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Reducing Maternal and Neonatal Tetanus in Chad

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Abstract
Chad is currently the country in which infants and mothers are most at risk for maternal and neonatal tetanus (MNT). We created a program to provide education and autoclaves to sanitize tools for birth. We will measure results using a survey before and after our program is implemented. Our project is projected to reduce the incidence of MNT.

Objectives
• Provide sustainable education program for mothers and midwives about dangers and prevention of MNT
• Provide two autoclaves per region of Chad
• Reduce MNT incidence

Background
• MNT: bacterial infection contracted during unsanitary birth
• Chad's vaccination rate is less than 60%
• 86% of births are unattended in Chad
• Safer Births in Chad: charity assisting Chad Midwives' Association with improving birth conditions
• Autoclave: sterilization device that requires heat and water

Methods
Reduce Neonatal and Maternal Tetanus In Chad
Educate Midwives Association
Autoclaves in every region
Educate Mothers
More sanitary births

Solar Powered Autoclave
CAUTION: Reaches High Temperatures
Instructions: Use in sunny area. Fill boiler with hot water and place tools in vessel. Once indicator light comes on, run for 30 minutes. When pressure returns to 0, slowly open lid from behind then carefully remove tools using tongs.

Advantages of Solar Sterilization

Cost
Effectiveness
Chemical Sterilants
Tabletop Autoclave
Centralized Hospital
Boiling water
Solar Autoclave

Our approach to reducing MNT is education and prevention. We will provide two solar powered autoclaves to each of the 22 regions in Chad. We created an educational program for Safer Births in Chad, who will present this program to the midwives and regional autoclave operators who will share the knowledge with mothers in Chad.

Anticipated Results
• Fewer cases of MNT
• More knowledgeable population
• Autoclaves can be used for other medical procedures

Conclusions
• Prevention of MNT reduces infant and maternal mortality rates
• Less risk associated with childbirth
• We recommend working with larger organizations with local connections to spread information

References
disease.causes
http://www.who.int/medical_devices/poster_a18.pdf