



AR. ADVANCE
In safe hands!

AR.green
For a better future!

Made in Europe | Safer, Cleaner, Greener.

 **ARKA**
protecting life

www.arkamedical.eu



*Healthcare associated infections (HAIs)
are the **most frequent adverse event**
in healthcare delivery worldwide.*

WHO. The Burden of Health care-associated infection worldwide.

R·ADVANCE

R·green

***Safer,
Cleaner¹,
Greener².***



1. Raimundo J.Oliveira A.Labfit imp.85_Technical Repor (Edition5) Labfit-HRPD.2023)2009 2. Marinas, M. (June 2024). On the use of gloves: Staff satisfaction and IPC compliance. Royal Hospital for Neuro-disability.

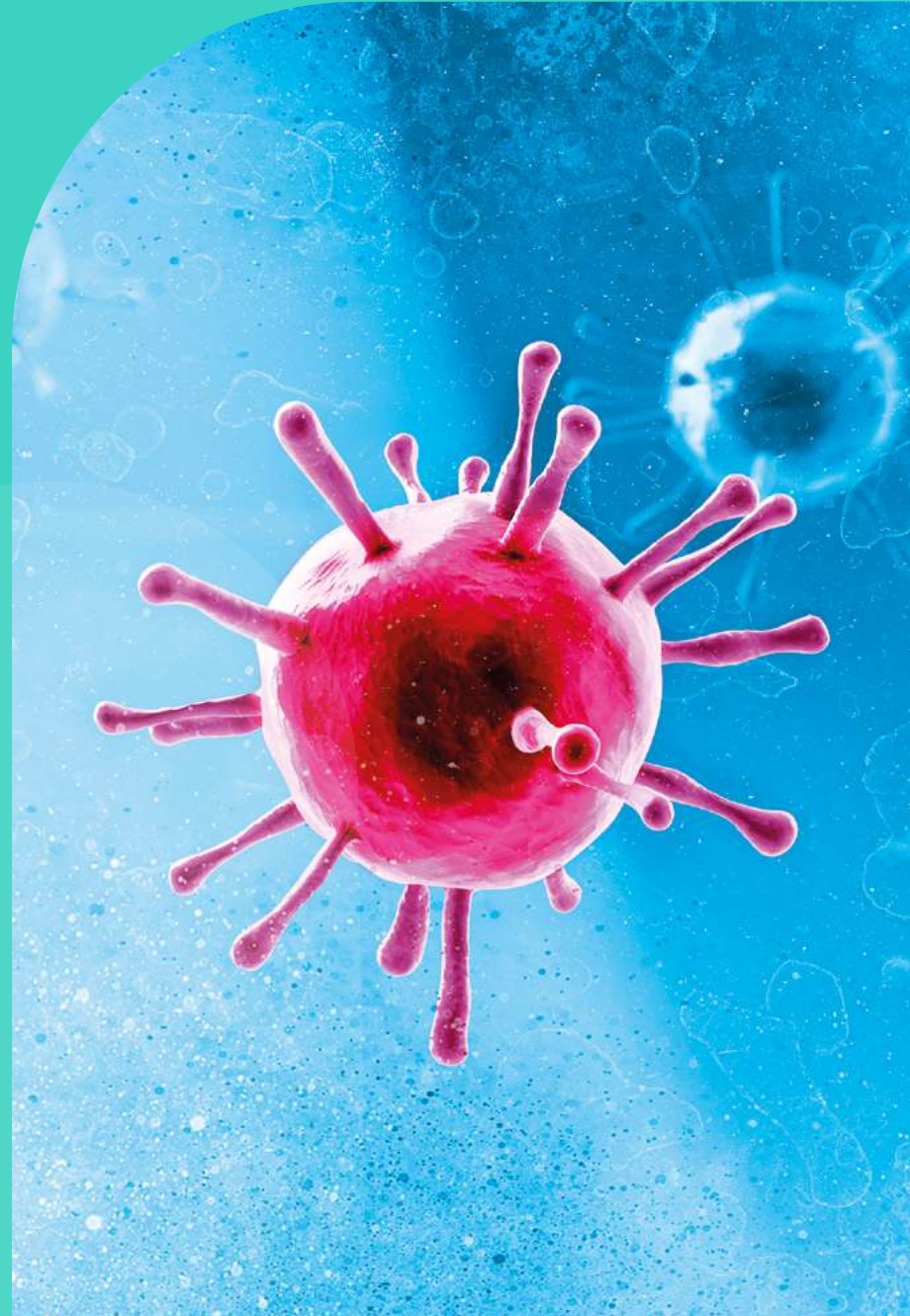


*The **use of single-use nonsterile gloves** in the hospital setting is **second only to proper hand washing in reducing contamination** during patient contact.*

*To avoid the spread of HAI, **gloves are an essential tool for healthcare professionals**¹.*

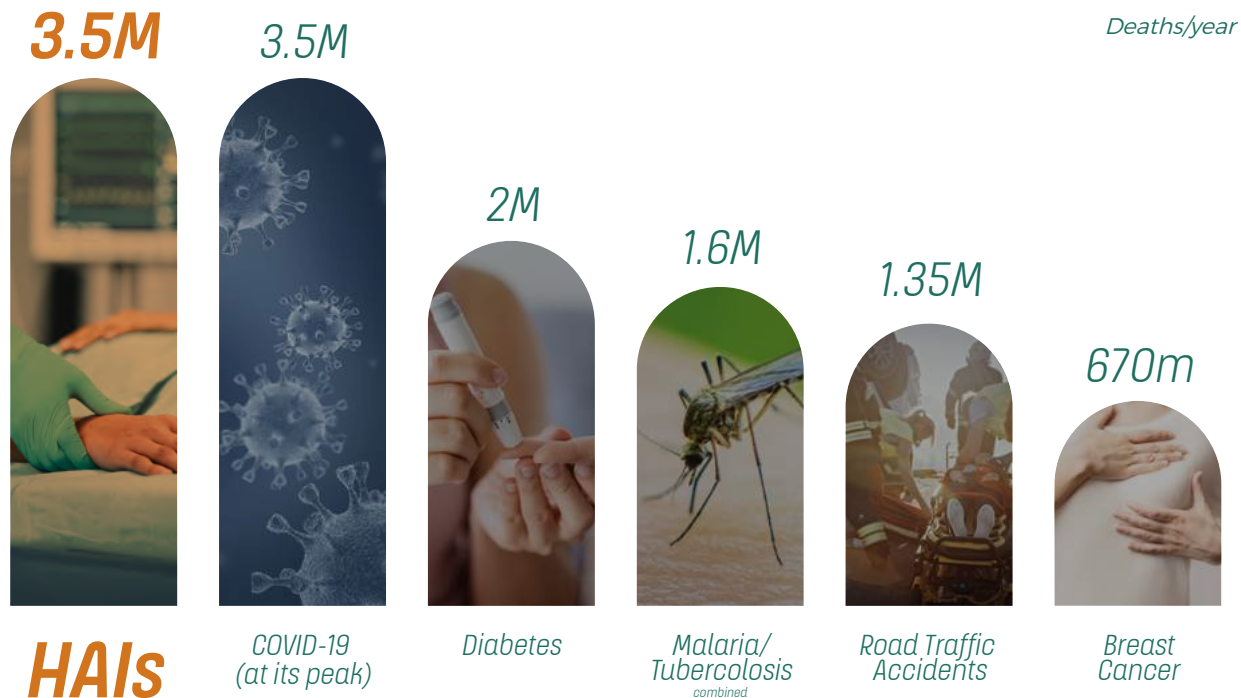
1. Moran V et al. Cross Contamination: Are Hospital Gloves Reservoirs for Nosocomial Infections? Hosp Top. 2017 Jul-Sep;95(3):57-62

A Silent Pandemic - the burden of HAIs



Healthcare Associated Infections - a silent pandemic

By 2050, HAIs could claim 3.5 million lives annually. 4.4 times **more deaths than HIV/AIDS** and Sexually Transmitted Diseases combined in 2021.



