

ANTT®
Aseptic Non Touch Technique

Not to be circulated or reproduced without permission:

enquiries@antt.org

Thank you

The Association for Safe Aseptic Practice

ANTT Update
Rethinking patient safety

Stephen Rowley
Clinical Director
The Association for Safe Aseptic Practice

The Associations Mission:

ASAP The Association for Safe Aseptic Practice

To help support reductions in preventable healthcare associated infection in all healthcare settings

.. by establishing an international standard for aseptic practice with ANTT® as promoting safe practice in all health domains from clinical practice to industry



Hospitals



Community



Emergency



Defence



Humanitarian


Alcowipe


BD Plastipak

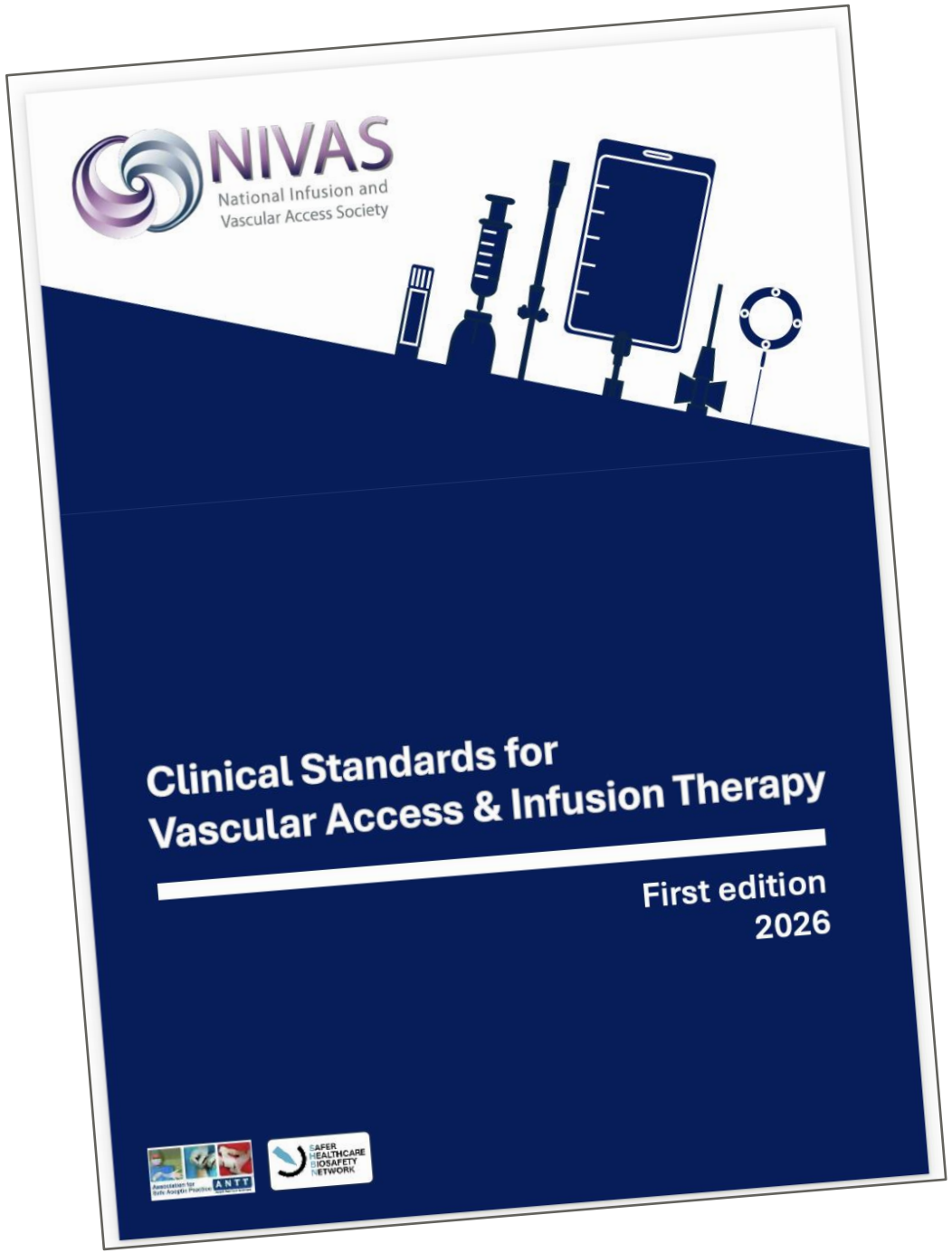
ASAP The Association for Safe Aseptic Practice

ANTT® Aseptic Non Touch Technique

ANTT Update

ANTT National Conference 2026 – London

www.antt.org stephen.rowley@antt.org





Congratulations to the NIVAS Board!

Evidenced graded clinical guidelines

Guidance on all matters of Vascular Access and Infusion Therapy

Explaining matters of aseptic practice for IV infusion and access in the most meaningful practice language – ANTT®

Simple

Sensible

Effective

ANTT®
Aseptic Non Touch Technique

The International Standard for Aseptic Technique



ANTT®

Aseptic Non Touch Technique

The International Standard for Aseptic Technique

Documented reach across 74 named countries, territories and UK nations, plus additional regional records.

- Universal Practice language
- Standardised practice
- Stronger clinical governance
- Supporting HAI reduction



Regional records

- Africa
- Arab States
- Asia
- Caribbean / West Indies
- Central America
- East Asia / Far East
- Eastern Europe
- Europe
- Middle East
- Pacific
- Scandinavia
- South America
- Southeast Asia
- South Pacific

Countries, territories and UK nations

Africa

- Algeria
- Senegal
- Seychelles
- Sierra Leone
- South Africa

Americas

- Argentina
- Brazil
- Canada
- Chile
- Colombia
- Ecuador
- El Salvador
- Haiti
- Mexico
- Peru
- Puerto Rico
- United States
- Uruguay
- Venezuela

Asia

- China
- India
- Indonesia
- Japan
- Kazakhstan
- Korea
- Malaysia
- Maldives
- Mongolia
- Nepal
- Pakistan
- Philippines
- Singapore
- Sri Lanka
- Taiwan
- Thailand
- Vietnam

Europe

- Belgium
- Bulgaria
- Croatia
- Czech Republic
- England
- Estonia
- Finland
- France
- Germany
- Gibraltar
- Greece
- Hungary
- Ireland
- Ireland
- Italy
- Malta
- Netherlands
- Northern Ireland
- Norway
- Poland
- Portugal
- Romania
- Russia
- Scotland
- Serbia
- Slovenia
- Spain
- Switzerland
- Türkiye
- Ukraine

Middle East

- Israel
- Qatar
- Saudi Arabia
- United Arab Emirates

Oceania / Pacific

- Australia
- East Timor
- New Zealand

Records include countries, territories, UK nations and broader regional entries.

https://j-ivcares.jp/en/antt/

ANTT Japanese IntraVAscular Catheter Research and Education Society

Since 2024

JIVCARES

Japanese IntraVascular CAtheter Research and Education Society

J-IVCARES 公式日本語版

ANTT®
無菌非接触操作

Aseptic Non-Touch Technique

すべての侵襲的手技に・すべての診療現場に
感染から患者を守るための国際標準フレームワーク



Japanese

www.antt.org

ANTT® 臨床診療フレームワーク





Copyright © 2024 The Association for Safe Aseptic Practice (ASAP) ANTT® All rights reserved. V5.0

