1	30 s	$\geq 5.0$	[28]
	70%	MHV	Strains MHV-2 and MHV-N	10 min	$> 3.9$	[30]
2-Propanol	70%	CCV	Strain I-71	10 min	$> 3.3$	[30]
	100%	SARS-CoV	Isolate FFM-1	30 s	$\geq 3.3$	[28]
	75%	SARS-CoV	Isolate FFM-1	30 s	$\geq 4.0$	[14]
	75%	MERS-CoV	Strain EMC	30 s	$\geq 4.0$	[14]
	70%	SARS-CoV	Isolate FFM-1	30 s	$\geq 3.3$	[28]
	50%	MHV	Strains MHV-2 and MHV-N	10 min	$> 3.7$	[30]
2-Propanol and 1-propanol	50%	CCV	Strain I-71	10 min	$> 3.7$	[30]
	45% and 30%	SARS-CoV	Isolate FFM-1	30 s	$\geq 4.3$	[29]
Benzalkonium chloride		SARS-CoV	Isolate FFM-1	30 s	$\geq 2.8$	[28]
	0.2%	HCoV	ATCC VR-759 (strain OC43)	10 min	0.0	[31]
	0.05%	MHV	Strains MHV-2 and MHV-N	10 min	$> 3.7$	[30]
Didecyldimethyl ammonium chloride	0.05%	CCV	Strain I-71	10 min	$> 3.7$	[30]
	0.00175%	CCV	Strain S378	3 d	3.0	[32]
	0.0025%	CCV	Strain S378	3 d	$> 4.0$	[32]
Chlorhexidine digluconate	0.02%	MHV	Strains MHV-2 and MHV-N	10 min	0.7–0.8	[30]



Sodium hypochlorite	0.02%	CCV	Strain I-71	10 min	0.3	[30]	
	0.21%	MHV	Strain MHV-1	30 s	≥ 4.0	[33]	
	0.01%	MHV	Strains MHV-2 and MHV-N	10 min	2.3–2.8	[30]	
Hydrogen peroxide	0.01%	CCV	Strain I-71	10 min	1.1	[30]	
	0.001%	MHV	Strains MHV-2 and MHV-N	10 min	0.3–0.6	[30]	
	0.001%	CCV	Strain I-71	10 min	0.9	[30]	
Formaldehyde	0.5%	HCoV	Strain 229E	1 min	> 4.0	[34]	
	1%	SARS-CoV	Isolate FFM-1	2 min	> 3.0	[28]	
	0.7%	SARS-CoV	Isolate FFM-1	2 min	> 3.0	[28]	
Glutaraldehyde	0.7%	MHV		10 min	> 3.5	[30]	
	0.7%	CCV	Strain I-71	10 min	> 3.7	[30]	
	0.009%	CCV		24 h	> 4.0	[35]	
	2.5%	SARS-CoV	Hanoi strain	5 min	> 4.0	[36]	
	0.5%	SARS-CoV	Isolate FFM-1	2 min	> 4.0	[28]	
	Povidone iodine	7.5%	MERS-CoV	Isolate HCoV-EMC/2012	15 s	4.6	[37]
		4%	MERS-CoV	Isolate HCoV-EMC/2012	15 s	5.0	[37]
1%		SARS-CoV	Hanoi strain	1 min	> 4.0	[36]	
1%		MERS-CoV	Isolate HCoV-EMC/2012	15 s	4.3	[37]	
0.47%		SARS-CoV	Hanoi strain	1 min	3.8	[36]	
0.25%		SARS-CoV	Hanoi strain	1 min	> 4.0	[36]	
0.23%		SARS-CoV	Hanoi strain	1 min	> 4.0	[36]	
0.23%	SARS-CoV	Isolate FFM-1	15 s	≥ 4.4	[38]		
	0.23%	MERS-CoV	Isolate HCoV-EMC/2012	15 s	≥ 4.4	[38]	

SARS = Severe Acute Respiratory Syndrome; MERS = Middle East Respiratory Syndrome; MHV = mouse hepatitis virus; CCV = canine coronavirus; HCoV = human coronavirus.