Sources: <https://www.who.int/news-room/fact-sheets/>; Global status report on road safety 2018. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.; 2024_WHO_Global report on infection prevention and control; European Centre for Disease Prevention and Control. Point prevalence survey of healthcare associated infections and antimicrobial use in European long-term care facilities: 2016-2017. Stockholm: ECDC; 2023.

Global Impact of Healthcare Associated Infections

Healthcare Associated Infections (HAIs) are acquired while patients are receiving treatment for medical or surgical conditions



1/10

patients get
an infection
while receiving care



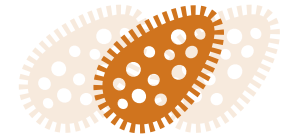
3,5 million deaths

due to HAIs,
every year,
up to 2050



136 million HAIs

resistant to
antibiotics,
per year



1/3

bacteria associated
with HAIs are
resistant to
antibiotics

*In EU and EEA countries, the three **most impactful antibiotic-resistant microorganisms**, which account for 70% of the burden of AMR (in terms of disability and premature mortality), are typically **acquired in health care settings**.*

No country or health system, however sophisticated, can claim to be free of HAIs



99 000 Deaths

Per year as consequence of the HAI in USA

\$35.7 bn

HAIs Economic Burden in the USA

1/31

Hospital patients get an HAI any given day in the USA

\$105/per capita

HAIs Economic Burden in the USA

1.7 mn

Patients impacted each year in USA Healthcare facilities



90 000 Deaths

Per year as consequence of the HAI in EU

7 bn €

HAIs Economic Burden in the EU

1/15

Hospital patients have at least one HAI whereas 1/24 patients in long term care facilities suffer from this

14€/per capita

HAIs Economic Burden in the EU

8.9 mn

Patients impacted each year in European Hospitals & Long-Term Care Facilities

Sources: 2022_WHO_Global report on infection prevention and control 2022; Global report on infection prevention and control 2024. Geneva: World Health Organization; 2024.; Oliveira et al. Estimating the savings of a national project to prevent healthcare-associated infections in intensive care units. J Hosp Infect. 2024 Jan;143:8-17. doi: 10.1016/j.jhin.2023.10.001. Epub 2023 Oct 6. PMID: 37806451.; <https://www.ecdc.europa.eu/en/healthcare-associated-infections>

~70%

HAIs are considered preventable



Hands are the main
source of infection



Global Hand Hygiene
compliance rate



Reduction in HAIs by compliance
towards hand hygiene

75.600 Deaths and \$17 bn could be saved

yearly on EU and US alone with perfect compliance towards hand hygiene and glove use

*HCPs are also
at health risk*



The impact of HAIs in the Healthcare Professionals

Healthcare-associated infections (HAIs) don't just affect patients—they also put healthcare professionals at risk, making them vulnerable to this silent pandemic.

*The WHO estimates that every year **more than**
3 million HCPs
are wounded by needles/sharp objects
contaminated with at least one of the
afore-mentioned **viruses**.¹*

1. Triassi M, Pennino F. Infectious risk for healthcare workers: evaluation and prevention. Ann Ig. 2018 Jul-Aug;30(4 Supple 1):48-51. doi: 10.7416/ai.2018.2234. PMID: 30062380.

HCPs have one of the **highest**
rates of occupational hospital-
acquired infections.¹

1. Elhabashy S, Moawad A, Gaber S. Incidence of hospital-acquired infections among healthcare workers in Egypt before and during the COVID-19 pandemic. East Mediterr Health J. 2024 Oct 1;30(9):612-621. doi: 10.26719/2024.30.9.612. PMID: 39574379

Best practices and guidelines for glove usage



World Health
Organization



NHS



EPA

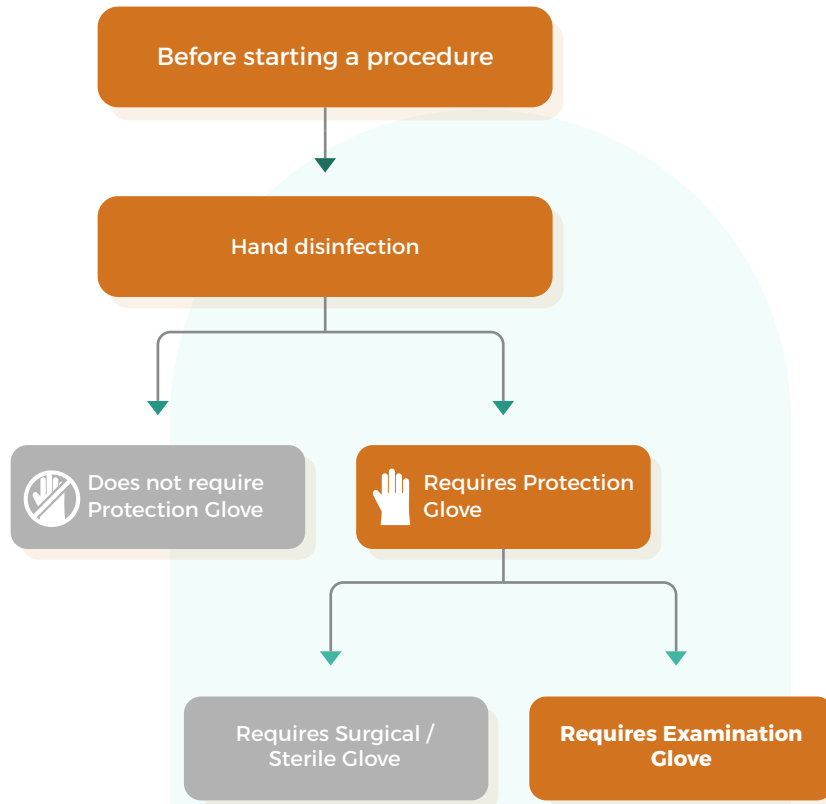
PMDA

独立行政法人 医薬品医療機器総合機構
Pharmaceuticals and Medical Devices Agency



International protocol for glove usage

Infection Prevention & Control (IPC) protocols implemented worldwide establish standardized procedures for patient interactions to effectively mitigate the risk of healthcare-associated infections (HAIs)



When using gloves:

- **“Wear gloves** when it can be reasonably anticipated that contact with blood or other body fluids, mucous membranes, non-intact skin or potentially infectious material will occur”.¹
- **“Select the appropriate glove** for the glove procedure to be started”.¹
- **“Touch only a restricted surface of the glove** corresponding to the wrist (at the top edge of the cuff).”¹
- **“...any surface with frequent contact with hands requires special attention and more frequent cleaning,** after thorough cleaning, consider the use of appropriate disinfectants to decontaminate these surfaces”.²

*Current standard solutions **do not comply** with these **international guidelines** towards HAIs risk mitigation.*



1. World Health Organization. WHO guidelines on hand hygiene in health care. Geneva: World Health Organization; 2009. ISBN: 978 92 4 159790 6. 2. Global guidelines for the prevention of surgical site infection, second edition. Geneva: World Health Organization; 2018.

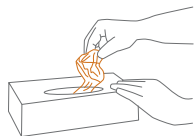
WHO, 2009 Glove Information Leaflet

How to correctly don and remove gloves

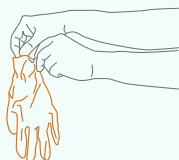


A restricted surface of the glove, corresponding to the wrist, should be the only area touched.

How to don gloves



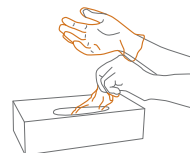
1. Take out a glove from its **original box**.



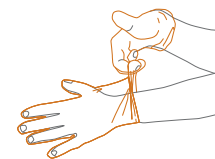
2. Touch only a **restricted surface of the glove corresponding to the wrist** (at the top edge of the cuff).



