

General Questions: Training, Reliability, Becoming a Trainer, Translation**ADOS-2****Q: What is the ADOS-2?**

The ADOS-2 is a revision of the ADOS that includes revised algorithms and a new Comparison Score for Modules 1 through 3, updated protocols with clearer administration and coding guidelines, and a new Toddler Module designed for minimally verbal children ages 12-30 months. The ADOS-2 is available for purchase through WPS at www.wpspublish.com. See below for more information about transitioning from using the ADOS to the ADOS-2.

Q: Who may administer the ADOS-2?

ADOS-2 users should have prior education, training and experience in conducting individually administered test batteries and should have a background and experience in the assessment of ASD. Some examples of clinicians who make use of the ADOS-2 in their daily work are clinical and school psychologists, psychiatrists, occupational therapists, and speech pathologists.

Q: What is the ADOS-2 Introductory/Clinical Training for Modules 1-4?

The ADOS-2 Introductory/Clinical Training for Modules 1-4 takes place over two days and uses a lecture format to introduce people to the basic principles of administering and scoring Modules 1-4 of the ADOS-2. This introductory training is intended for professionals who are interested in an introduction to the ADOS-2, including those who intend to use the ADOS-2 for clinical purposes. It is also a required first step in the process of establishing research reliability. It includes a combination of large group lecture, demonstration, and scoring of the ADOS-2. Individuals planning to use the ADOS-2 in clinical or school settings are strongly encouraged to attend an ADOS-2 Introductory/Clinical Training before using the instrument. **Note that in all cases, simple attendance at the workshop is not sufficient to ensure competent use of the ADOS-2.**

Q: What is the ADOS-2 Introductory/Clinical Training for the Toddler Module (Module T)?

For clinicians or researchers who plan to use the new Module T, it is highly recommended that they attend a 1-day Introductory/Clinical Module T training that provides information specific to use of the new Toddler module. Clinicians or researchers who cannot attend an in-person Module T training should order and study the Module T video guidebooks available through WPS in the ADOS-2 Training Upgrade Package. In addition, individuals who plan to use Module T should carefully review all administration and coding procedures in the Module T section of the ADOS-2 manual AND practice administration and coding with several toddlers BEFORE administering Module T for clinical or research purposes.

Note: Prior training in and experience with Modules 1-4 is a necessary pre-requisite for use of Module T. Trainees who wish to attend the ADOS-2 Introductory/Clinical Training for Module T must first attend an ADOS-2 Introductory/Clinical Training for Modules 1-4 and/or complete the WPS video guidebook training package.

Q: What is the ADOS-2 Advanced/Research Training?

ADOS-2 Advanced/Research training focuses on bringing attendees' administration and scoring skills to a higher level of inter-rater agreement with the scoring practices of skilled examiners. The heightened level of accuracy is needed to ensure that item-level coding is comparable at different labs in different parts of the world where research is being conducted. Trainees must have completed the ADOS or ADOS-2 Introductory/Clinical Training in person prior to attending the ADOS-2 Advanced/Research training.

Q: How can I get training on the ADOS-2?

CADB offers both ADOS-2 Introductory/Clinical Trainings and ADOS-2 Advanced/Research Trainings at least once per year. Please visit: <http://www.cornellpsychiatry.org/education/ados-research.html>

Groups of clinicians or researchers can also arrange for ADOS-2 trainings by contracting on an individual basis with an ADOS-2 certified independent trainer. A list of independent trainers can be found at: <http://www.cornellpsychiatry.org/education/autism.html>

ADOS-2 Introductory/Clinical trainings are also available through WPS in many locations. In addition, WPS offers a video guidebook training package that may serve as a substitute for the Introductory/Clinical training. However, the video guidebook training package does not fulfill the initial training requirement for those who are interested in achieving research reliability. Therefore, if you plan to attend an ADOS-2 Advanced/Research Training and use the ADOS-2 in research, you must first attend an ADOS Introductory/Clinical Training in person.

Q: I am already trained on the ADOS. How do I update my training to the ADOS-2?

ADOS users are responsible for ensuring that they update their skills to become familiar with the ADOS-2 administration and scoring procedures. The ADOS-2 is an updated revision of the ADOS with several new features. However, users of the ADOS are expected to be able to transition smoothly to using the ADOS through careful self-study. ADOS users may also wish to update their training by attending an ADOS-2 Introductory/Clinical and/or Advanced/Research training, but this is not required.