ANTT
Aseptic Non Touch Technique

無菌操作に関する用語の不統一や曖昧さに対する懸念は、1980 年代、あるいはそれ以前から広く報告され始めていた。その後も、各年代において複数の研究者が国際的にこの問題を取り上げ、繰り返し指摘してきた（Thomlinson, 1987；Johnson, 1988；Breen-Williams & Waterman, 1996；Rowley, 2001；Rowley ら , 2010；Gargiulo ら , 2012；Suvikas-Peltonen, 2017）。もはやこの問題を掘り下げて論じること自体は、特段新しい知見でも有用でもないことは明らかである。したがって、ここでこれ以上詳細に述べることはしない。現在では、ANTT が共通の実践言語を備えた**無菌操作の国際的標準**として大きく発展しており、本協会はその継続的な発展とさらなる普及に尽力している。



画像 1. 普遍的な実務用語による理解度の向上

標準化された臨床実践 = より安全な臨床実践

医療をはじめ、航空業界のような多数の顧客を対象とする安全性重視型産業においては、**標準化された実践の利点**がすでに長年にわたり認識されている。世界保健機関（WHO）は 2006 年以降、「High 5s プロジェクト」（WHO, 2013）を通じて、医療における標準化の推進に取り組んできた。一般的に、標準化は理解や実践におけるばらつきを減らし、それによって医療の**質と安全性を向上させる**（Sidiropoulos ら , 2009；Lavelle ら , 2015）。重要な臨床技能の標準化も同様であり、教育、実践、そして研究における**より効果的かつ効率的な基盤**を提供するものである。

重要な臨床技能における**単一の標準化の利点**を最も明確に示す例の一つが、心肺蘇生法（CPR）である。世界的に見ても、CPR の理論・手順・実践は本質的に共通しており、統一された実践用語、明確に定義されたガイドライン、そしてエビデンスに基づく推奨事項に基づいている（Perkins ら , 2017;Olasveengen ら , 2017）。

CPR と同様に、無菌操作もまた極めて重要な臨床技能であり、その高い遂行品質と実効性が不可欠である。いかなる品質管理システムにおいても重要な要素の一つは、**曖昧さのない明確な基準に基づいて実践すること**である（図 2）。ANTT 臨床実践フレームワークは、現在、世界中の医療従事者および医療機関に対して、**統一された無菌操作の国際標準と共通の実践言語**を提供している。



画像 2. 普遍的な手技；標準化された実践方法 = 安全性の高い実践方法

Noemí Cortés Rey
Nursing Education Supervisor
Healthcare Area of A Coruña and Cee



Spanish

www.antt.org

Marco teórico de Práctica Clínica ANTT®



Para todos los procedimientos invasivos

En todos los entornos asistenciales

ANTT® Marco Teórico de Práctica Clínica. Versión 6.0. Copyright © 2024 The Association for Safe Aseptic Practice, www.antt.org

1. Marco Teórico de la ANTT®

1.1 ¿Qué es ANTT®?

De forma destacada, ANTT® fue, y continúa siendo, el primer y único marco teórico-práctico integral, claramente definido y basado en la evidencia, para la práctica aséptica, aplicable a todo tipo de procedimientos clínicos y en cualquier entorno asistencial, desde la cirugía hasta la atención comunitaria.

ANTT® constituye un enfoque contemporáneo y unificado para definir, estandarizar y enseñar tanto la práctica clínica como el lenguaje operativo de la asepsia. Se basa en un modelo lógico que integra la práctica aséptica con la mejor evidencia disponible en prevención de infecciones. A través de una red global de profesionales y expertos clínicos, este marco se somete a evaluación continua y actualización sistemática, incorporando nuevas evidencias y enfoques emergentes en la atención sanitaria.



Figura 1: ANTT se aplica en todos los entornos asistenciales

El marco original de ANTT® (1995) supuso la reformulación de la técnica aséptica tradicional, ampliamente descrita pero aplicada de forma variable y, en consecuencia, ambigua. A partir del análisis de la interacción entre los microorganismos patógenos, el entorno asistencial, pacientes y el personal sanitario durante los procedimientos invasivos, se desarrolló un nuevo modelo de práctica sustentado en una terminología específica, precisa y clínicamente aplicable. El marco de ANTT® definió con claridad el propósito y los componentes de una técnica aséptica segura mediante un concepto central innovador: la "protección de **partes clave** y **sitios clave**" (*Key-Part and Key-Site Protection*).

Asimismo, las dos formas de manipulación tradicionalmente empleadas en la práctica aséptica fueron clarificadas, diferenciadas y sistematizadas como ANTT Estándar y ANTT Quirúrgica. Esta diferenciación incorpora un criterio técnico objetivo, que permite seleccionar la modalidad más adecuada en función de la menor o mayor complejidad del procedimiento.

ANTT® Marco Teórico de Práctica Clínica. Versión 6.0. Copyright © 2024 The Association for Safe Aseptic Practice, www.antt.org