3. **Don the first glove.**

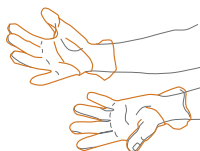


4. Take the second glove with the bare hand and **touch only a restricted surface of glove corresponding to the wrist.**

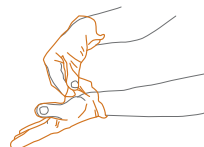


5. To avoid touching the skin of the forearm with the gloved hand, **turn the external surface of the glove to be donned on the folded fingers of the gloved hand**, thus permitting to glove the second hand.

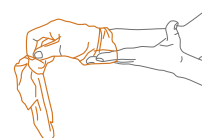
How to remove gloves



6. **Once gloved, hands should not touch anything else** that is not defined by indications and conditions for the glove use.



1. **Pinch one glove at the wrist level to remove it**, without touching the skin of the forearm, and peel away from the hand, thus allowing the glove to turn inside out.



2. Hold the removed glove in the gloved hand and **slide the fingers of the ungloved hand inside between the glove and the wrist**. Remove the second glove by rolling it down the hand and fold into the first glove.



3. **Discard the removed gloves.**

WHO, Global guidelines for the prevention of Surgical Site Infections, 2018

Frequently hand-touched surfaces should be disinfected to minimize cross-contamination in healthcare environments.

*Any surface with frequent contact with hands requires special attention and more frequent cleaning, **after thorough cleaning, consider the use of appropriate disinfectants to decontaminate these surfaces.**¹*

A conventional card box is a high touch point and cannot be disinfected, which contributes to an unclean environment, even in surgical/clean room and, due to its composition, releases particles into the environment.



1. World Health Organization. Global Guidelines for the prevention of surgical site infections. 2018.

Global Guidelines for the prevention of surgical site infections - WHO, 2018



Example of cleaning frequencies in operative and postoperative care areas

● Every patient ● Every patient, if used ● Enhanced ● If soiled



Current glove boxes do not comply with WHO guidelines since they cannot be decontaminated as other hand-touched surfaces.

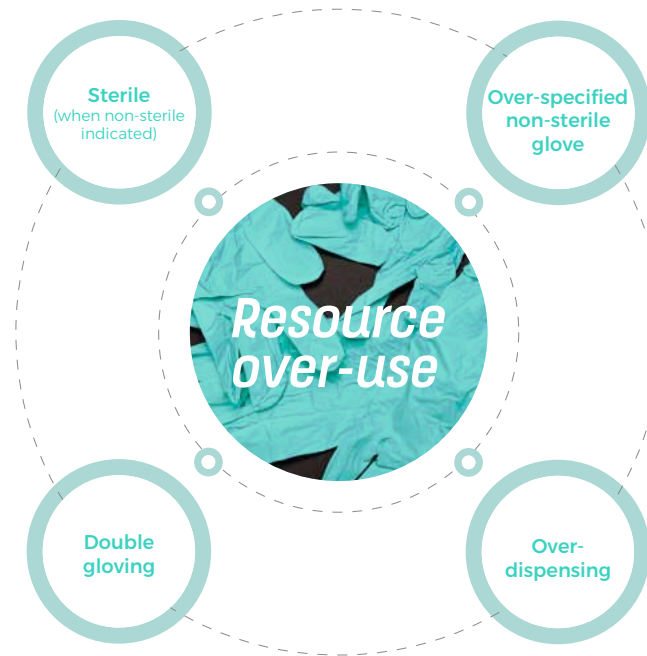
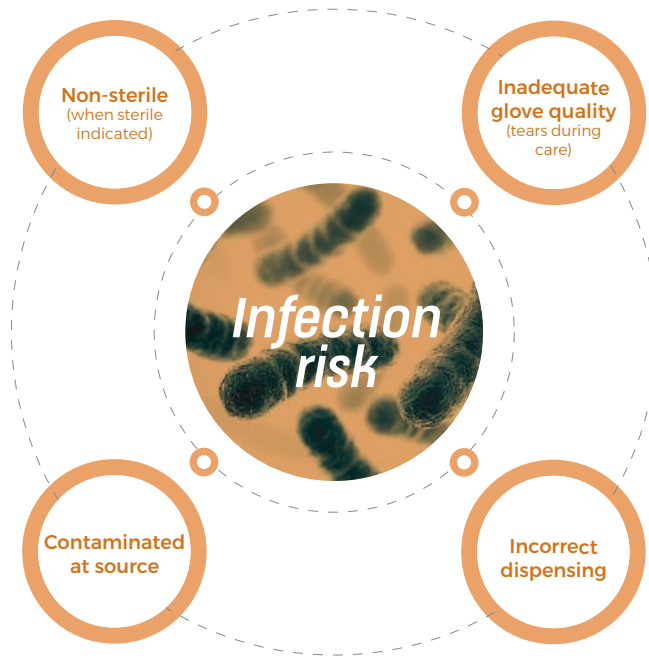
"The importance of choosing the right gloves"¹



1. Jon Otter: Role of glove quality in maximising staff safety. November 15, 2024 - Infection Prevention & Control.

Why the selection of the proper single use examination glove is so relevant

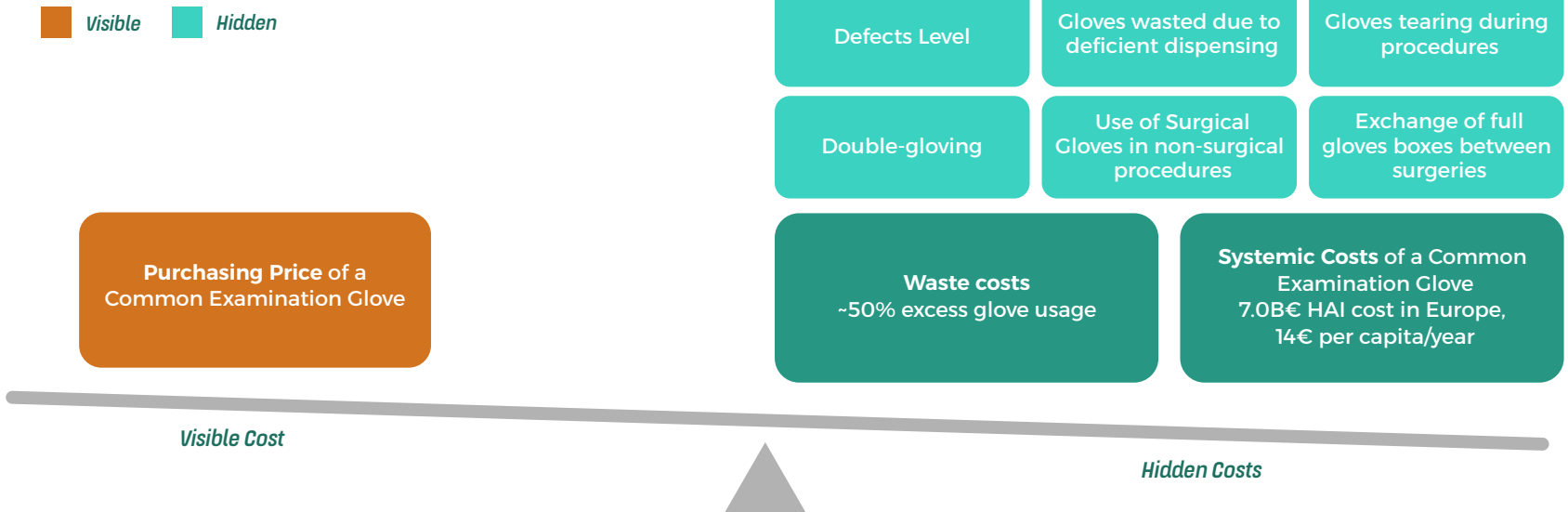
*"If an appropriate glove is not selected for the task at hand, consequences can be significant, both in terms of **infection risk and over-use of gloves**."*¹



1. Jon Otter: Role of glove quality in maximising staff safety. November 15, 2024 - Infection Prevention & Control.

The hidden costs of the current glove solutions

What we do not account for when purchasing gloves



Factors influencing glove choice

Criteria for glove selection:^{1,2}

Making informed choices about glove and PPE usage helps minimize overall consumption while reducing the risk of cross-contamination.



