

Careless disposal of antibiotics could produce 'ferocious superbugs,' UN environment experts warn

5 December 2017 – Growing antimicrobial resistance linked to the discharge of drugs and some chemicals into the environment is one of the most worrying health threats today, according to new research from the United Nations that highlights emerging challenges and solutions in environment.

“The warning here is truly frightening: we could be spurring the development of [ferocious superbugs](#) through ignorance and carelessness,” said Erik Solheim, chief of the UN Environment Programme ([UNEP](#)), on Tuesday.

He added that studies have already linked the misuse of antibiotics in humans and agriculture over the last several decades to increasing resistance, but the role of the environment and pollution has received little attention.

As such, the [Frontiers Report](#), launched on the second day of the UN Environment Assembly ([UNEA](#)), which is running through 6 December at UNEP headquarters in Nairobi, Kenya, looks at the environmental dimension of antimicrobial resistance in nanomaterials; marine protected areas; sand and dust storms; off-grid solar solutions; and environmental displacement – finding the role of the environment in the emergence and spread of resistance to antimicrobials particularly concerning.

“This needs priority action right now, or else we run the risk of allowing resistance to occur through the back door, with potentially terrifying consequences,” stressed Mr. Solheim.

[Antimicrobial resistance](#) occurs when a microorganism evolves to resist the effects of an antimicrobial agent. Globally about 700,000 people die of resistant infections every year because available antimicrobial drugs have become less effective at killing the resistant pathogens.

Clear evidence shows that antimicrobial compounds from households, hospitals, pharmaceutical facilities and agricultural run-off released into the environment, combined with direct contact between natural bacterial communities and discharged resistant bacteria, is driving bacterial evolution and the emergence of more resistant strains.

Once consumed, most antibiotic drugs are excreted un-metabolized along with resistant bacteria – up to 80 per cent of consumed antibiotics, according to the report. This is a growing problem, as human antibiotic use this century has increased 36 per cent and livestock antibiotic use predicted to increase 67 per cent by 2030.

Evidence shows that multi-drug resistant bacteria are prevalent in marine waters and sediments close to aquaculture, industrial and municipal

discharges.

Solving the problem will mean tackling the use and disposal of antibiotic pharmaceuticals as well as the release of antimicrobial drugs, relevant contaminants and resistant bacteria into the environment, the report says.

Other evolving issues

The report also considers other emerging issues, such as nanomaterials in which little is understood about their long-term effects. According to UNEP, past lessons reveal that “no evidence of harm” does not equal “evidence of no harm,” meaning that research into nanomaterials is essential.

Another area it highlighted was in securing Marine Protected Areas as one excellent option for maintaining or restoring the ocean’s and coastal ecosystems health, and a potential driver for economic benefits derived from them.

The Frontiers Report also noted that sand and dust storms, which impoverish arid landscapes soils, and can cause economic losses, indicted that strategies promoting sustainable land and water management must be integrated with measures addressing climate change mitigation and adaptation.

Pointing out that nearly one billion people live without electricity, the report emphasized the importance of bridging the off-grid energy gap as a possible key to achieving the [2030 Agenda](#) and its Sustainable Development Goals ([SDGs](#)) for universal access to affordable, reliable energy services.

Finally, in an era of unprecedented mobility, the report points out that migration produces environmental changes that include pollution, deforestation and biodiversity loss, saying that unless we deal with long-term environmental vulnerability and build resilience, environmental displacement will become a new normal.

[Caring for the planet starts with ‘the ground we walk on;’ UN says on World Soil Day](#)

5 December 2017 – Soil is a major carbon storage system, essential for sustainable agriculture and climate change mitigation, the United Nations agriculture agency said Tuesday, launching on [World Soil Day](#) a comprehensive global map showing the amount of carbon stocks contained in soil.

“[Soil is the foundation of agriculture](#) , it is where food begins,” said Maria Helena Semedo, Deputy Director-General of the UN Food and Agriculture

Organization ([FAO](#)).

“Maintaining the soil’s important functions and ecosystem services to support food production and increase resilience to a changing climate calls for sustainable soil management practices,” she added.

Soil organic matter, with carbon as its main component, is crucial to soil health and fertility, water infiltration and retention as well as food production.

The world’s soils act as the largest terrestrial carbon sink, reducing greenhouse gases. Intensifying its role could significantly offset the rapid rise of carbon dioxide in the atmosphere.