PTPI Polskie Towarzystwo Pielęgniarstwa Infuzyjnego

PTPI
Polish Society Infusion Nursing



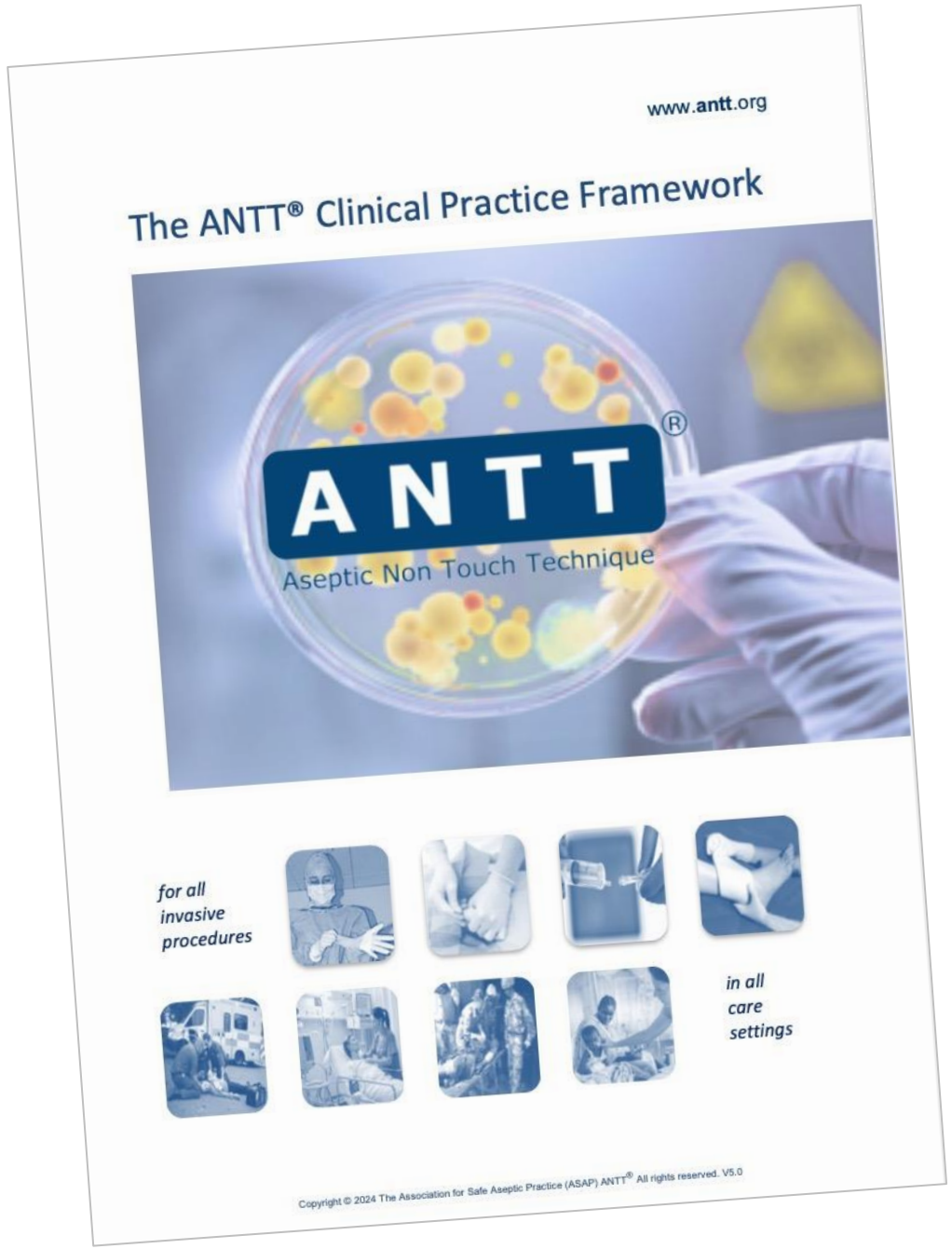


Polish

Martin Krause
Assistant Professor
Medical College Prague
Czech Republic

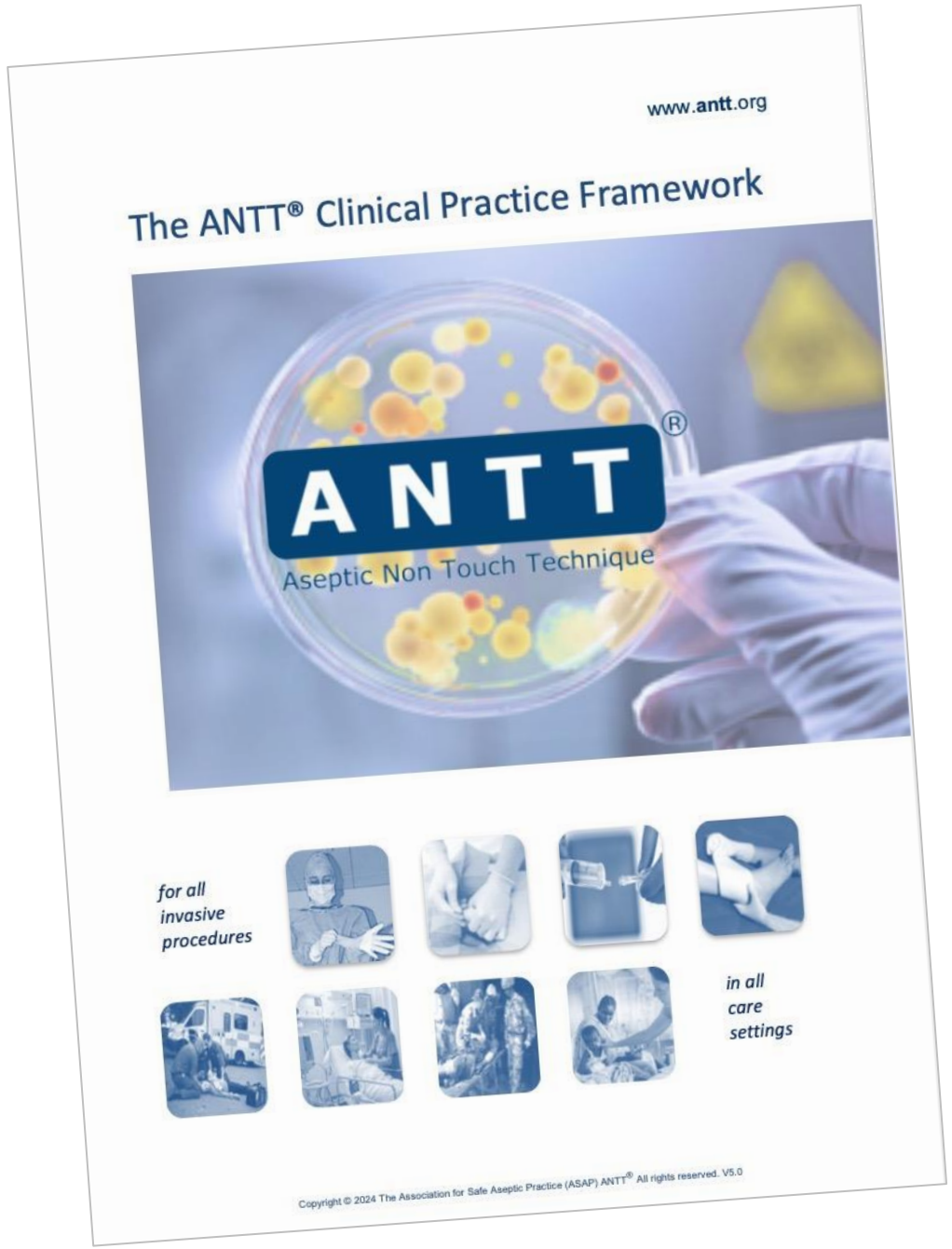


Czech



Surgical-ANTT®
Aseptic Non Touch Technique

Standard-ANTT®
Aseptic Non Touch Technique



Surgical-ANTT®
Aseptic Non Touch Technique

Standard-ANTT®
Aseptic Non Touch Technique

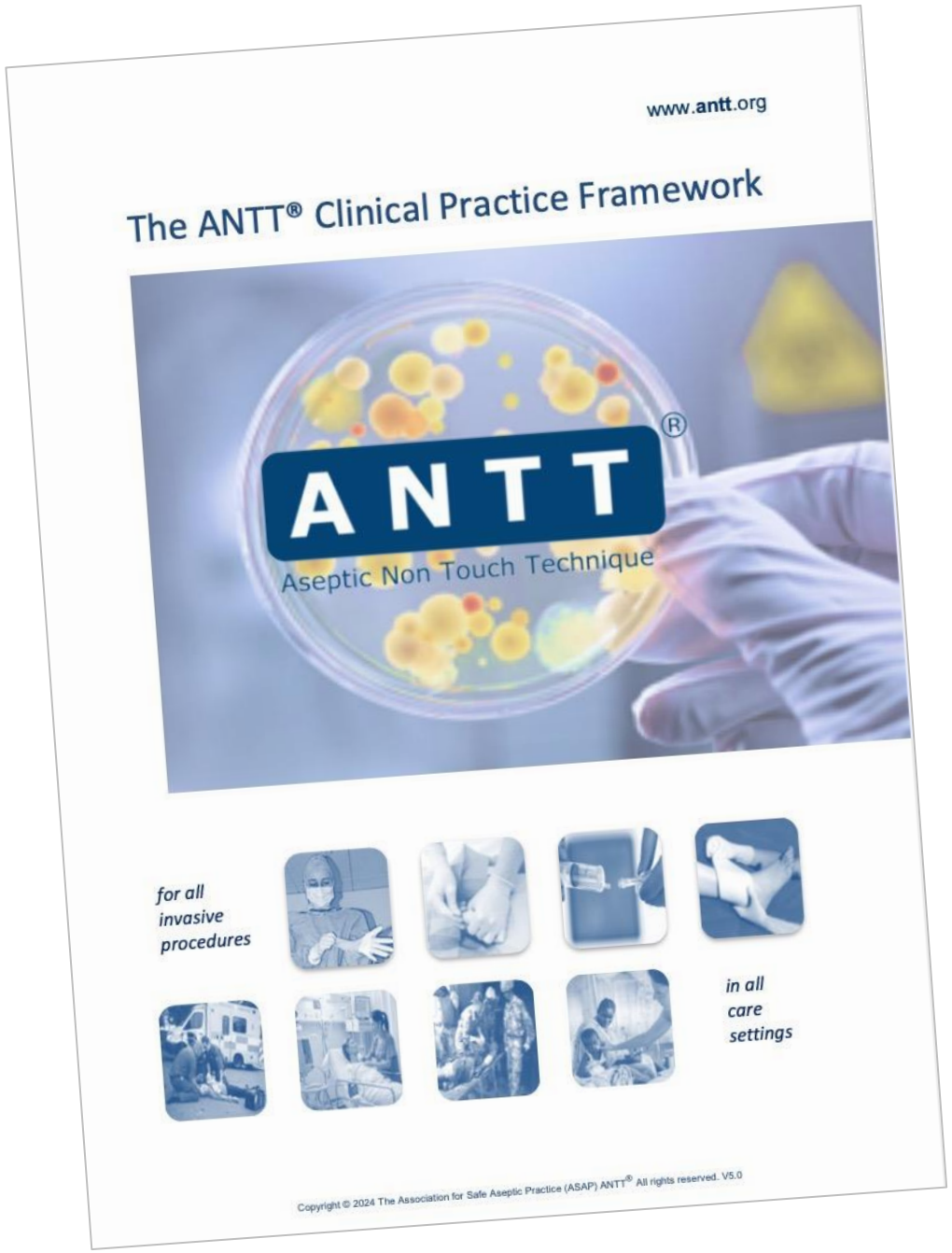
Does **asepsis** have to be abandoned in emergency settings & situations?