Acceptable Quality Level (AQL)

- Measure of how many defective gloves are detected during manufacture.
- Healthcare gloves typically range from AQL 1.5 (higher defect rate) to 0.65 (lower defect rate).



Tensile strength

- How much force a glove can take before it tears.
- Gloves with higher tensile strength are less likely to tear during usage.
- Healthcare gloves typically range from 6N (weaker) to 10N (stronger).



Reduced Bioburden Clean Glove

- Gloves should be free of potentially pathogenic microorganisms.³
- Production should be done in a controlled environment to minimize the contamination of gloves.



WHO compliant Packaging & dispensing

- Glove packaging and dispensing influences how many gloves are wasted and contaminated.
- Packaging should be able to be disinfected and allow single dispensing by the cuff as per WHO guidelines.

"The trend should be towards using less gloves overall, with higher quality gloves in terms of AQL, tensile strength, and a packaging and dispensing system selected for higher risk applications..."²

1. Freitas, J et al. Consensus-Based Guidelines for Best Practices in the Selection and Use of Examination Gloves in Healthcare Settings. Nurs.Rep. 2025, 15, 9. <https://doi.org/10.3390/nursrep15010009> 2. Jon Otter: Role of glove quality in maximising staff safety. November 15, 2024 - Infection Prevention & Control. 3. Kramer A, Assadian O. Indications and the requirements for single-use medical gloves. GMS Hyg Infect Control. 2016 Jan 12;11:Doc01. doi: 10.3205/dgkh000261. PMID: 26816673; PMCID: PMC4714734

Criteria for glove selection

Consensus guidelines for Best Practices in the selection and Use of Examination Gloves in Healthcare Settings¹



Fundamental parameters in the selection of gloves

Parameters	Justification
AQL value < 1.5, according to EN 455-1.	The lower the AQL value, the greater the barrier effect of the glove.
Tensile strength > 6 Newton, according to EN 455-2.	The higher the tensile strength value, the greater the strength of the glove.
Glove cuffs oriented towards opening, according to the WHO Glove Use Information Leaflet.	Compliance with the WHO recommendation.
Sanitizable packaging, since, being a frequently touched surface, it must be cleaned, according to the recommendations of the CDC and Health Infection Control Practices Advisory Committee (HICPAC).	Sanitization with the appropriate cleaning agents is essential for infection prevention and control in a healthcare environment.
Glove that can be removed one by one, according to the WHO's Glove Use Information Leaflet.	Minimizing the manipulation of the gloves allows you to minimize the possibility of cross-contamination.

Parameters that promote glove quality

Parameters	Justification
Recyclable and/or recycled packaging	Decreases the impact of the ecological footprint caused by medical waste.
European production	Decreases the ecological footprint due to transportation. Strong component in social responsibility.
Packaging is watertight until opening in a clinical setting	The watertight packaging protects the gloves from external contamination between the time of production and use.
Gloves Inspection	Decreases the number of defective gloves and decreases the amount of waste produced - One Health approach. It saves times for healthcare professionals.
Particulate-free packaging	ISO-14644-5-2004 standard: control the number of particles present in the environment in the clean rooms.
Production in a controlled environment	Minimizes contamination of gloves in the production phase.

Elaborated by IPC associations, the document addresses **critical challenges in infection prevention, antimicrobial resistance and environmental sustainability**, with a focus on the proper selection, use, and disposal of examination gloves.

*These recommendations emphasize the critical importance of having **high-quality gloves** in healthcare practices, especially in high-risk procedures.*

IR·ADVANCE IR·green

In safe hands, for a better future!

ARKA Medical has developed a range of Nitrile Single Use Examination Gloves, in collaboration with leading infection prevention and control (IPC) experts across Europe, ensuring they meet the latest international guidelines, orientations from WHO, NHS, ECDC and Healthcare professional consensus on best practices in the selection and use of examination gloves.



A close-up portrait of a healthcare professional, likely a nurse or doctor, wearing a green surgical cap, a white face mask, and green gloves. They are looking directly at the camera with a calm expression. The background is a bright, out-of-focus clinical setting. The overall color palette is dominated by greens and blues, creating a clean and professional atmosphere.

In safe hands for a better future

***Made in Europe
Safer, Cleaner, Greener.***

R.Advance and R.Green were developed in line with the latest international guidelines, consensus and HCPs best practices

	Standard Examination Gloves	R.green	R-ADVANCE	Surgical Gloves
AQL (acceptable defects)¹	1.5	1.5	0.65	0.65
Gloves 100% Inspected	✗	✓	✓	✗
Tensile Strenght (Elasticity and Resistance)	6N	9N	9N	9N
Clean Glove (Reduced Bioburden)²	✗	✓	✓	✓
Extraction one-by-one (WHO)³	✗	✓	✓	✓
Extraction by the cuff (WHO/IPC)³	✗	✓	✓	✓
Sanitizable Packaging⁴	✗	✓	✓	✗
Waste Reduction vs Standard Gloves⁵	-	-53%	-53%	-
Origin of production	Asia	Europe	Europe	Asia/Europe

 Has/Complies
  Does not have/Does not comply

The table above compares R.Advance and R.Green with current standard examination gloves on glove selection criteria recommended by International guidelines and IPC consensus on best practices in the selection and use of examination gloves.

1. Norm EN 455 2. Raimundo J.Oliveira A.Labfit imp.85_Tecnical Repor (Edition5) Labfit-HRPD.2023)2009 3. WHO 2009. Glove use information leaflet (revised August 2009) 4. World Health Organization. (2018) . Global guidelines for the prevention of surgical site infection, 2nd ed.. World Health Organization. <https://iris.who.int/handle/10665/277399>. 5. Marinas, M. (June 2024). On the use of gloves: Staff satisfaction and IPC compliance. Royal Hospital for Neuro-disability.

ir.green

For a better future!

The European examination glove

Sanitizable Packaging



Single glove extraction



Extraction by the cuff



100% Air and Water-tight



Patented flowpack



Made from recyclable and recycled material



100% inspected gloves 

AQL 1.5

High Elasticity and Resistance 

9N, + 50% vs standard gloves

Clean glove 

-81% Bioburden vs. standard gloves

R.Slip technology 

Easy donning and extra comfort
Sensitivity like a second skin

AQL: what is it and why is it important?

"A glove to be safe needs to be free from holes."

This fundamental requirement comes from **EN455, the standard that sets the minimum quality criteria for examination gloves**, and it is measured through an indicator: AQL.

Following norms ISO 2859, for an example batch of 4 millions gloves produced, 500 random gloves are analyzed.