In an historic decision on agriculture, the 2017 UN Climate Change Conference in Bonn ([COP23](#)) recognized the need for improved soil carbon, soil health and soil fertility. The [Global Soil Organic Carbon Map](#), the most comprehensive to date, illustrates the amount of organic carbon stock in the first 30 cm of soil – revealing natural areas with high carbon storage that require conservation along with regions where further sequestration would be possible.

This information can prove a powerful tool to guide decision-making on practices aimed to preserve and increase the current soil carbon stocks – helping win the fight against climate change.

The map shows that globally the first 30 cm of soil contains around 680 billion tons of carbon – almost double the amount present in our atmosphere.

The degradation of one third of the world’s soils has already prompted an enormous release of carbon into the atmosphere. Restoring these soils can remove up to 63 billion tons of carbon, significantly reducing the effects of climate change.

FAO’s [Intergovernmental Technical Panel on Soils](#) supported the map’s development, including by putting together the national carbon maps of more than 100 countries, making a concrete contribution towards Sustainable Development Goal ([SDG](#)) 15, Life on Earth.

The next step is for countries to monitor their national soil information systems for organic carbon levels to make evidence-based decisions on how to manage and monitor their soils.

[**UN rights chief calls for probe into**](#)

crimes against Rohingya, says genocide 'cannot be ruled out'

5 December 2017 – The United Nations human rights chief on Tuesday called for an international criminal probe into the perpetrators of the widespread and brutal attacks that have driven more than 600,000 Rohingya Muslims from Myanmar since August, noting that “elements of genocide” against the minority could not be ruled out.

Rohingyas have faced decades of statelessness, policies of dehumanizing discrimination and segregation, and the horrific violence and abuse, along with the forced displacement and systematic destruction of villages, homes, property and livelihoods, said UN High Commissioner for Human Rights Zeid Ra'ad Al Hussein.

“Given all of this, can anyone rule out that [elements of genocide](#) may be present?” he told the Human Rights Council in Geneva in a special session convened in response to the ongoing exodus of Rohingyas from Myanmar to Bangladesh.

“Ultimately, this is a legal determination only a competent court can make. But the concerns are extremely serious, and clearly call for access to be immediately granted for further verification,” he added.

The High Commissioner urged the Council to consider making a recommendation to the UN General Assembly that it establish a new impartial and independent mechanism, complementary to the work of the fact-finding mission into the latest wave of violence and abuses, to assist individual criminal investigations of those responsible.

By 2 December, an estimated 626,000 refugees – or more than half the estimated number of Rohingya living in Rakhine state – had fled to Bangladesh since October 2016, and particularly since August 2017. The Myanmar Government has said its latest campaign in northern Rakhine was in response to attacks by insurgents.

The High Commissioner reported that his Office ([OHCHR](#)) had sent three teams to Bangladesh this year to monitor the situation and interview refugees. He said witnesses reported acts of appalling barbarity committed against the Rohingya, including deliberately burning people to death inside their homes; murders of children and adults; indiscriminate shooting of fleeing civilians; widespread rapes of women and girls; and the burning and destruction of houses, schools, markets and mosques.

Mr. Zeid said he had reported to both the Human Rights Council and the UN Security Council about the persistent allegations of serious human rights violations by security forces. Yet, he added, prosecutions for alleged acts of violence against them, including sexual violence – whether committed by security forces or civilians – appeared to be extremely rare. Refusal by

international as well as local actors to even name the Rohingyas as Rohingyas – to recognize them as a community and respect their right to self-identification – is yet another humiliation, and it creates a shameful paradox: they are denied a name, while being targeted for being who they are,” he added.

“The world cannot countenance a hasty window-dressing of these shocking atrocities, bundling people back to conditions of severe discrimination and latent violence which seem certain to lead in the future to further suffering, and more movements of people,” Mr. Zeid said.

[West and Central Africa lagging far behind world in HIV response, warns UNICEF](#)

5 December 2017 – Four in five children living with HIV in West and Central Africa are still not receiving life-saving antiretroviral therapy and AIDS-related deaths among adolescents aged 15-19 are on the rise, the United Nations Children’s Fund ([UNICEF](#)) has warned.

“It is [tragic that so many children and adolescents today are not receiving the treatment they need](#) just because they have not been tested,” said Marie-Pierre Poirier, the UNICEF Director for the region, in a news release, Tuesday, calling for improvement of early diagnosis and access to HIV treatment and care for children.