Does **asepsis** have to be abandoned in emergency settings & situations?

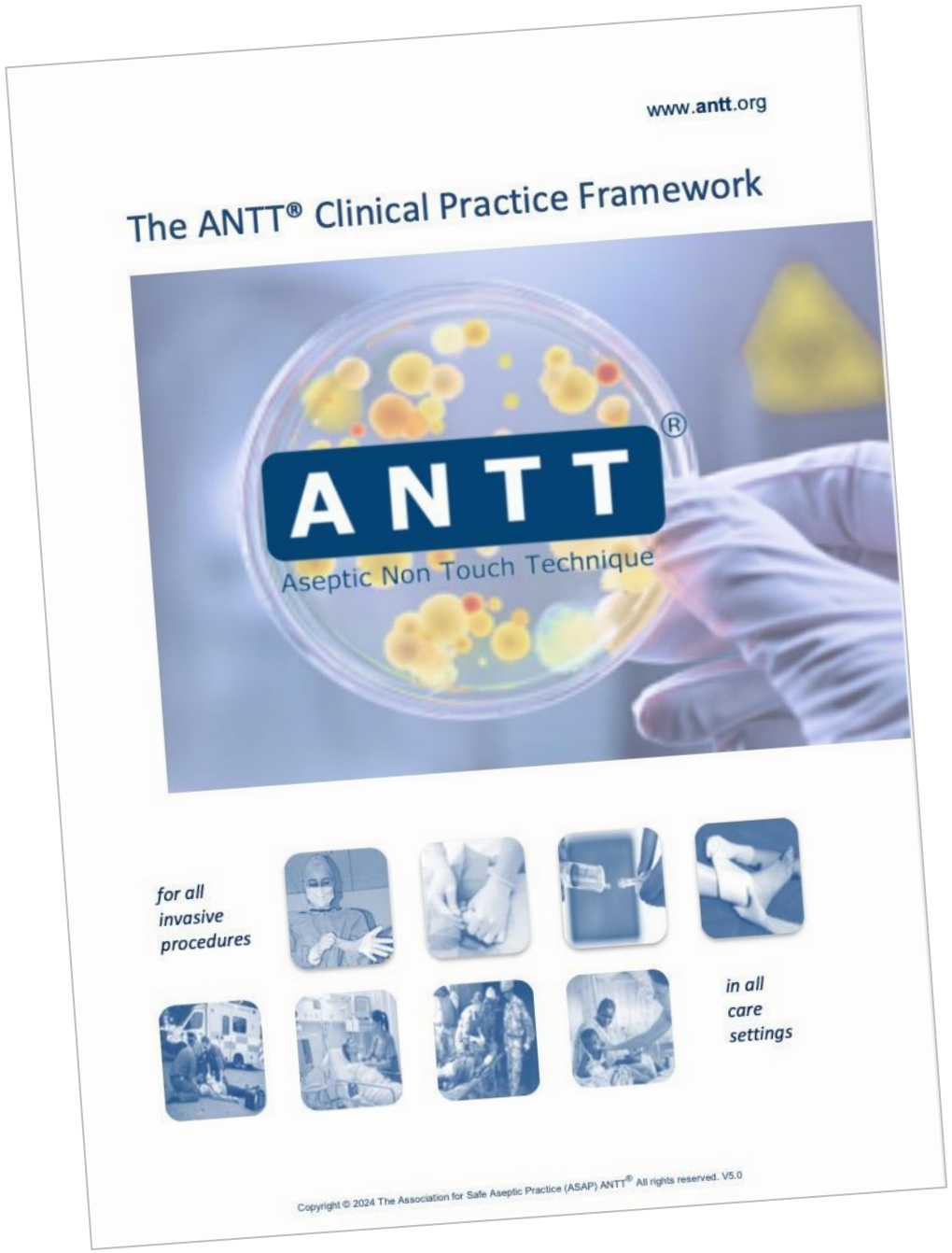


No



Surgical-ANTT®
Aseptic Non Touch Technique

Standard-ANTT®
Aseptic Non Touch Technique



Surgical-ANTT®
Aseptic Non Touch Technique

Standard-ANTT®
Aseptic Non Touch Technique

Emergency-ANTT®
Aseptic Non Touch Technique



A pragmatic approach to ANTT® that focuses specifically on:

What ANTT approach is possible in the moment

Emergency-ANTT: same aim of asepsis, reprioritised process

Standard-ANTT. A linear process



Emergency-ANTT. A flexible process



Prioritising the critical clinical situation, without abandoning asepsis

Three ANTT Approaches

Standard-ANTT®

Aseptic Non Touch Technique

For technically **simple** clinical procedures

Surgical-ANTT®

Aseptic Non Touch Technique

For technically **complex** clinical procedures

Emergency-ANTT®

Aseptic Non Touch Technique

An adaptation of Standard- and Surgical-ANTT when **time dictates**

The same Principles & Safeguards.

- Key-Part Protection
- Key-Parts & Key-Sites
- Asepsis
- Micro Critical Aseptic Fields
- Critical Aseptic Fields
- General Aseptic Fields
- Non Touch Technique
- Standard Precautions

ASAP The Association for Safe Aseptic Practice

ANTT® Aseptic Non Touch Technique

Rethinking patient safety

Prioritising risks for best outcomes?

www.antt.org stephen.rowley@antt.org

It’s been a journey







Before ANTT



CoNfuSed terminology & practice

‘That mad guy’


R.I.P
Died of poor aseptic technique in hospital


MRSA Airways

ANTT®

Aseptic Non Touch Technique

The International Standard for Aseptic Technique

Documented reach across 74 named countries, territories and UK nations, plus additional regional records.