For clinicians or researchers who plan to use the new Module T, it is highly recommended that they attend a 1-day Introductory/Clinical Module T training that provides information specific to use of the new Toddler module. Clinicians or researchers who cannot attend an in-person Module T training should order and study the Module T video guidebooks available through WPS in the ADOS-2 Training Upgrade Package. In addition, individuals who plan to use Module T should carefully review all administration and coding procedures in the Module T section of the ADOS-2 manual AND practice administration and coding with several toddlers BEFORE administering Module T for clinical or research purposes.

Q: Can I attend an Advanced/Research Training specific to the Toddler Module (Module T)?

Some researchers or clinicians who plan to use Module T in their research and/or everyday clinical practice may wish to obtain more in depth training on Module T administration and scoring procedures. We plan to offer Module T Advanced/Research trainings at CADB in the future. In the

meantime, please contact the CADB training team for information about independent trainers with extensive experience using Module T who can provide Module T Advanced/Research trainings privately.

Q: Do I need to establish research reliability on the ADOS-2?

If you plan to use the ADOS-2 for research purposes, you will need to establish reliability on the instrument **before you begin collecting data**. Establishing and maintaining reliability is crucial to maintaining consistency and comparability across research studies on ASD.

If you plan to use the ADOS-2 for clinical purposes only, you are welcome, but not required, to establish research reliability on the instrument.

Q: What is the process for establishing reliability on the ADOS-2?

To obtain reliability on the **ADOS-2**, you must first complete both the Introductory/Clinical training and the Advanced/Research training. Once you have completed the ADOS-2 Advanced/Research Training, you must establish reliability on the instrument **before you begin any data collection for a research project**.

There are two factors in establishing your reliability: 1) showing that you have learned the standardized administration procedures, and 2) showing that you understand coding rules and have achieved at least 80% agreement on the protocol and the algorithm with CADB or an independent trainer. This is accomplished through the following:

1) Demonstrate standardized administration procedures

You must demonstrate your understanding of standardized administration procedures on 3 separate administrations each for Modules T/1/2 and Modules 3/4. Demonstrations of administration procedures can include:

- Two video recordings of yourself administering two different ADOS-2 modules that you bring to the training workshop for review and feedback
- Administrations of the ADOS-2 you do during the Advanced/Research Training workshop
- Your post-course taped ADOS-2 administrations submitted to us for reliability scoring

2) Establish reliability in coding the ADOS-2

You must reach 80% agreement with CADB or an independent trainer on 3 administrations of the ADOS-2 Modules T/1/2 and 3 administrations of ADOS-2 Modules 3/4. Agreement is calculated separately for the diagnostic algorithm and for the protocol in total, and you must achieve 80% agreement on both. If you are working with CADB or an independent trainer to establish reliability, administrations can include:

- Administrations of the ADOS-2 during the Advanced/Research Training
- Your scoring of the administrations on the post-course tape we send home with you after the Advanced/Research Training
- Your post-course taped ADOS-2 administrations submitted to us for reliability scoring

You also may establish reliability with another reliable coder who works with you at your work site, provided you see them on a daily basis. See below for details.

ADOS TAPE SUBMISSION GUIDELINES**Q: Can I establish reliability on the ADOS-2 with someone in my lab (instead of with CADB or an independent trainer)?**

If you work with someone who has previously established reliability on the ADOS-2 with CADB or an independent trainer, you can complete the steps of establishing reliability with that person, as long as you are working at the same physical site and have frequent (i.e., daily) contact to talk about coding and administration issues. To establish reliability with someone at your site, you must achieve 80% agreement in coding with the ADOS-2 reliable examiner on both the protocol and the algorithm across 3 consecutive administrations of Modules 1 / 2 and 3 consecutive administrations of Modules 3 / 4. Within these 6 administrations, all 4 modules must be represented. Your ADOS-2 reliable examiner also must see you administer all 4 modules at some point during the reliability process. You and the reliable examiner must double-score administrations (that is, code an administration independently, then check your reliability with one another) until you have established 80% agreement among yourselves on 3 independently scored administrations of the ADOS.

Q: I am already research reliable on Modules 1-4 of the ADOS. Do I have to re-establish research reliability on Modules 1-4 of the ADOS-2?

Individuals who previously established research reliability on Modules 1-4 of the ADOS are considered to be research reliable on Modules 1-4 of the ADOS-2. However, these individuals are responsible for updating their training on the ADOS-2 through careful review of the new manual and protocols, consensus scoring with other ADOS-2 research reliable examiners, and/or attendance at ADOS-2 trainings and/or booster trainings.

