

## Why we should not GPS athletes for anti doping purposes

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## Introduction

- Some prohibited substances are detectable only for a limited period of time in an athlete's body while still maintaining a performance-enhancing effect.
- Designed to protect the integrity of sport, out-of-competition doping controls increase the efficiency of the anti-doping programs.
- One approach, the “whereabouts system,” was introduced as a mechanism to enable out-of-competition testing. Its efficiency depends on the ability to be able to test athletes at times at which cheaters are most likely to use prohibited substances and methods.
- Athletes must not be aware such testing will occur.
- Is Geolocation the answer? Or does it cause more problems?





## Whereabouts: heavily criticised

Excessive surveillance character (Waddington 2010)  
Infringement of privacy (Pendlebury and McGarry, 2009)  
High costs, and the burden it places on athletes (Overbye and Wagner, 2014).

Although athletes themselves often see the whereabouts system as a ‘necessary evil’ (Hanstad and Loland, 2009), they have also indicated that the system interfered negatively in everyday life. (Valkenburg, 2014; Overbye and Wagner, 2014)  
Recently, several athletes have publicly declared that they would prefer to be “geolocalized” – that is, to have their location identified automatically by a wearable or implantable technology – than having to regularly fill in and update their whereabouts information into WADA’s ADAMS system (Valkenburg, 2014 ; MacGregor, 2013).





## What are the potential advantages of geolocalization for athletes?

- Implantable devices could be used to provide continuous information about their location and whereabouts. (Halt, 2009)
- Reduce likelihood of missing an out-of-competition test
- Administrative burden on athletes reduced (Overbye and Wagner, 2014)
- Provide anti-doping officials with supplementary tools to locate the athletes and perform out-of-competition controls, in combination with altitude and ABP data.





## What are the potential disadvantages of geolocalization for athletes?

- Potential infringement of an athlete's right to privacy. (Pendlebury and McGarry, 2009)
- Raises questions about when it would be appropriate for anti-doping agencies to access information about athletes' whereabouts. (MacGregor et al, 2013)
- Principle of proportionality : whereabouts pursue a legitimate aim (e.g., anti-doping) but should not interfere unnecessarily with an individual's rights and interests (Schaffelhofer, 2015).
- Heightened intrusion justified (Hardie, 2014)
- RTP already an exceptional matter (Hanstad and Loland, 2009)





## What are the potential disadvantages of geolocalization for athletes?

- Legitimacy: according to one study, only a minority of athletes support such devices. (Valkenburg et al., 2014)
- Increased concerns about data security (given constant monitoring potential)
- Athletes might fear that their data could be hacked, leading to a potentially negative impact on their career. (Evans et al, 2016)
- Considering the potential societal impact of the use of such technologies, the likelihood of increased harm in the trust and reputation of anti-doping agencies and WADA is bigger than any potential benefit from use of such technology.





## GPS Whereabouts: pragmatic concerns

- In order to allow anti-doping officials to plan anti-doping controls athletes would still be required to submit their planned locations in ADAMS, as location-based devices only identify individuals at a given point in time and not in the future
- GPS tracking can provide inaccuracies in dense forests or between tall buildings, or could be affected by other system failures (Michael et al.; 2006).
- Athletes could also forget, lose or break their tracking devices (accidentally or otherwise).





## Conclusions

1. the use of geolocalization could be useful in a research setting with the goal of understanding associations between genotype, phenotype and environment.
2. the use of geolocalization of part of or as replacement of whereabouts rules are, however, replete with ethical concerns. While benefits remain largely hypothetical and minimal, the potential invasion of privacy and the data security threats are real. Currently, it seems likely that the technology could result in more harm than benefit to athletes, the sport and the anti-doping movement.
3. considering the impact on privacy, data security issues, the societal ramifications and pragmatic considerations, at this time the use of geolocalisation should neither be mandated as a tool for disclosing whereabouts, nor implemented on a voluntary basis.

