

COVID-19 Africa Action Network for Nurses and Nurse-Midwives (AAN)

AAN Annual Report

1 January-31 December 2021

**PROTECT NURSES
SAVE LIVES**



This Holiday Season,
make a donation to save a Nurse's life.



With your help, we can provide nurses with the PPE needed to drastically reduce the **risk of transmission** of COVID-19.

Donate at <https://africactionnetwork.com/donate>
so we can help protect nurses and save lives



The COVID-19 Africa Action Network
for Nurses and Nurse-Midwives
thanks you for supporting Nurses
and Nurse-Midwives



AAN Mission, Vision and Goals

AAN Mission

In the context of pandemic and endemic respiratory disease, AAN's mission is to provide information, technical support and funding for nurse and nurse-midwife projects in Eastern and Southern African to produce and distribute evidence-based, reusable, high performance, medical face masks for distribution to nurses, nurse-midwives, other healthcare workers and vulnerable groups.

AAN Vision

AAN vision is the development of locally based, environmentally sustainable and evidence-based PPE production systems, empowering health professionals, countries, and communities to meet their own PPE needs, promoting the rational use of high performance respiratory tract prophylactics to stem the spread of all infectious respiratory diseases.

Goals

- Local production and distribution of 1 million reusable medical masks to nurses, midwives, other HCWs and vulnerable groups in 12 Eastern and Southern African countries
- Specifications for the production and use of evidence-based reusable face masks that perform to the standards of internationally approved single use surgical masks, through rigorous R&D, testing, and expert input, (Dr Janine Jagger and Dr Edison Omollo among others).

AAN 2021 Results Overview

1. **Nurse/Midwife access to PPE:** AAN's 14 projects in 12 countries will have produced & donated 540,000 protective reusable medical masks to health facilities (see attached data chart) in 234 health facilities, 15 nursing schools, 7 IDP camps, 10 public schools.

AAN's goal of producing 1M masks over the grant period of 1 year was restrained by rolling lockdowns and social/political unrest in several project countries and by the exigencies of the R&D -testing processes.

2. **Additional beneficiaries:** Internally displaced persons in Somalia and Sudan; community health workers in all project countries, vulnerable older adults in Rwanda care homes; public school teachers & students in Eswatini; reproductive health networks and the residents of urban slum area residents in Kenya, and in remote rural communities in Uganda.

3. **PPE R&D and Testing:** AAN is on track to achieve a locally-made, reusable medical mask **with 98+% BFE and 100% SBP**

- Nelson Laboratories (International reference laboratory with headquarters in Utah):
 - Bacterial Filtration Efficiency (**BFE**) – reached 91.5% for Kenya masks
 - Synthetic Blood Penetration (**SBP**) – reached 100 % resistance to SBP for Kenya masks
- Technical University of Kenya, Dr Edison Omollo and Kenya Board of Standards (KEBS):
 - Determination of critical properties of materials being used – fibre composition, thread density, weave design
 - Microbial cleanliness of final products
 - Bacterial Filtration Efficiency – KEBS test equipment proved faulty/unreliable
- Living Labs (PATH) - to initiate in Q1 2022
 - Field testing of AAN masks for breathability, comfort, and washing resistance/durability to take place 1st quarter of 2022.
- 4. **Awards:** Innovations and Sustainability in Health Care Worker Safety Awards to AAN projects at Kampala International University Nursing School (2020) & the Reproductive Health Network Kenya (2021).

5. **Nursing and organisational development** - See attached AAN brief to PATH

Methodology to achieve efficacy of AAN reusable locally produced cloth masks (DR Omollo-Technical University of Kenya)

MATERIALS

- Eswatini
- Kenya
- Uganda
- Sudan
- South Africa
- Somalia

FABRIC CHARACTERIZATION

- Mask design
- Fibre composition
- Thread density
- Weave design

PERFORMANCE TESTING

- Microbial Cleanliness
- Synthetic Blood Penetration Resistance
- Bacterial Filtration Efficiency

Testing: ISO standards
Performance criteria: Surgical mask

AAN R&D and testing

- Nelson Laboratories (International reference laboratory with headquarters in Utah):
 - Bacterial filtration efficiency (BFE)
 - Synthetic Blood Penetration (SBP)
- Technical University of Kenya, Dr Edison Omollo and Kenya Board of Standards (KEBS):
 - Fibre composition, thread density, weave design of materials used
 - Microbial cleanliness
 - Bacterial filtration efficiency
- Living Labs (PATH) - 1st quarter of 2022
 - Field testing of AAN masks for breathability, comfort, washing resistance

AAN country projects (in alpha order):

14 country-projects (phase 1 & 2) to produce reusable PPE production projects in 11 countries; In addition to projects initiated in:

- Eswatini
- Kenya
- Lesotho
- Malawi phase 2
- Somalia
- South Africa
- Sudan
- Uganda - KIU Nurses & Midwives Students' Association
- Uganda phase 2 -KIU Nursing School & UNMU
- Zambia
- Zanzibar
- Zimbabwe

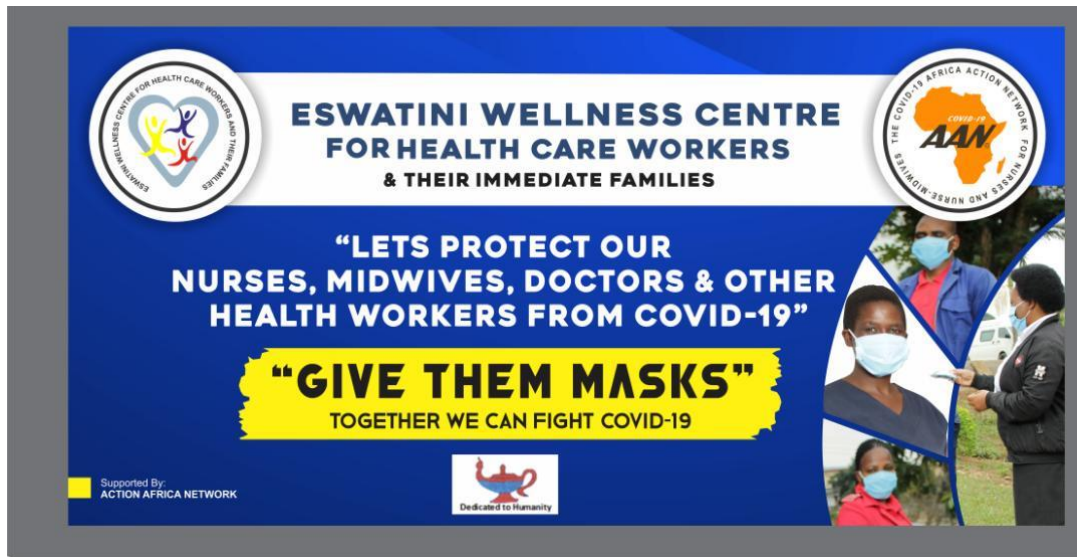
AAN country projects

Eswatini Wellness Centre for Health Care Workers:

10 health facilities including Covid centres, public schools , nursing schools

Lesotho Nursing Council & CHAL Schools of Nursing

To initiate in 1st quarter 2022



AAN country projects

Reproductive Health Network Kenya:
33 health facilities, public and private



Malawi Organisation of Nurses and Midwives- phase 1& 2:
32 health facilities, 3 schools of nursing, Nat'l Assoc of Albinism



AAN country projects

Somalia Women's Empowerment Development Organisation (WEDO): 10 hospitals, 7 IDP camps



Sudan – IVWG, Sudanese Critical Nursing Society and ZagRags: 43 health facilities (each 2 mask pack included a bar of soap for washing the masks)



AAN country projects

South Africa - University of Pretoria Dept of Nursing Science and Ubuntu Health & Wellness Institute: Full initiation is pending mask materials testing results and procurement of best performance materials.



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA



Kampala International University Student Nurses Association: Established a sustainable enterprise to supply masks to student nurses.



AAN country projects

Uganda phase 2 –KIU Nursing School & Uganda Nurses & Midwives Union: 10 hospitals and clinics in 4 remote/rural areas.



Zambia – Rusangu University School of Health Sciences: 24 health facilities across all provinces. Full initiation is pending mask materials testing results and procurement of best performance materials.



AAN country projects

Zanzibar Nursing and Midwifery Council: 10 hospitals and 2 health institutions on various of the Zanzibar islands.



Zimbabwe Nurses Association: 35 health institutions in 10 provinces.



More About AAN

- In March 2020, AAN began life with an idea: in the Covid-19 context where single use PPE was inaccessible for nurses and midwives in resource poor settings, reusable evidence-based face masks produced locally by and for nurses and midwives could offer autonomy from unsustainable global supply chains, develop local know-how and reduce the disastrous environmental impacts of single use PPE.
- Conceived by an all-volunteer global group of healthcare professionals, AAN took action toward an initial vision: providing funds and technical support for the local production of 1 Million reusable medical face masks by nurse/midwife led projects in Southern and Eastern African countries.
- A linked AAN vision is the development of local, environmentally sustainable PPE production, empowering health professionals and communities in the region to meet their PPE needs, building on local knowledge with minimal environmental impact and skilled labour.

For more information: **AAN 2020 Annual Report** <https://africactionnetwork.com/wp-content/uploads/2021/03/AAN-Annual-Report- FINAL-15.03.2020.pdf>

Website: www.africactionnetwork.com

Instagram: <https://www.instagram.com/africactionnetwork/>

Twitter: <https://twitter.com/AfricaActionNe2>