	AQL	Nro. of defective gloves allowed in the sample	Nro. of defective gloves per batch	% of defective gloves per batch
Examination gloves	1.5	14	112 000	2.8%
	1.0	10	80 000	2%
Surgical gloves	0.65	7	56 000	1.4%

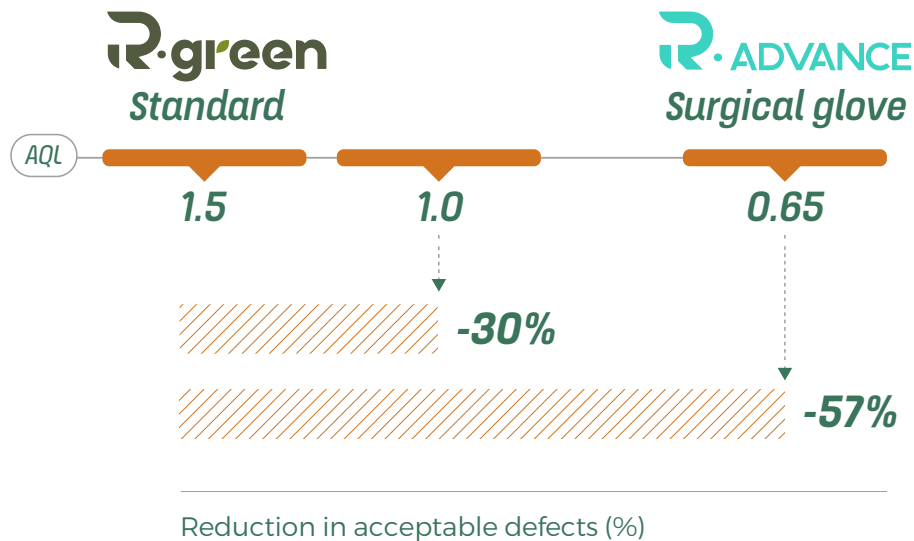
The lower the AQL, the fewer pinholes in the gloves, reducing the risk of Healthcare-Associated Infections (HAIs).

Some of the most prevalent microorganisms in healthcare-associated infections can pass through a microhole that is invisible to human eyes and can be in touch with our skin.

Protection beyond the norm

ARKA **inspects 100% of the gloves** produced, achieving an unprecedented level of confidence in the protection of the HCPs and patients.

Comparative analysis of defects across different AQLs using the AQL scale, for a batch of 150,000 gloves with a sample size of 200, in accordance with the standard norms



R.green with 1.5 AQL is designed to protect HCPs and patients in procedures that require the usage of examination gloves.

R.ADVANCE is specifically designed for High-Risk Non-Surgical Procedures. The AQL of 0.65 guarantees the safety level of a surgical glove.

Why is glove resistance important?

A glove with higher tensile strength offers greater resistance to abrasion during medical procedures, reducing the risk of gloves tearing and consequent cross-contamination.

1/7

**of Examination Gloves
are torn during medical
procedures¹**

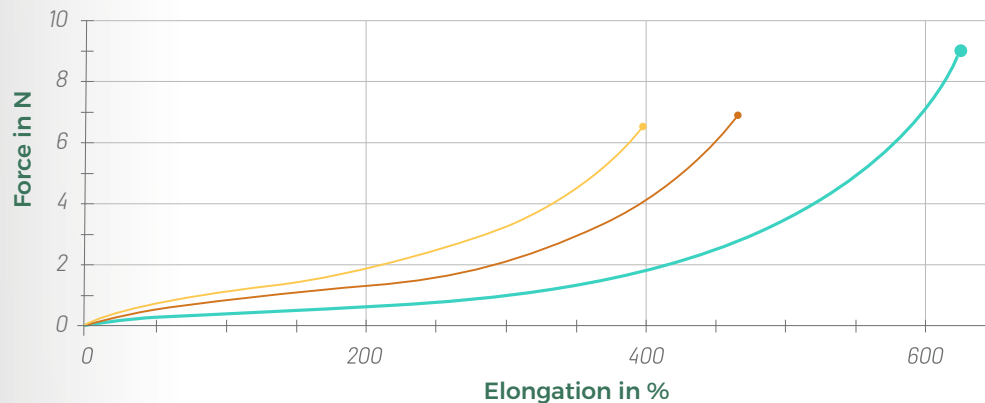
1. Jenn Carbin. Understanding Medical Gloves. Infection Prevention.



Tensile strength is central to the durability of a glove and related to resistance to abrasion, tears and punctures.¹

The higher the tensile strength value, the greater the strength of the glove.

Tensile Strength Test



	Weight (gr)	Palm Thickness (mm)
Standard Glove	3,3	0,06
Thicker Standard Glove	4,5	0,09
ADVANCE R-green	4,0	0,08

ARKA gloves are more elastic and have 50% more resistance (9N) than standard examination gloves (6N). Its advanced technology ensures reliability and comfort, even during the most challenging tasks.

1. Jahangiri M, Choobineh A, Malakoutikhah M, Hassanipour S, Zare A. The global incidence and associated factors of surgical gloves perforation: A systematic review and meta-analysis. Work. 2022;71(4):859-869. doi: 10.3233/WOR-210286. PMID: 35253703. 30;14(7):349. doi: 10.3390/jfb14070349. PMID: 37504844; PMCID: PMC10381443.

Bioburden and its importance

Evidence shows that disposable gloves are already contaminated with a large variety of spore-forming and non-spore-forming bacteria when they reach the hands of professionals.¹

Determination of a population of microorganisms (bioburden)²

Conventional gloves

Assay	Aerobic bacteria (CFU/sample)	Fungi/yeast (CFU/sample)	Anaerobic bacteria (CFU/sample)	Total bioburden (CFU/sample)
Assay #1	9	5	4	18
Assay #2	12	2	5	19
Assay #3	3	10	3	16
Assay #4	5	17	4	26
Assay #5	2	4	6	12
Assay #6	5	15	8	28
Assay #7	3	2	7	12
Assay #8	2	7	5	14
Assay #9	1	9	9	19
Assay #10	2	10	5	17

CFU: colony forming uni

Adapted from Raimundo J, Oliveira A. Labfit.Imp.85_Technical Report (Edition5). Labfit-HPRD. 2023.

1. Berthelot P, et al. Bacterial contamination of nonsterile disposable gloves before use. Am J Infect Control. 2006;34(3):128-30. 2. Raimundo J, Oliveira A. Labfit.Imp.85_Technical Report (Edition5). Labfit-HPRD. 2023.

-81% Bioburden vs Standard gloves

Clean gloves: Evidence shows that R.Advance and R.Green gloves have significantly lower bioburden compared to standard examination gloves

Determination of a population of microorganisms (bioburden)¹



Assay	Aerobic bacteria (CFU/sample)	Fungi/yeast (CFU/sample)	Anaerobic bacteria (CFU/sample)	Total bioburden (CFU/sample)
Assay #1	<1 (LOQ)	<1 (LOQ)	<1 (LOQ)	<3
Assay #2	<1 (LOQ)	<1 (LOQ)	2	<4
Assay #3	2	<1 (LOQ)	2	<5
Assay #4	2	<1 (LOQ)	<1 (LOQ)	<4
Assay #5	<1 (LOQ)	<1 (LOQ)	<1 (LOQ)	<3
Assay #6	1	<1 (LOQ)	1	<3
Assay #7	<1 (LOQ)	<1 (LOQ)	<1 (LOQ)	<3
Assay #8	<1 (LOQ)	1	2	<4
Assay #9	<1 (LOQ)	<1 (LOQ)	2	<4
Assay #10	<1 (LOQ)	<1 (LOQ)	3	<5

The R.Advance and R.Green gloves are produced in a **unique and innovative 100% automated line** and in a **controlled environment, without human intervention**. They are packed in an air and watertight flowpack, from production to the HCP, keeping them pure until they are used in a clinical environment. These are **highly pure nonsterile gloves**, a tool for controlling cross-contamination and bioburden.



CFU: colony forming uni; LOQ: limit of quantification

Adapted from Raimundo J. Oliveira A. Labfit.Imp.85 Technical Report (Edition5). Labfit-HPRD. 2023.

Examination Glove Packaging

Randomly packed gloves (present in conventional carton boxes) promote cross-contamination and do not allow compliance with the WHO guidance, which recommends that gloves should be removed from the packaging by touching only the cuff.¹

1. World Health Organization, Glove Information Leaflet, 2009



A unique and innovative flowpack

Designed to reduce the risk of cross-contamination, allowing glove dispensing by the cuff, one at a time, in accordance with WHO guidelines.