- Universal Practice language
- Standardised practice
- Stronger clinical governance
- Supporting HAI reduction



Regional records

- Africa
- Arab States
- Asia
- Caribbean / West Indies
- Central America
- East Asia / Far East
- Eastern Europe
- Europe
- Middle East
- Pacific
- Scandinavia
- South America
- Southeast Asia
- South Pacific

Countries, territories and UK nations

Africa

- Algeria
- Senegal
- Seychelles
- Sierra Leone
- South Africa

Americas

- Argentina
- Brazil
- Canada
- Chile
- Colombia
- Ecuador
- El Salvador
- Haiti
- Mexico
- Peru
- Puerto Rico
- United States
- Uruguay
- Venezuela

Asia

- China
- India
- Indonesia
- Japan
- Kazakhstan
- Korea
- Malaysia
- Maldives
- Mongolia
- Nepal
- Pakistan
- Philippines
- Singapore
- Sri Lanka
- Taiwan
- Thailand
- Vietnam

Europe

- Belgium
- Bulgaria
- Croatia
- Czech Republic
- England
- Estonia
- Finland
- France
- Germany
- Gibraltar
- Greece
- Hungary
- Ireland
- Ireland
- Italy
- Malta
- Netherlands
- Northern Ireland
- Norway
- Poland
- Portugal
- Romania
- Russia
- Scotland
- Serbia
- Slovenia
- Spain
- Switzerland
- Türkiye
- Ukraine

Middle East

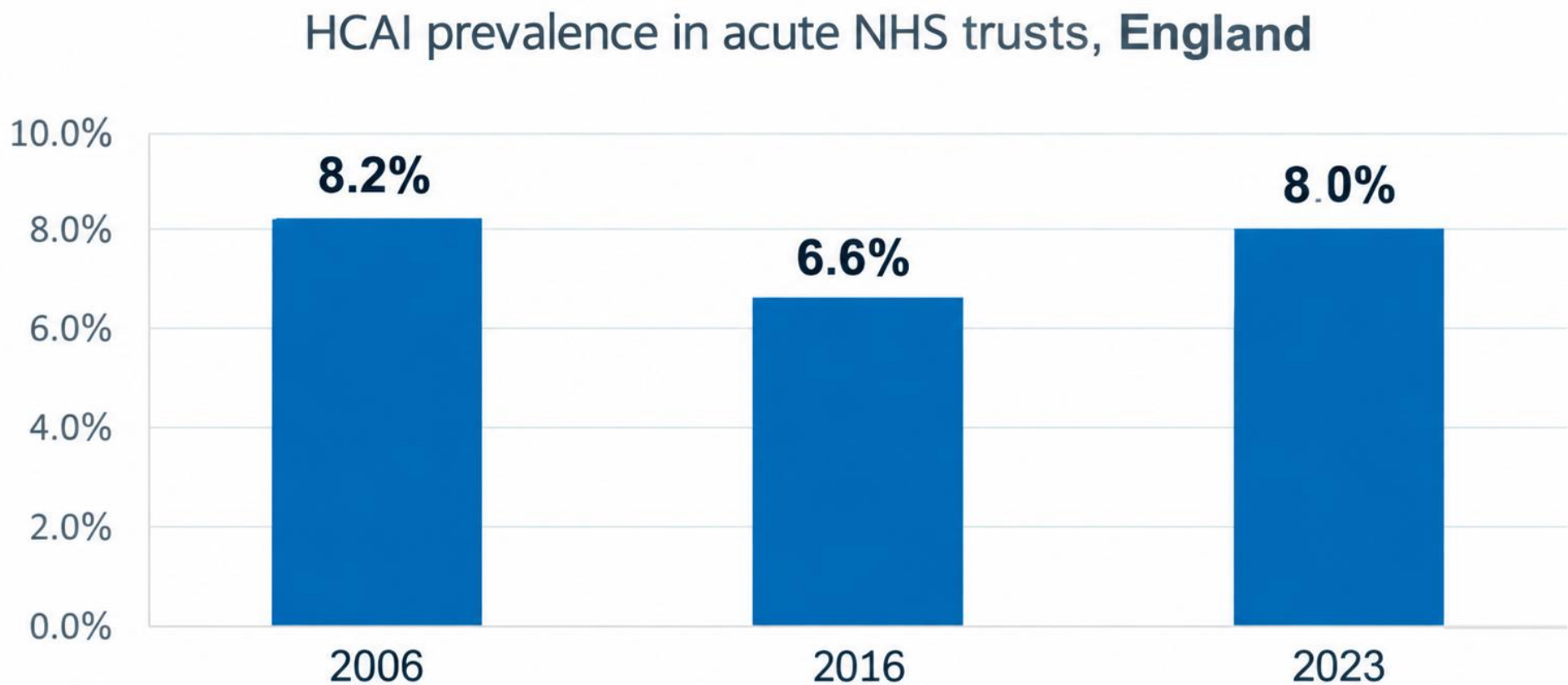
- Israel
- Qatar
- Saudi Arabia
- United Arab Emirates

Oceania / Pacific

- Australia
- East Timor
- New Zealand

Records include countries, territories, UK nations and broader regional entries.

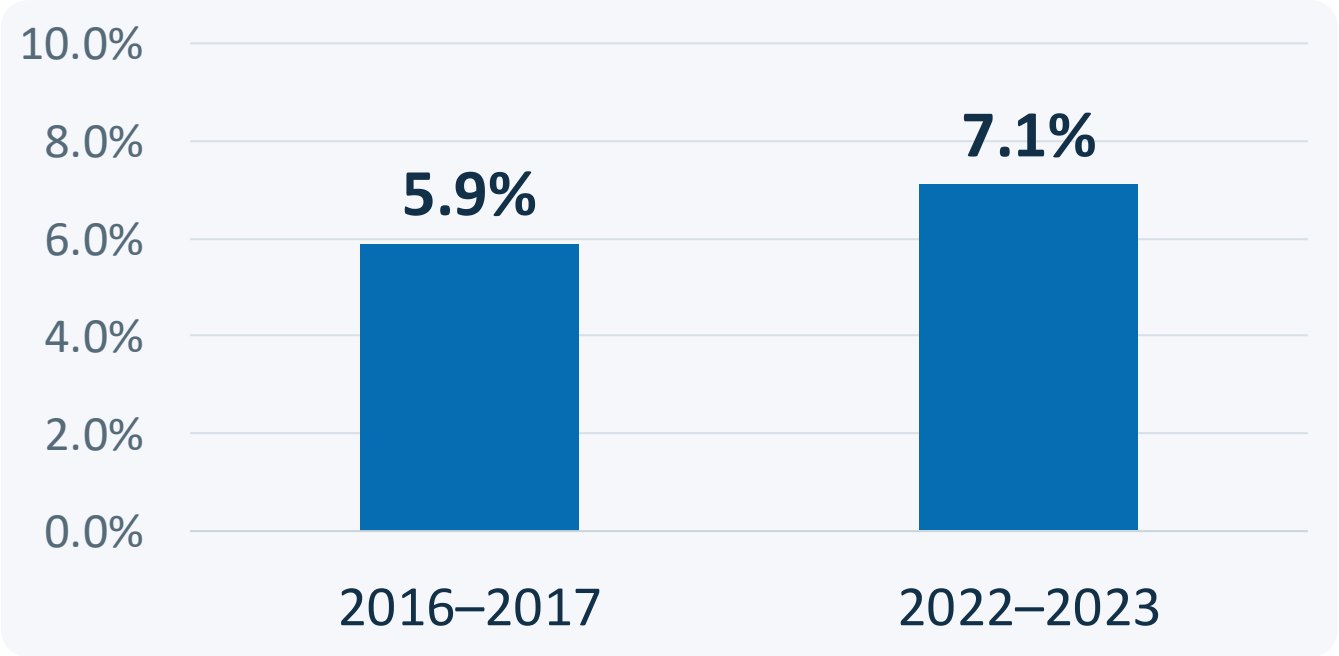
Have we become accustomed to the harm?