Q: I am already research reliable on Modules 1-4 of the ADOS. How do I establish research reliability on Module T?

Individuals who previously established research reliability on Modules 1-4 of the ADOS can “extend” their research reliability to the new Toddler Module (Module T). This is done by 1) carefully reviewing all administration and coding procedures in the Module T section of the ADOS-2 manual, 2) attending a 1-day Clinical/Introductory Module T training (offered at CADB or by an independent trainer with extensive Module T experience) AND/OR studying the Module T video and guidebook available through WPS in the ADOS-2 Training Upgrade Package, and 3) practicing administration and coding with several toddlers and consensus coding with other research reliable examiners. These steps should all be completed BEFORE using Module T for research purposes.

Q: Once I am research reliable on the ADOS-2, how do I maintain my reliability?

It is essential in any research project to establish procedures for maintenance of reliability. We recommend that you double-score and reassess reliability with other reliable coders for approximately one of every 5 to 10 administrations of the ADOS-2, depending on how frequently you administer the instrument. It is easy for even very skilled clinicians to “drift” in scoring if there is not frequent discussion and a chance to compare independently made scores. Attendance at “booster trainings” is also helpful in ensuring continued reliability over time.

Q: Once I have completed ADOS-2 Introductory/Clinical Training, can I train someone else?

No. The Introductory/Clinical Training is designed to provide training to individual users only. Completion does not provide the additional materials and experiences required for the skills needed to

train others. Further training through the Advanced/Research Training and subsequent reliability process is required before others may be trained (see below).

Q: Once I have established research reliability on the ADOS-2, can I train other people at my site?

After you are reliable with CADB or another independent trainer, you can then train other research group members to reliability who are in the same physical location as you are. Collaborators must be physically at the same site. Thus, though Weill Cornell Medical College and Columbia University Medical Center are collaborating, we are not in the same location. Even though the University of Chicago and Northwestern University are in the same city, they are not the same site. We recommend that, with colleagues at your site, you double-score administrations (that is, code an administration independently, then check your reliability with one another) until you have established 80% agreement amongst yourselves on three independently scored administrations of the ADOS-2. This can include the tapes we have given you. We request that you only train people who are in your immediate research group (who are at the same site as you are and whom you see on a daily basis).

If you choose to establish reliability with someone in your lab as opposed to establishing reliability with CADB or an independent trainer, you are not permitted to then train other people in your lab. Thus, if you need to be able to train other people in your lab, you must complete the research reliability process with CADB or an independent trainer.

Q: Can I train people at *other* sites on the ADOS-2?

If you need to be able to train others outside your lab, you must complete the requirements for becoming a certified independent trainer. Becoming a trainer involves first getting reliable with us, then coming to another training session as a group leader and completing additional reliability tapes. This procedure is relevant both for researchers and for clinicians who would like to lead training workshops. Then we will provide you, at cost, with training materials to train others.

Q: How do I become a trainer on the ADOS-2?

After completing the Introductory/Clinical and the Advanced/Research trainings for the ADOS-2, and establishing reliability with CADB or an independent trainer on Modules T-4, you may want to complete the additional training to be able to train others at different sites. This involves attending the ADOS-2 Advanced/Research Training again as a Trainer in Training. Trainers in Training help lead small groups in administering and scoring the ADOS-2 during the training workshop. Trainers in Training must also confirm reliability with us on another set of reliability tapes. Please note that there are very few slots for Trainers in Training each year, and we cannot guarantee acceptance into the Trainer in Training program. We require that Trainers in Training hold a doctoral degree (e.g., PhD, MD) or be in a graduate program moving toward such. We give priority to people who have extensive experience both in administration of the ADOS-2, as well as in assessment of ASD in general. In addition, in order to become a Trainer in Training, you must have attended (as a trainee) an Advanced/Research Training hosted by CADB or another designated ADOS-2 Advanced/Research Training site (contact us for more details).

ADI-R

Q: Who can administer the ADI-R?

The ADI-R should be used by professionals who are very familiar with autism spectrum disorders (ASD) and who have experience in clinical interviewing and assessment of individuals with ASD and other developmental disabilities. The authors of the ADI-R strongly recommend that you at least complete the clinical videotape training package available through WPS before beginning to use the instrument. The examiner's clinical skills and experience with the ADI-R are crucial to administration. WPS has specific information on requirements for use: www.wpspublish.com.