Patented flowpack concept 

 **CLOP opening and closing system**

Preserves non-used gloves from the surrounding environment

 **Cuff facing towards the opening**

Cuff orientation and extraction one by one, as per WHO guidelines.¹



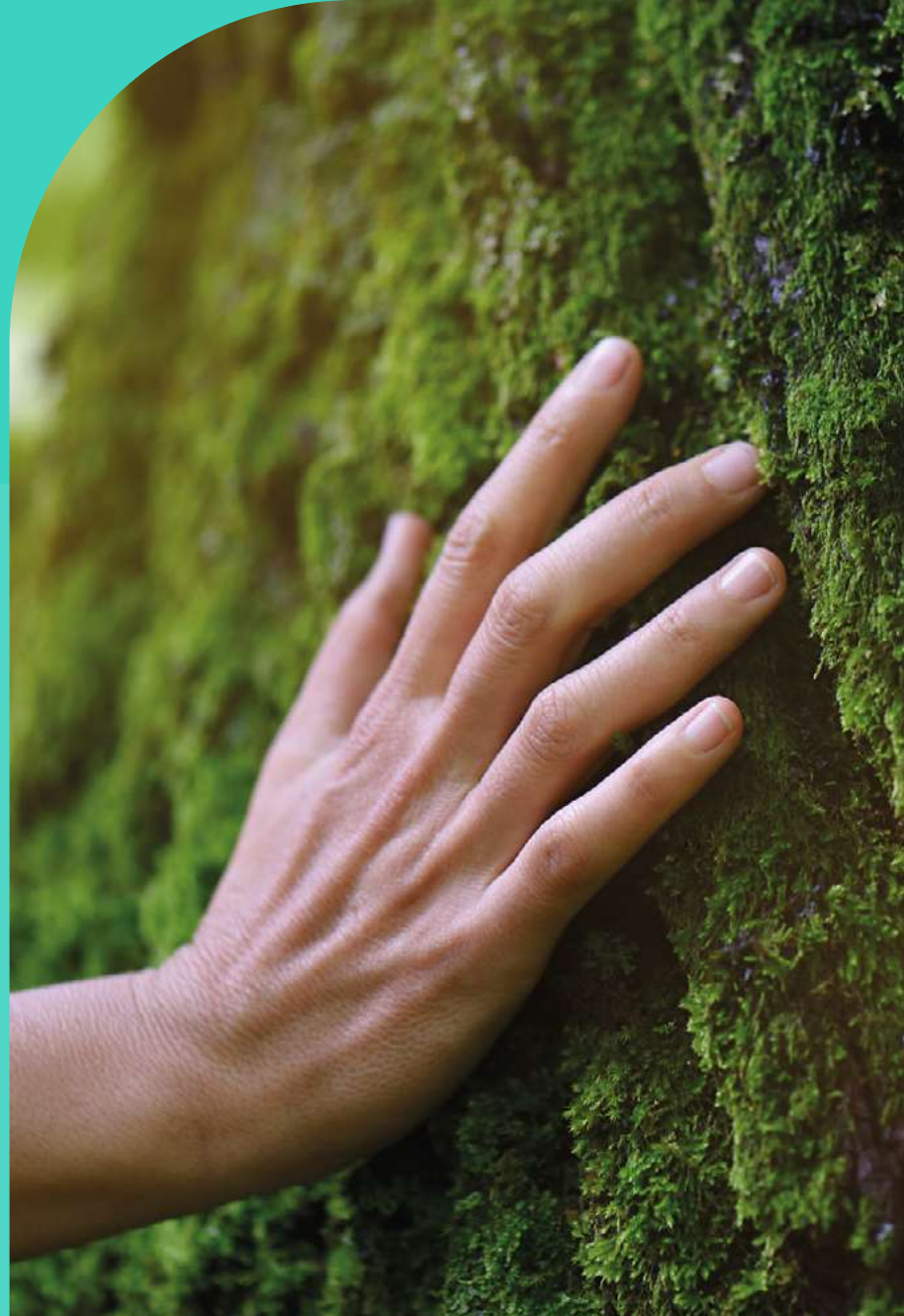
 **Decontaminated on the inside and decontaminable on the outside**

 **100% air and watertight packaging**

Made from recycled and recyclable material 



***Sustainable**
by design*



Why is waste reduction important?

The environmental impact of consumables in healthcare systems



15 million tons
annually on a global scale



In Europe, **36%**
of hospital consumables
are made of plastic or
derivatives



42%
of plastic consumables
used in hospitals must be
incinerated



Safe Disposal of Medical Gloves

Incineration is globally recognized as the most reliable method for handling infectious and hazardous medical waste, endorsed by international standards^{1,2,3}

Gloves contaminated with blood, bodily fluids, or infectious pathogens are classified as **infectious waste** and should be disposed of through **incineration or autoclaving**, as per recommended protocols.^{1,2,3}

In a scenario where the large majority of the Infectious waste is incinerated, solutions like **biodegradable** or **recyclable gloves** have limited relevance in healthcare practices.

To promote **sustainable** practices in glove usage, efforts should focus on **reducing overall glove consumption and minimizing waste**.

*By choosing high-quality gloves like **R.Advance** and **R.Green**, healthcare institutions enhance safety while also **reducing their environmental impact** by minimizing overall glove consumption and waste.*



獨立行政法人 医薬品医療機器総合機構
Pharmaceuticals and Medical Devices Agency



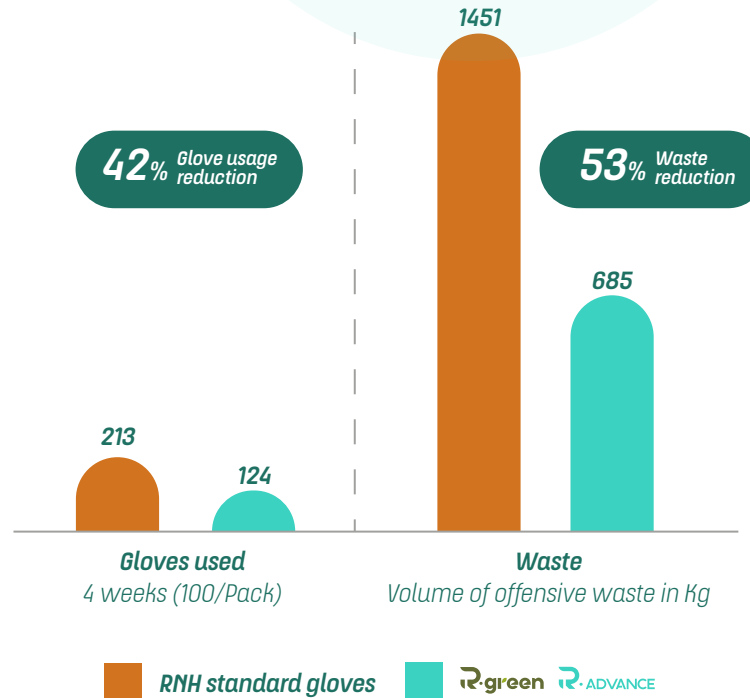
World Health
Organization

1. World Health Organization (WHO). (2018). Safe Management of Wastes from Healthcare Activities. 2. Centers for Disease Control and Prevention (CDC). (2021). Guidelines for Environmental Infection Control in Healthcare Facilities. 3. Occupational Safety and Health Administration (OSHA). (2020). Bloodborne Pathogens Standard – Medical Waste Management.



Waste Reduction

Approx. 42% reduction in glove usage and 53% waste reduction in clinical settings¹.



Made in Europe R.Advance gloves prioritize safety of staff and waste reduction, supporting Hospitals in achieving their sustainability goals.

¹. Marinas, M. (June 2024). On the use of gloves: Staff satisfaction and IPC compliance. Royal Hospital for Neuro-disability.