According to UNICEF, West and Central Africa has the lowest paediatric antiretroviral treatment coverage in the world, with only 21 per cent of the 540,000 children (aged 0-14) living with HIV receiving antiretroviral treatment in 2016 compared to 43 per cent globally.

A major cause behind this is the limited capacity of the countries to perform the tests needed for early infant diagnosis of HIV.

“Without knowing a child’s HIV status, his or her family is less likely to seek the treatment that could prevent the tragedy of a child’s death from AIDS-related illnesses,” said UNICEF.

The situation is worse among adolescents: the annual number of new HIV infections among those aged 15-19 years in the region now exceeds that of children aged 0-14 years. These new infections occur mostly through unprotected sexual contact and among adolescent girls.

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Equally concerning, according to [Step Up the Pace: Towards an AIDS-free](#), a recently released UNICEF report, is that the region has seen a 35 per cent rise in the annual number of AIDS-related deaths among adolescents aged 15-19 years – the only age group in which the number of AIDS-related deaths increased between 2010 and 2016.

With the region's youth population expected to grow significantly within the coming decades, especially in countries like the Democratic Republic of the Congo (DRC) and Nigeria, the numbers of children and adolescents becoming infected with HIV and dying from AIDS is likely to remain high, unless the HIV response – both prevention and treatment – improves dramatically, the report warns.

To overcome these hurdles, the report calls for key strategies to enable countries accelerate efforts to curb the spread of disease.

In particular, it proposes a differentiated HIV response focusing on unique epidemiological and local contexts in each country and community; integration of HIV services into key social services including health, education and protection; community ownership and local governance of the HIV response including working with families to help reduce stigma, access prevention and treatment; and investment in innovations to remove barriers to diagnostic and biomedical approaches such as point of care diagnostics, HIV self-testing and pre-exposure prophylaxis.

– Leaders of the region have endorsed a Catch-Up plan aiming to triple the number of people on treatment in the region – including children – by the end of 2018, the key issue now is to accelerate implementation, said Luiz Loures, the Deputy Executive Director of the Joint United Nations Programme on HIV/AIDS ([UNAIDS](#)).

– Countries should urgently put in place more effective strategies for early infant diagnosis of HIV, and start reducing inequity in children's access to treatment.

[Iraq: Ambiguity over legal age of marriage could devastate childhoods, warn UN officials](#)

4 December 2017 – Voicing concern over proposed amendments to laws governing marriage in Iraq – in particular the ambiguity over the legal age of marriage

– senior United Nations officials called on the country to ensure adequate protection for children across Iraq.

“It is a matter of concern that these draft amendments are silent on the minimum age of consent to marriage and do not apply to all components of Iraqi society,” said Representatives of the Secretary-General on Sexual Violence in Conflict, Pramila Patten, and for Children and Armed Conflict, Virginia Gamba, in a [statement](#), the Iraqi Council of Representative’s approval in principle of the draft law – that does not explicitly set the minimum age of marriage to 18-years for both women and men – represents a significant step back from commitments to prevent and address sexual violence.

The two UN senior officials also raised fears of increase in divisions within the country at a time when Iraq is recovering from the conflict with the Islamic State of Iraq and the Levant (ISIL or Da’esh).

They also cautioned that the proposed amendments could lead to possible breaches of Iraq’s legally binding commitments under the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) as well as the Convention on the Rights of the Child (CRC).

“My Office was repeatedly assured by Prime Minister Haider al-Abadi and the Speaker of the Council of Representatives Salim al-Jabouri that the fulfilment of each of the pillars of the Joint Communiqué are essential to Iraq’s post-Da’esh reconstruction,” Ms. Patten stated.

A key pillar of the Joint Communiqué (signed by the Iraqi Foreign Minister with the UN, formally committing to prevent and address conflict-related sexual violence) is to ‘support legislative and policy reform to strengthen protection from and service response to sexual violence crimes.

Noting that the boys and girls of Iraq, already victims of grave violations resulting from years of conflict with Da’esh, are now “at risk of being deprived of their childhood,” Ms. Gamba called on the Government to “take all necessary actions to protect every child by preventing the adoption of policies that can harm children already exposed to armed conflict.”

SRSR Patten and Gamba concluded by strongly “urging the Government of Iraq to reconsider these proposed amendments to the Personal Status Law” and reaffirming their commitment “to stand with both the Government and people of Iraq to ensure that the scourge of sexual violence is eliminated and that children affected by armed conflict are protected.”