Survey snapshots. Differences in case mix and methods affect comparisons.
Source: UKHSA, England PPS 2006, 2016 and 2023

Europe faces the same question

HAI prevalence in acute care hospitals, **Europe**

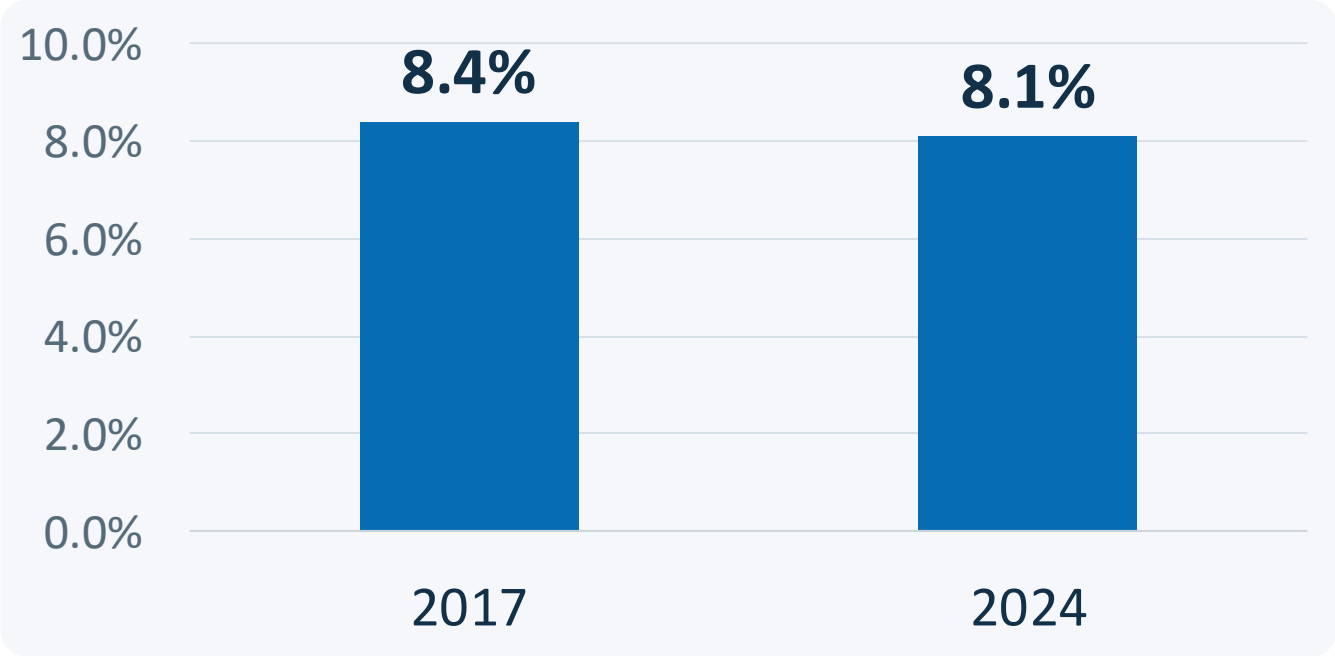


Survey snapshots. Case mix and participating countries differ. The later survey includes healthcare-associated COVID-19 and infections originating in long-term care facilities.

Source: ECDC, acute care hospital point prevalence surveys 2016–2017 and 2022–2023 (2024 report)

Canada faces the same question

Adult HAI prevalence in participating **Canadian** acute care hospitals



Recent plateau after earlier reductions. Participating hospitals and case mix differ. Adults only. The 2024 survey includes healthcare-associated COVID-19.

Source: Mitchell et al., Canadian Nosocomial Infection Surveillance Program, ICHE (2025)

Singapore faces the same question…and so on

Singapore: national acute care hospital survey, 2015–2016

11.9%

of adult inpatients had at least one HAI

646 patients across 13 hospitals

One national snapshot, not an Asia-wide estimate or a time trend.
ECDC survey methodology. Differences in definitions and case mix limit comparisons.

Source: Cai et al., Clinical Infectious Diseases (2017), 64(Suppl 2): S61–S67

First do no harm*

First do no harm*

**Over and above the baseline harm we've decided to settle for*



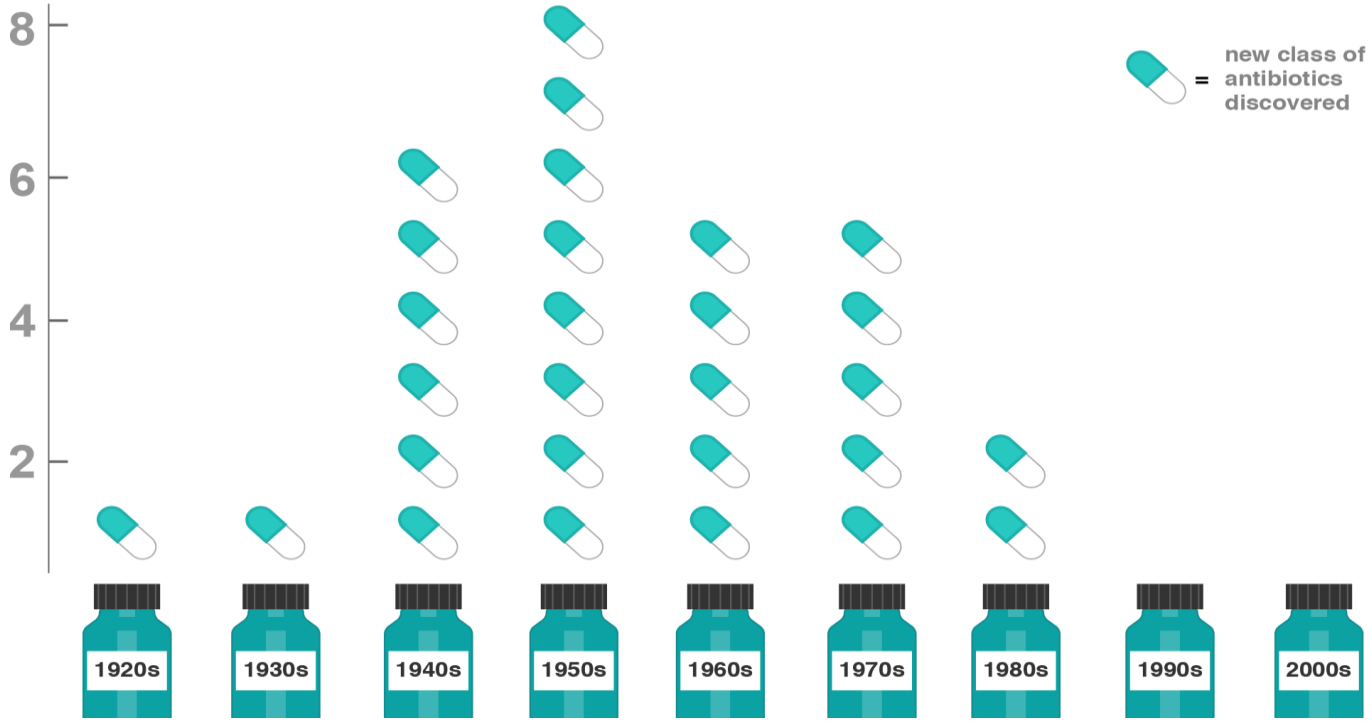
Antimicrobial Resistance (AMR)

In 2019, AMR caused an estimated 1.27 million deaths worldwide and contributed to a total of 4.95 million deaths.

AMR is estimated to cause 39 million deaths between 2025 and 2050, **equating to about 2 million deaths annually.**

The Lancet (2021)

The antibiotics are running out



Data source: Adapted from Silver, L.L. Challenges of Antibacterial Discovery. In Clinical Microbiology Reviews, 2011, 24:71-109.

Infection Prevention

is going to be everything

What makes a safety priority?

And who decides?

What makes a safety priority?

CAUTION: Not a like-for-like ranking of preventable deaths: definitions, periods, coverage and ascertainment vary. The falls count excludes deaths from other fall-related injuries; VTE deaths include events after discharge.

What makes a safety priority?