2024 Initiatives (II/II)

The R.Advance glove has been tested in several renowned health institutions, revealing very promising results

Tests carried out on the R-Advance Glove:

	 Glove consumption	 Waste reduction*	 User feedback
	-71%**	-74%	Very positive
	-45%	-53%	Very positive
	-42%	-53%	Very positive
	-29%	N.A.	Very positive

* The measurement method for waste reduction was standardized based on the approach used at the Royal Hospital. Waste is now calculated as the percentage difference between the amount of conventional gloves and R.Advance gloves used, with this percentage then multiplied by the weight of each glove/ glove pack;

** Draft results. Simple average obtained from the percentage reduction of R.Advance glove sizes S, M and L.

"A much better glove than the ones we use, a massive improvement"
- Healthcare professional

Sustainable by design



In several trials, R.Advance & R.Green have consistently enabled significant reductions in glove use and waste generation in hospital settings.



Lower Costs & Improved Sustainability

*Thinking beyond
sterile & non-
sterile*



Beyond "sterile vs non-sterile"

Factors influencing glove choice



determines PPE usage according to the procedure risk involved.

STERILE GLOVES INDICATED

Any surgical procedure; vaginal delivery; invasive radiological procedures; performing vascular access and procedures (central lines); preparing total parental nutrition and chemotherapeutic agents.

EXAMINATION GLOVES INDICATED IN CLINICAL SITUATIONS

Potential for touching blood, body fluids, secretions, excretions and items visibly soiled by body fluids.

DIRECT PATIENT EXPOSURE: Contact with blood; contact with mucous membrane and with non-intact skin; potential presence of highly infectious and dangerous organism; epidemic or emergency situations; IV insertion and removal; drawing blood; discontinuation of venous line; pelvic and vaginal examination; suctioning non-closed systems of endotracheal tubes.

INDIRECT PATIENT EXPOSURE: Emptying emesis basins; handling/cleaning instruments; handling waste; cleaning up spills of body fluids.

GLOVES NOT INDICATED (except for CONTACT precautions)

No potential for exposure to blood or body fluids, or contaminated environment

DIRECT PATIENT EXPOSURE: Taking blood pressure, temperature and pulse; performing SC and IM injections; bathing and dressing the patient; transporting patient; caring for eyes and ears (without secretions); any vascular line manipulation in absence of blood leakage.

INDIRECT PATIENT EXPOSURE: Using the telephone; writing in the patient chart; giving oral medications; distributing or collecting patient dietary trays; removing and replacing linen for patient bed; placing non-invasive ventilation equipment and oxygen cannula; moving patient furniture.



• **Exposure Prone Procedures**
(emergency care, dental, maternity)



• **Minor procedures**
(e.g. urinary catheter insertion, wound care)



• **Minimally invasive surgery**



• **HCID**

Adapted from: WHO, 2009 Glove Information Leaflet

1. Loveday HP et al. epic3: National Evidence- Based Guidelines for Preventing Healthcare- Associated Infections in NHS Hospitals in England. The Journal of hospital infection 2014;86 Suppl 1:S1-S70. [https://doi.org/10.1016/S0195-6701\(13\)60012-2](https://doi.org/10.1016/S0195-6701(13)60012-2).

EPP are defined as those **procedures where the healthcare providers gloved hands may be in contact with sharp objects** (such as needles or sharp tissues like bone or teeth) inside a patient's open body cavity or wound, where the hands or fingertips may not be completely visible at all times.

EPP occur during **Emergency Medicine, Surgery, Dental, and Obstetrics and Gynaecology.**

*In these scenarios, **the quality of the glove being used** to protect the patient from the EPP **is especially important.**¹*

*For EPP, it's vital that **gloves of sufficient quality are selected.**¹*

1. Jon Otter: Role of glove quality in maximising staff safety. November 15, 2024 - Infection Prevention & Control.



Critical areas and mitigating measures of HAIs transmission

WHO compiled several evidences on best IPC practices and identifies these areas as critical for the spread of HAIs



Patient Rooms and Wards:

- High-touch surfaces: bed rails, IV poles, door handles, call buttons.
- Shared medical equipment like blood pressure cuffs and thermometers.



Bathrooms and Sanitation Facilities:

- C. difficile and Norovirus often spread in poorly sanitized facilities.



Intensive Care Units (ICUs):

- High concentration of invasive procedures (e.g., ventilators, catheters).
- Vulnerable patient population with weakened immune systems.



Operating Theatres:

- Contamination of surgical instruments and surfaces.
- Airborne transmission risks during procedures.



Emergency Rooms (ERs):

- High turnover of patients and acute exposure to infectious diseases.
- Limited time for thorough cleaning between patients.



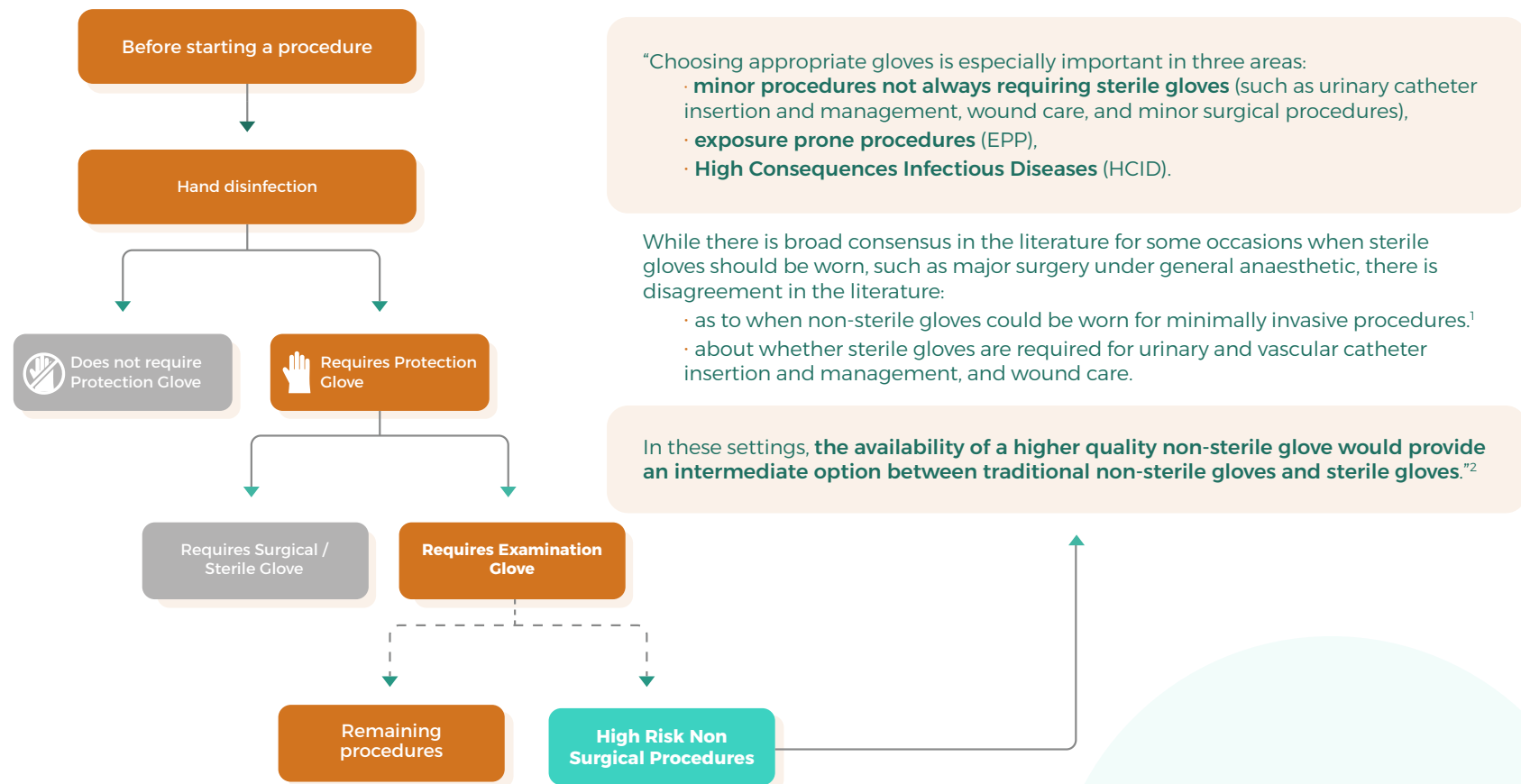
Outpatient Clinics and Dialysis Units:

- Cross-contamination due to shared equipment.