Q: What is the ADI-R Advanced/Research Training?

The ADI-R Research Training is a 2 ½-day training that provides intensive instruction on administering and scoring the ADI-R and in-depth discussion about specific administration and coding issues. The training is designed to bring trainees' administration and scoring skills to a higher level of inter-rater agreement with the scoring practices of skilled examiners. The heightened level of accuracy is needed to ensure that item-level coding is comparable at different labs in different parts of the world where research is being conducted. It is strongly recommended that trainees practice administering and coding the ADI-R before attending the ADI-R Research Training. This can be done by working with other ADI-R reliable examiners and /or reviewing the introductory training package published by Western Psychological Services (WPS). This package includes videotaped administrations and a training manual. Contact www.wpspublish.com for purchasing information.

Q: How can I get training on the ADI-R?

CADB offers Advanced/Research Training on the ADI-R about once per year. Please visit: <http://www.cornellpsychiatry.org/education/adi-r.html>

Groups of clinicians or researchers can also arrange for ADI-R trainings by contracting on an individual basis with an ADI-R certified independent trainer. A list of independent trainers can be found at: <http://www.cornellpsychiatry.org/education/autism.html>

Q: Do I need to establish reliability on the ADI-R?

If you plan to use the ADI-R for research purposes, you will need to establish reliability on the instrument **before you begin collecting data**. Establishing and maintaining reliability is crucial to maintaining consistency and comparability across research studies on ASD. If you plan to use the ADI-R for clinical purposes only, you are welcome, but not required, to establish reliability on the instrument. Individuals planning to use the ADI-R in clinical or school settings are encouraged to at least complete the videotaped training package available from WPS.

Q: What is the process for establishing reliability on the ADI-R?

To obtain reliability on the **ADI-R**, you must first complete the ADI-R Research Training. Again, you should establish reliability **before you begin any data collection**.

There are two factors in establishing your reliability: 1) showing that you have learned the standardized administration procedures, and 2) showing that you understand coding rules and have

achieved at least 90% agreement on the protocol and algorithm with our lab. This is accomplished through the following:

1) Demonstrate standardized administration procedure

You must demonstrate your understanding of standardized administration procedures on 3 separate administrations. Demonstrations of administration procedures can include:

- A video recording of yourself administering an ADI-R that you bring to the training workshop for review and feedback
- Administrations of the ADI-R you do during the Advanced/Research Training
- Your post-course taped administration submitted to us for reliability scoring

2) Establish reliability in coding the ADI-R

You must reach 90% agreement with CADB or an independent trainer on 3 administrations of the ADI-R. Agreement is calculated separately for the diagnostic algorithm and for the protocol in total, and you must achieve at least 90% agreement on both. If you are working with CADB or an independent trainer to establish reliability, administrations can include:

- Administrations of the ADI-R during the Advanced/Research Training
- Your scoring of the administrations on the post-course tape we send home with you after the Advanced/Research Training
- Your post-course taped ADI-R administration submitted to us for reliability scoring

You also may establish reliability with another reliable coder who works with you at your work site, provided you see them on a daily basis. See below for details.

ADI-R TAPE SUBMISSION GUIDELINES

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Q: Once I have established research reliability on the ADI-R, can I train other people at my site?

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Q: Once I am research reliable on the ADI-R, how do I maintain my reliability?

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Q: How do I become a trainer on the ADI-R?

After completing the Advanced/Research training for the ADI-R, and establishing reliability with CADB or an independent trainer, you may want to complete the additional training to be able to train others at different sites. This involves attending the ADI-R Advanced/Research Training again as a Trainer in Training. Trainers in Training help lead small groups in administering and scoring the ADI-R during the training workshop. Trainers in Training must also confirm reliability with us on another set of reliability tapes. Please note that there are very few slots for Trainers in Training each year, and we cannot guarantee acceptance into the Trainer in Training program. We give priority to people who have extensive experience both in administration of the ADI-R, as well as in assessment of ASD in general. In addition, in order to become a Trainer in Training, you must have attended (as a trainee) an Advanced/Research Training hosted by CADB or another designated ADI-R Advanced/Research Training site (contact us for more details).

If you have any questions or comments, please contact CADB's Training Coordinator Marcella Bello at (914) 997-5531 or at mab9254@med.cornell.edu.

Note: Dr. Catherine Lord, along with the other authors of the instruments and training packages, receives royalties when people purchase ADOS-2 or ADI-R materials.