4700
deaths/annum

VTE Assessment

Mandatory assessment
95% target
Monitored performance

NHS
National Health Service (UK)

CAUTION: Not a like-for-like ranking of preventable deaths: definitions, periods, coverage and ascertainment vary. The falls count excludes deaths from other fall-related injuries; VTE deaths include events after discharge.

What makes a safety priority?

4700
deaths/annum

VTE Assessment

Mandatory assessment
95% target
Monitored performance

240,000 annum.
26 deaths

Falls

Every fall recorded
Harm falls formally reviewed
Monitored performance

NHS
National Health Service (UK)

CAUTION: Not a like-for-like ranking of preventable deaths: definitions, periods, coverage and ascertainment vary. The falls count excludes deaths from other fall-related injuries; VTE deaths include events after discharge.

What makes a safety priority?

4700
deaths/annum

VTE Assessment

Mandatory assessment
95% target
Monitored performance

240,000 annum.
26 deaths

Falls

Every fall recorded
Harm falls formally reviewed
Monitored performance

?

Resuscitation

Mandatory training
Structured review

NHS
National Health Service (UK)

CAUTION: Not a like-for-like ranking of preventable deaths: definitions, periods, coverage and ascertainment vary. The falls count excludes deaths from other fall-related injuries; VTE deaths include events after discharge.

What makes a safety priority?

4700 deaths/annum

VTE Assessment

Mandatory assessment
95% target
Monitored performance

240,000 annum. 26 deaths

Falls

Every fall recorded
Harm falls formally reviewed
Monitored performance

?

Resuscitation

Mandatory training
Structured review

?

‘Martha’s Rule'

Training
Mandatory documentation

NHS
National Health Service (UK)

CAUTION: Not a like-for-like ranking of preventable deaths: definitions, periods, coverage and ascertainment vary. The falls count excludes deaths from other fall-related injuries; VTE deaths include events after discharge.

What makes a safety priority?

4700
deaths/annum

VTE Assessment

Mandatory assessment
95% target
Monitored performance

240,000 annum.
26 deaths

Falls

Every fall recorded
Harm falls formally reviewed
Monitored performance

?

Resuscitation

Mandatory training
Structured review

?

‘Martha’s Rule'

Training
Mandatory documentation

28,500
HAI deaths /annum

Aseptic Technique

Ad hoc training
Little to no clinical assurance

NHS
National Health Service (UK)

CAUTION: Not a like-for-like ranking of preventable deaths: definitions, periods, coverage and ascertainment vary. The falls count excludes deaths from other fall-related injuries; VTE deaths include events after discharge.

So who decides?

The **Executive Board**



Assessing cost & value for HAI:
The incomplete equation

The visible cost

Training time & cost
Practical assessment
Equipment and facilities

The invisible cost

Cost of extended treatments
Cost of longer hospital stays
Litigation

The financial cost of healthcare-associated infection

NHS hospitals in England • modelled annual burden, 2016/17

£2.7 billion

Estimated annual cost to the NHS

Equivalent to approximately £7.4 million every day

7.1 million

hospital bed days attributable to HAI each year

Equivalent to about 19,450 beds occupied throughout the year

Infection prevention protects patients and releases scarce NHS capacity.

Source: Guest JF et al. BMJ Open 2020;10:e033367. doi:10.1136/bmjopen-2019-033367

England, not the whole UK. Historical model estimate, not a current expenditure total. Daily cost and bed equivalents calculated from annual estimates.

HAI carries a major financial cost internationally

Published estimates of annual healthcare-associated infection costs

EUROPE

€13–24 billion

Acute and long-term care facilities

25 million extra hospital days annually

WHO summary[1] • price year unspecified

UNITED STATES

US$35.7–45 billion

Direct medical costs to hospitals

Estimated cost of treating hospital HAI

CDC report, 2009[2] • 2007 US dollars

The financial burden of HAI extends far beyond the UK.

[1] WHO. World Hand Hygiene Day: Key facts and figures. [2] Scott RD II. CDC, 2009. Sources and detail in notes.

Estimates use different methods, settings, currencies and price years. They are not directly comparable or current expenditure totals.

How do **Executive Boards** prioritise?



The **Executive Board**

Are only as effective as the advice they receive from health care professionals



Could health professionals do more to make **the invisible more visible** for our Executive Boards?



So how is complacency interrupted?

To make the invisible more visible we need:

- Much better surveillance
- Better financial monitoring of HAI in real time
- Improved patient education. (We may be complacent of HAI, patients are unlikely to be)

The ultimate responsibility for driving safe care remains with care professionals. **We can’t wash our hands of it.**

What can **YOU** do to interrupt complacency?

Communicate to the organisation:

- Audit practice effectively
- Do current metrics help patients most?
- Improve local surveillance (If money is scarce target issues).
- ASAP Peer review
- Measure the organisation to the ASAP Patient Charter.
- Challenge the organisation to meet ANTT Accreditation
- Start small – aim big

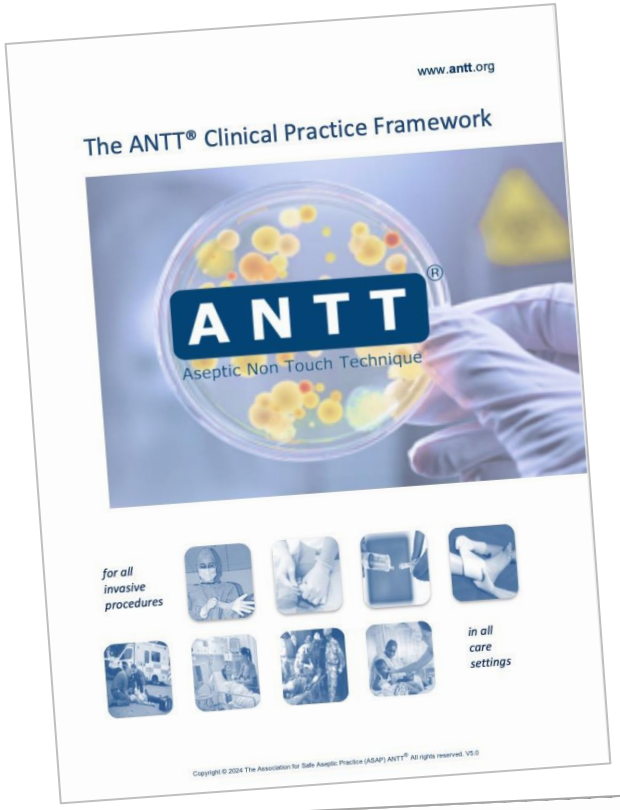
What does the Association for Safe Aseptic practice do?