In these Healthcare areas (ICUs, Operating Theatres, ERs and Outpatient Clinics and Dialysis Units), it is critical to have **gloves that provide adequate protection** and that **possess a dispensing system according to WHO guidelines** to mitigate HAIs.

Beyond “sterile vs non-sterile”

Factors influencing glove choice



1. Loveday HP, et al. epic3: National Evidence- Based Guidelines for Preventing Healthcare- Associated Infections in NHS Hospitals in England. The Journal of hospital infection 2014;86 Suppl 1:S1-S70. [https://doi.org/10.1016/S0195-6701\(13\)60012-2](https://doi.org/10.1016/S0195-6701(13)60012-2). 2. Jon Otter: Role of glove quality in maximising staff safety. November 15, 2024 - Infection Prevention & Control.

R·ADVANCE

In safe hands!

AQL 0.65

As safe as a surgical glove
(-57% defects vs 1.5 AQL)

Clean glove

Bioburden reduced in
81% vs standard gloves



High Resistance: 9N

50% more resistant than norm
EN455:2 (6N)



R.Slip technology

Easy donning and extra comfort
Sensitivity like a second skin

Gloves

Single glove extraction



Extraction by the cuff



100% Air and Water-tight



Sanitizable Packaging

Flowpack

A unique protection concept for High Risk Non-Surgical Procedures



 **Vertical
Extraction**

Minimize cross-contamination

 **Decontaminable**

Easy to sanitize at any moment

 **Fast and easy
dispensing**

Eases single Extraction by the cuff

R.Dispenser

*In safe hands,
for a better future!*



The Challenges

3.5M

HAIs
deaths/year

7B €

HAIs
economic burden in EU/year

70%

HAIs are considered
prevantable

40%

reduction in HAIs by compliance through
hand hygiene and proper glove use

15M

tons of plastics waste in EU
hospitals/year

95%

of examination gloves used in Europe
are sourced in Asia



In safe hands for a better future!



Higher Quality Gloves

100% Inspected Gloves
+50% Tensile Resistance
-81% Bioburden

Increased safety of HCPs and Patients

Mitigation of HAIs risks

WHO Compliant Dispensing



Extraction by the Cuff
Single Glove Dispensing
Sanitizable Packaging

More sustainable and cost effective healthcare practice through less gloves being used:

-43% glove consumption
-52% waste reduction



Made in Europe

Enhanced sanitary sovereignty and resilience of healthcare systems





Protecting Life

ARKA Medical is an **Innovative European Company** dedicated to the development, design, and marketing of single-use medical and non-medical devices.

Our portfolio addresses critical unmet needs of HealthCare practitioners, with a core focus on mitigating **Cross-Contamination Risks**, fostering **Sustainability**, and strengthening **European Sanitary Resilience**.

Europe's First Examination Glove Production Facility, ARKA operates a cutting-edge, patented, and fully automated manufacturing plant that ensures 100% inspection of every glove produced.

This advanced manufacturing capabilities enable ARKA to deliver the safest and most reliable **range of Nitrile Examination Gloves** available on the market.

The First European Industry of Single Examination Nitrile Gloves, with an innovative and patented fully automated production line, allowing inspection of 100% of the gloves, ensuring the production of the safest gloves currently available for healthcare practice.



Our Values

We are ARKA and our values are **Protection**, **Integrity**, **Humanity** and **Oneness**.

ARKA was built to protect. **Protection** of life, of the future, of those who care and are cared is the deep purpose guiding our every actions and options.

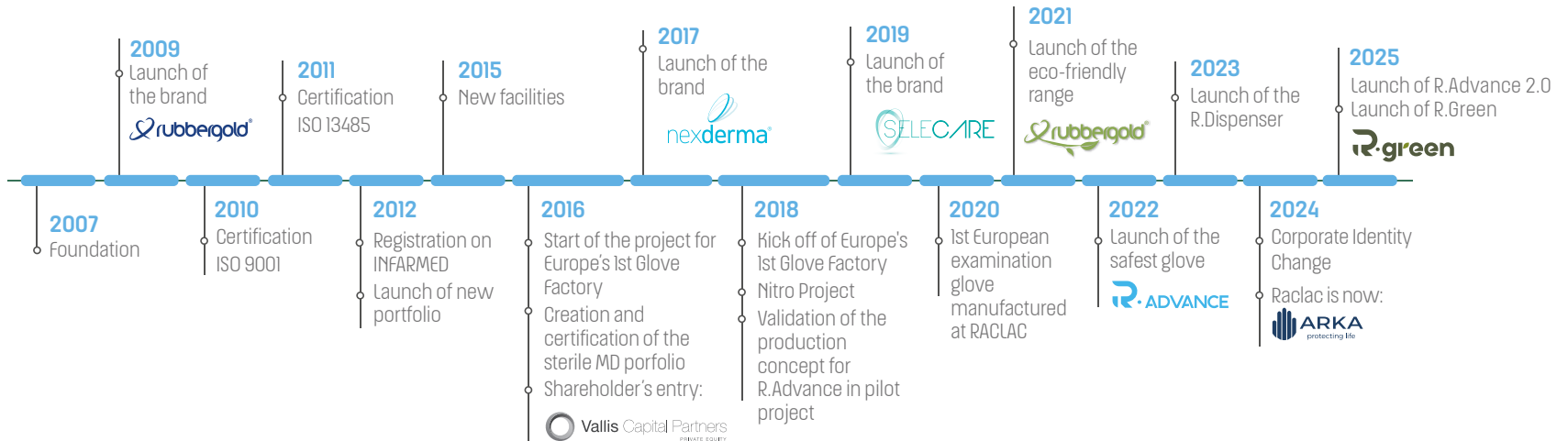
Within ARKA, we cultivate a culture of **Integrity**, founded on Truth and Ethics. We nurture this way of being with transparency in our relationships, honoring all out internal and external stakeholders, and in compliance with the good practices and all codes and regulations.

ARKA is a place of **Humanity**, as we embrace pluralism, fundamental individual rights, respect for differences and strive to support with kindness the self-expression, dreams and consciousness of all that are inside and around us.

Outside ARKA we foster the value of **Oneness** through creating interconnected value. Our continuous pursuit of innovation is driven to positively impact collectively, cultivating shared value relationships with Customers, Suppliers, Authorities, Regulators, Healthcare Professionals and Patients, reaching goals through a common economic, social and environmental elevation.

The Innovation Journey

Elevating protection through innovation



ARKA Medical: An European Industrial Breakthrough

The base to create a new safety standard for Healthcare Practice

ARKA developed, in a 6 years R&D effort, a **proprietary technology** to produce premium nitrile exam gloves.



ARKA's production line

vs

Conventional production lines

Innovative and Patented production concept ← — — — — — — — → Conventional production line

100% Automated line ← — — — — — — — → Labour intensive line

High levels of batches' consistency ← — — — — — — — → Inconsistency in inter-batch glove quality

Production in a **controlled environment** ← — — — — — — — → Production in a contaminated environment

Automatic rejection points for non-compliant gloves ← — — — — — — — → Statistical rejection

Capable of **AQL 0.25** ← — — — — — — — → Standard AQL

Protecting the environment!

At ARKA Medical, we firmly believe that environmental responsibility is not just a choice but a necessity.

Sustainability is deeply embedded in our strategies, driving our actions toward a greener future.

Our ongoing efforts to reduce our carbon footprint and achieve Net Zero by 2050 are detailed in our ESG report, accessible through this link:

<https://tinyurl.com/2du53vuf>





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