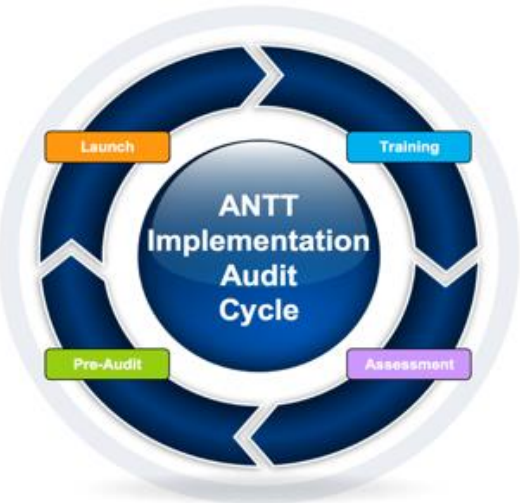
Email and telephone support



Staff Training













ANTT Audit



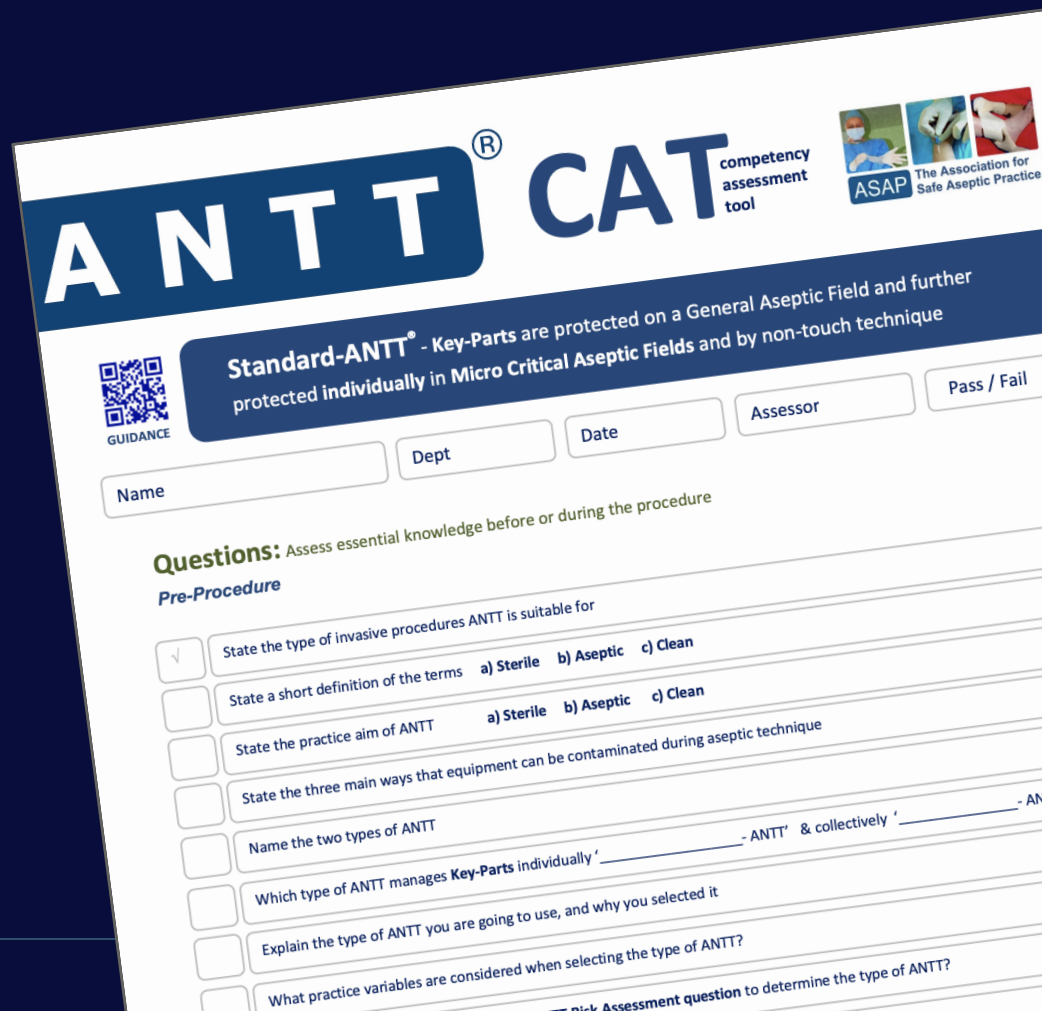


ANTT Competency Assessment

ANTT Competency Assessment

What HCWS's should know, do and be able to explain

KNOW • DO • EXPLAIN



Micro-organisms are everywhere:

Every surface
Every person
Every procedure



HCW's...
Need to **know** this
Take necessary steps to mitigate
Be able to **explain** this

Example Assessor question: *Has the HCW's mitigated the obvious and easy risks?*

Transition effectively into aseptic practice

STOP Normal Activities

↓

Transition

↓

START Aseptic Procedure



HCW's...

Need to **know** the importance of transitioning

Perform Standard Precautions/PPE

Be able to **explain** the rationale for effective transition

Example Assessor question: *Has the HCW transitioned effectively?*

Two techniques. One Aim of Asepsis

Standard-ANTT

INDIVIDUAL
Key-Part Protection



Surgical-ANTT

COLLECTIVE
Key-Part Protection



HCW's...
Need to **know** the aim of ANTT & the two types of protection
Perform individual or collective Key-Part Protection
Be able to **explain** this

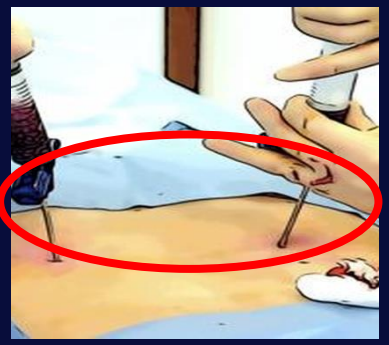
Example Assessor question: What is the aim of Surgical-ANTT? What type of key-Part Protection does Standard-ANTT involve?

Key-Part and Key-Site Protection is paramount



KEY-PARTS

Equipment parts that could transfer microorganisms to the patient



KEY-SITES

Patient portals of entry

HCW's...
- Need to **know** what Key-Parts & Key-Sites are
- **Identify** Key-Parts & Key-Sites
- **Explain the importance of Key-Part/Site Protection**

Example Assessor question: *Define what Key-Part sand Key-Sites are?*

The Key-Part Rule...

Aseptic Key-Parts must only touch other aseptic Key-Parts or Key-Sites

HCW's...
Must **know** the Key-Part & Key-Site rule
Identify Key-Parts & Key-Sites
Explain how the rule is achieved

Example Assessor question: How is the Key-Part & Key-Site rule achieved in practice?

ANTT Risk assessment determines the type of ANTT

“Is it easy to do this procedure without touching Key-Parts & Sites?"

YES **Standard-ANTT**

NO **Surgical-ANTT**

HCW’s…
Must **know** how to determine the type of ANTT
Perform the ANTT Risk Assessment
Explain what practice variables they consider

Example Assessor question: What practice variable do you consider during ANTT Risk Assessment

Three kinds of aseptic field



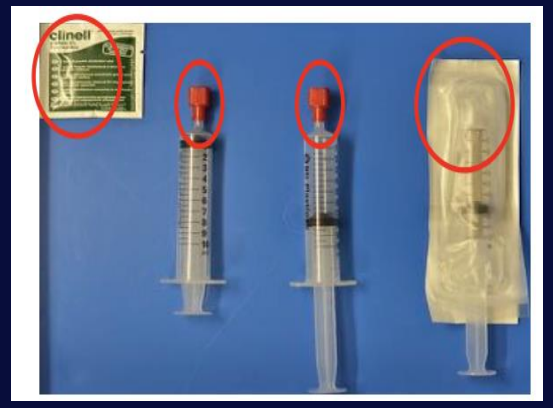
GENERAL ASEPTIC FIELD

Clean working area



CRITICAL ASEPTIC FIELD

Collective Key-Part protection



MICRO CRITICAL ASEPTIC FIELD

Individual Key-Part protection

HCW's...
Must **know** the three types of aseptic field in ANTT
Perform effective aseptic field management
Explain what aseptic fields are used for each type of ANTT

Example Assessor question: What aseptic fields would you use for Standard-ANTT?

Non-touch technique is fundamental to ANTT

Standard-ANTT

NTT is MANDATORY



Surgical-ANTT

Sterile gloves are worn, NTT is still desirable

HCW's…
Must **know** that NTT is mandatory in Standard-ANTT
Perform NTT effectively and safely
Explain how NTT is applied to both types of ANTT

Example Assessor question: How is NTT achieved in Surgical-ANYTT?

ANTT ANTT Assessor needs TWO forms of evidence



SHOW ME

Safe performance



TELL ME

Explain practice using ANTT practice terms